CRANFIELD UNIVERSITY

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“Examining Political Risk in Service Offshoring Strategies”

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Supervisor: Dr. Carlos Mena
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Political Risk in Offshoring Strategies: Examining political risk implications in the offshore service industry

Supervisor: Dr. Carlos Mena
August 2015

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ABSTRACT

This research investigates political risk in the context of service offshoring and the corresponding impact on risk management decisions. The first stage of the study uses the Repertory Grid Technique (RGT), to explore key post-contract political risks experiences within offshore outsourcing activities. Twelve key political risks affecting offshore outsourcing decisions are identified, and the moderating effect of offshoring activity types (BPO, ITO or KPO) on political risk exposure and impact perceptions is highlighted. The research also explores the conditioning effect of industry specific exposure to political risk and enhances the explanatory ability of the Transaction Cost Economics (TCE) constructs, offering a re-operationalization of the political risk component of external uncertainty.

The second stage of the research introduces a series of hypotheses between offshoring flows and political risk profiles, and applies multiple regression to analyse political risk affecting offshore activities in low cost countries across contract-based offshoring engagements and FDI. The findings highlight that political risk is a genuine business concern for offshore contract-based outsourcing modalities, and identify concerns with Intellectual Property protection, Quality of Bureaucracy and Corruption as key considerations affecting location decisions in low-cost countries. The research further suggests a positive relationship between strong country level institutional and regulatory systems and high knowledge content in offshoring engagements.

From a practical perspective, the research highlights the need for managerial tools to determine diversified firm and industry specific political risk impact on global service outsourcing engagements. The key practical contribution is the development of differentiated political risk typologies that can capture the nuances of external risks in offshoring, allowing for more accurate risk assessment of offshoring decisions.

Keywords: Political Risk; Offshore Outsourcing; Low-cost country sourcing, Service Offshoring; Foreign Direct Investment (FDI); Transaction Cost Theory, Repertory Grid Analysis, Multiple Regression Analysis.

Personal Statement

My interest in offshoring, in its various forms, stems from years of working in emerging economies and observing how the phenomenon has engaged the world in an interlinked network of economic interdependence. The expanding global sourcing activities are having a transformational effect on the global economy, working as a platform for socio-economic realignment and growth.

Whereas critics have highlighted offshoring as a potential cause of job-loses in the US and Europe, and at times even a source of income inequality in host countries, the overall value-building dynamic of offshoring is materializing at a global level. In fact, offshoring is now acknowledged as a powerful engine for socio-economic change through job creation in host countries and can be seen as an indirect mechanism for global wealth redistribution. With the emergence and acceptance of concepts like social impact sourcing, as part of corporate social responsibility (CSR) initiatives, offshore outsourcing has the potential to further create dignified job opportunities, support gender equality through equal pay and reverse urbanization as enhanced IT infrastructure allows for job creation outside major cities. Furthermore, offshoring has similarly become an indirect social equalizer in developed countries by facilitating accessibility to affordable goods/services to all levels of society and thereby enhancing the material quality of life for millions.

For host countries offshore outsourcing is an opportunity to connect local businesses with the global economy, developing local job market opportunities and facilitating knowledge transfers, with the potential to assist developing countries onto a development path fuelled by private sector expansion and capacity enhancement. This dynamic is most obvious in now maturing emerging economies, such as China and India, being previous markets for simple manufacturing, then Information Technology Outsourcing or simple Business Process Outsourcing (BPO) and now engaging in Knowledge Process Outsourcing (KPO), based on an advanced level of supplier-client relationship and integration.

The following research on political risk in global offshoring strategies promotes the expansion of business opportunities into new frontier low-cost countries by developing methodologies that aim at identifying, and potentially managing rather than avoiding risk. Through proactive risk management international service buyers will be able to engage with increased confidence in more complex, but profitable offshoring opportunities. Finally, the research informs policy development for national governments and multinational organizations like the United Nations and World Bank, on private sector support and actions promoting the hosting of offshoring activities with the intentions of furthering national development objectives.

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LIST OF ABBREVIATIONS

This section provides a list of abbreviations for the reader. The intention is to provide a quick reference for commonly used abbreviations used throughout the review to enhance readability and accuracy of interpretations.

BoP	Balance of Payment
BPO	Business Process Outsourcing
CU	Cranfield University
DBA	Doctorate in Business Administration
ERP	Enterprise Risk Management
GCI	Global Competitiveness Index
ICRG	International Country Risk Guide
IMF	International Monetary Fund
IP	Intellectual Property
ITO	Information Technology Outsourcing
KPO	Knowledge Process Outsourcing
PRSG	Political Risk Services Group
SCRM	Supply Chain Risk Management
TCE	Transaction Cost Economics
TES	Technology Enabled Services
UNCTAD	United Nations Conference on Trade and Development
WEF	World Economic Forum
WTO	World Trade Organization

1 Linking Commentary

The purpose of this Linking Commentary is to synthesize and integrate the scoping study and three consecutive research projects that have been completed as partial fulfilment of the Doctorate in Business Administration (DBA) at Cranfield School of Management. These projects build on each other and constitute the milestones required by the DBA process.

The linking commentary firstly introduces the background and business problem to be addressed by the research. Next, it presents the theoretical entry point and associated research questions guiding the overall study. An overview of the research process and interlinked projects is provided, followed by a discussion on the applied research methods. Finally a summary of the key findings is presented, before elaborating on the research's contributions to knowledge and practice. The commentary closes with a discussion of limitations and opportunities for further research.

The overall aim of this thesis is to explore the type and impact of political risk exposure in offshoring strategies. Specifically, the objective is to extend the analysis of political risk to include the offshore outsourcing service industry, and to compare the impact of political risk exposure across an extended spectrum of offshore entry modes. The research is guided by the following research question(s):

1. What are the key political risk factors impacting on offshoring strategies?
2. How do these political risk factors differ in importance depending on entry mode structure?

1.1 Structure of the Thesis

The thesis is structured as follows:

- Chapter 1: Linking commentary - Provides a synthesis of the three research projects and consolidated findings.

- Chapter 2: Project one (Systematic literature review) – Provides a systematic review of the literature and existing knowledge on political risk impacting offshore sourcing strategies.
- Chapter 3: Project two – Empirically explores and maps how offshore outsourcing practitioners construct and perceive political risk in offshore engagements.
- Chapter 4: Project three – Empirically explores the relationship between the identified political risk constructs and offshore sourcing flows from 2006-2015.

Appendices: There are a number of appendices related to each of the individual projects of the thesis. Appendices for each project are presented in separate sections A, B and C (A=Project One, B=Project Two and C=Project Three).

Note that this thesis integrates stand-alone documents submitted as milestone requirements for the DBA. The documents have been developed during the time period 2010 - 2015, and reflect a progression of the research process accordingly.

1.2 Business Problem

Globalization has propelled a revolution in offshoring strategies as companies, driven by cost pressures, extend their service chains across the globe through increased levels of offshore sourcing activities (Meixell, Gargeya 2005). The offshoring to low-cost countries, with ever more complex business environments, has expanded traditional risk consideration to include the political environment of host destinations, and underlined the need to combine offshoring strategies with proactive risk management (Giunipero 2004). As stated "*the risk [for offshoring and global supply chains] is broader than ever and a risk and uncertainty lens is the newest and perhaps one of the most important capabilities and contributions that can be made to a firm's competitiveness and viability*" (Barry, 2006, p.697). As companies offshore increasing volumes of business processes through complex networks of subsidiaries and outsourcing suppliers, proactive and

efficient risk management is therefore emerging as a key priority for companies relying on low-cost country offshoring as part of their global sourcing strategies.

1.2.1 Managing external risk in offshore engagements

Offshoring as a business concept is driven by the objective of finding more cost effective business process solutions through identifying and exploiting cost arbitrage between regions, including low cost skilled labor, raw materials and other economic input factors (Ramarapu, Parzinger and Lado, 1997). The key driver in offshoring has therefore traditionally focused on cost reductions by relocating subsidiary facilities or outsourcing production or back office service components to suppliers located in countries with lower production factor costs. Common examples of globally-sourced products or services include labor-intensive manufacturing, call centers staffed with English speaking workers and IT application maintenance work. As the concept has evolved, offshoring is no longer driven only by cost considerations, but also for the purpose of accessing new ideas and human capital as a form of talent arbitrage (Contractor, Kumar, Kundu and Pedersen, 2010); or to seek competitive advantage by gaining strategic access to developing markets (Ramarapu, Parzinger and Lado, 1997). With the maturing of the business concept, companies are offshoring gradually more important business processes through integrated networks of interdependent subsidiaries or suppliers across the globe, increasing vulnerability to external risk factors.

The familiar business risks for companies with extended supply or service chains involve disruption or cost implications of hidden or unanticipated risk, such as increased transportation costs, poor delivery performance, quality problems, lack of sufficient communication networks and logistics infrastructure to support operations (Modarress and Ansari, 2007). An indication of the potential impact of such hidden costs on the viability of the offshore engagements is underlined by Industry Canada, suggesting that only 42% of Canadian companies actually managed to reduce their total landed costs via low cost country sourcing (Chow, 2008).

While political risk is not a new phenomenon, the wider spread of *low-cost country* offshoring has introduced new exposures to political events and politically motivated actions that represent a more direct challenge to the performance of offshore strategies. The emerging variety of these non-business risks include direct or indirect actions of the host country political environment, like potential import or export license cancellation, governmental interference, government actions that prohibit contract fulfillment or currency transfer, freezing of bank accounts, confiscation of assets, export license restrictions and other political events, with various levels of disruption potential (Palugod and Palugod 2011). The risks could also include security considerations linked to politically motivated riots, strikes, sabotage and terrorism impacting directly or indirectly on operational performance (Monaghan 2010). As stated by Baas (2009) *"countries still matter and companies are exposing themselves to political risk to an unprecedented degree as they compete in the global economy*" (Baas, 2009 p. 135-136). As political risk has evolved in character and manifestations (Minor, 2003) the various facets of political risk therefore need to be assessed in more detail and correlated to the type of international involvement pursued (Agarwal and Feils, 2007).

Despite the increased awareness of emerging political risks and vulnerabilities, research has indicated that companies apply limited risk management analysis when engaging in global sourcing activities (Christopher, Peck and Towill, 2006). This is concerning as an updated concept of political risk needs to be integrated into wider company level risk management strategies to secure performance of extended offshoring engagements. An improved understanding of the differentiated nature of political risk exposure for various offshoring engagements will allow firms to implement more informed strategies for mitigating corporate losses and minimize likelihood or impact of substantial disruption. As argued *"those companies that are able to apply an analytical oriented, defensible system for managing policy risk, will greatly enhance their investment options and find a powerful source of competitive advantage"* (Henisz and Zelner, 2010, p.8). In contrary terms, the companies that are unable to successfully access new frontier

sourcing destinations will face substantial opportunity loss in an increasingly competitive world economy.

1.2.1.1 Uncertainties and risk

For the purpose of this research the term uncertainty refers to the effect of the unpredictability of factors in the external environment in which the offshoring activity is taking place and that may impact negatively on the business operations (Van Wyk 2010). In this sense uncertainty is closely linked to the concept of bounded rationality in the Transaction Cost economics, indicating that offshoring entity takes rational business decisions, however may have limited information about actual threats and intentions of the external actors to enforce those threats.

The term threat is understood as a potential action by an external entity intended to directly or indirectly impact on an offshoring operation. The term risk is understood as the point where threats are actioned by an external entity, often *"as output from existing political systems, or as disruptive actions from entities outside the system"* (Van Wyk, 2010, p.112). Either way the risk manifestations have an adverse impact on the business operations.

On this notion risk levels can be determined as the combination of the likelihood that a certain threat may materialize, combined with the consequences linked to an offshoring engagement. In this overall context risk mitigation strategies are those strategic activities deliberately undertaken by firms to mitigate the uncertainties from the various risk sources (Miller, 1992).

1.2.2 Exploring political risk challenges for the offshore service industry

While offshoring has traditionally been associated with the manufacturing industry, the offshoring of business services has seen a similar dramatic growth over the years, transforming the way businesses are managing their operations in an increasingly globalized world. As technologies in ICT introduced digitalization, services no longer need to be done on location and it is possible to separate whole service processes for offshoring (Modarress and Ansari, 2007). The offshore service industry has been driven by technology improvements lifting

constraints on geography, time and communication expense, allowing overseas subsidiaries or suppliers to connect with customers globally, giving service offshoring both scale and momentum. With an offshore outsourcing service industry estimated at around 400 billion USD in 2013, and with an annual growth rate of 6% per year (Gartner Group 2015), the need for expanding research towards service industry specific risk constellations is growing.

1.2.2.1 Classification of offshore services

Offshored services have traditionally been classified either as an *information technology (IT) service* or as a *business process service*. If the services are outsourced to an external supplier, these services are referred to as Business Process Outsourcing (BPO) or Information Technology Outsourcing (ITO), or collectively as Technology Enabled Services (TES). The offshoring of services has evolved from mainly IT services towards business process services to gradually more knowledge-based services such as research and development (R&D) (Palugod and Palugod, 2011). The notion of R&D can be defined as services related to the design and development of new or improved products and processes (Martinez and Garcia, 2011). Hence, it is argued that an additional classification can be added, termed *Knowledge Processing, or Knowledge Process Outsourcing (KPO),* if undertaken by an external suppliers. The three outsourcing classifications types compound specific structures and properties that potentially may vary in their exposure to the external environment, hence the following research will maintain a specific distinction between BPO, IPO and KPO.

1.2.3 Classifying entry modes and the importance of control

The term *offshoring strategies* refer to the geographic transfer of operations outside the borders of the home country, fundamentally meaning exposure to a foreign environment. The offshoring literature has mainly focused on entry modes relating to equity or non-equity alliances, strategic partner decisions or engagement through subsidiaries; defined as any long-term private investment in

which business is controlled from abroad, incorporating both ownership and managerial involvement (Schmidt, 1986). The choice of entry mode remains a fundamental decision that every firm engaging in the international market needs to address (Kulkarni, 2001) and is of interest to business managers and governments alike, as it has both management and macro-economic implications.

The notion of entry mode has been defined as "*an institutional arrangement that makes possible the entry of a firm's products, technology, human skills, management, or other resources into a foreign country"* (Root, 1994, p.5). This classic entry mode definition covers host country production and marketing mode, as well as export, contractual and foreign investment modes. Similarly, entry mode has been defined simply as the way of organizing a firm's business activities in a foreign country (Hill, Hwang, and Kim, 1990). For this research the offshoring options will focus on two main forms of entry mode; the contractual entry mode (offshore outsourcing) and the ownership-based (captive) entry mode including joint ownership engagements with a local partner (joint venture).

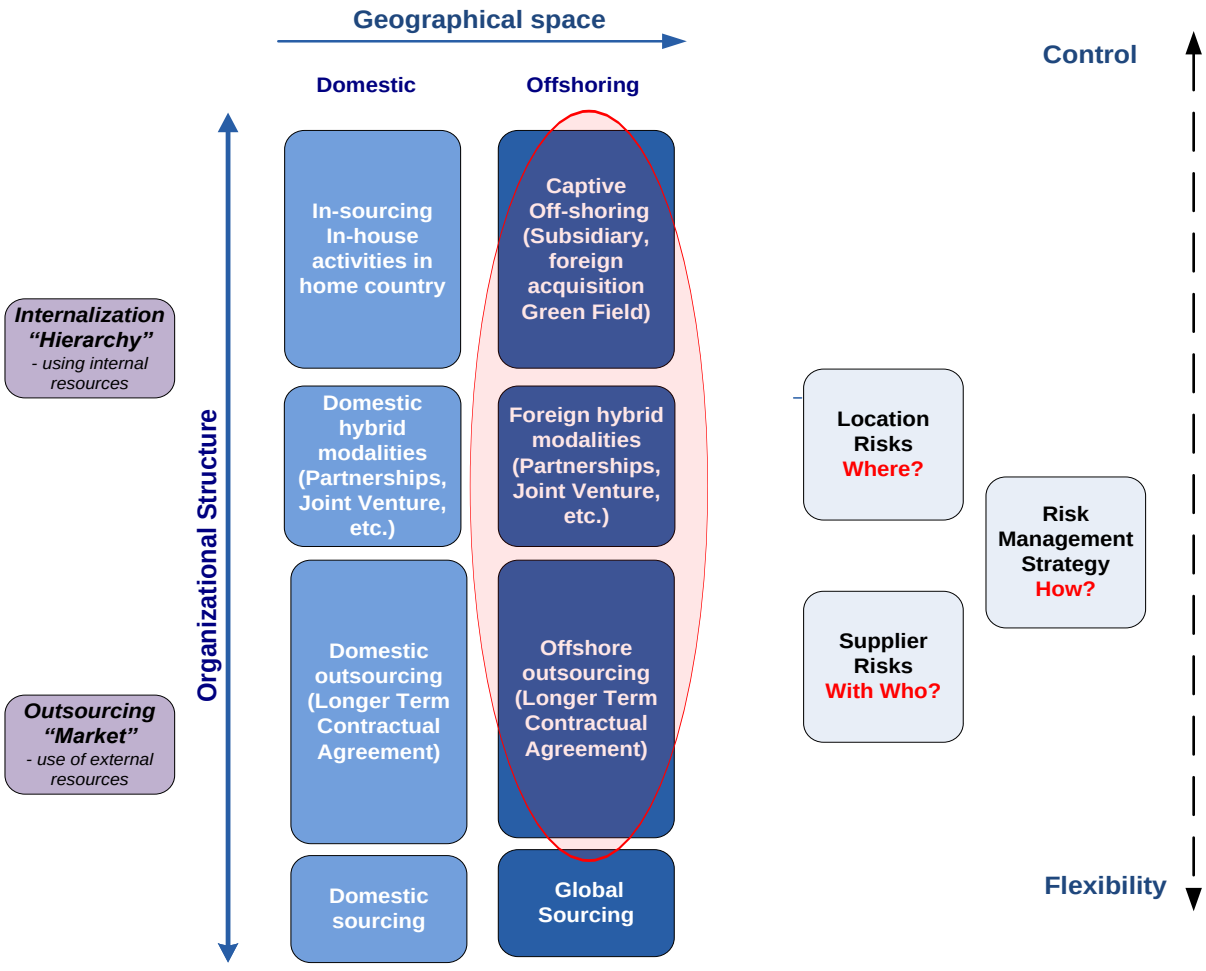
In *offshore outsourcing* the term *outsourcing* refers to the transfer of the internal production of goods or services to a third party or an outside supplier to perform a task, function, or process, in order to incur business-level benefits (Sanders, Locke, Moore and Autry, 2007). The notion of using an external provider means that the buying company relinquishes ownership control but increases flexibility, unlike when the buying company engages through a fully owned subsidiary, or a joint venture partnership.

The *wholly-owned subsidiary* or captive will refer to divisions or subsidiaries of multinational companies that provide services to the home company. A wholly-owned subsidiary is expected to offer the highest degree of control for the entrant and represents substantial resource commitment and risk. The *joint venture entry mode* refers to a business agreement in which the offshoring firm agree with a local partner in the host country to develop, for a finite time, a new entity and new assets by contributing equity. In a joint venture, both parties are equally invested

in the offshoring project in terms of money and time, and therefore represent less control than the subsidiary as any changes needs to be agreed with the partner entity.

The below figure illustrates the classification of offshoring strategies on a market versus hierarchy continuum and the associated firm control implications.

Figure 1: Range of Offshoring Strategies



1.3 Theoretical Conceptualization and Underpinning

1.3.1 A review of the entry mode literature

While understanding key motivations for the firm to engage in offshoring is important, the determination of the most appropriate *entry mode* constitutes a critical component of any offshoring strategy (Kulkarni, 2001). As stated by Miller (1992) *"A firm's strategy deals with the alignment of the organization to its uncertain environment and thereby organizational strategic choices determine a firm's exposure to uncertain environmental and organizational components that impact firm performance"* (Miller, 1992, p. 312). The analysis of the entry mode choice implies determining the degree of commitment that the investing company wants to assume in a given host country. The notion of entry mode choice is therefore considered one of the most critical decisions in offshoring with implications for organizational control, investment risk and the resource commitment required to ensure successful operations of offshore engagements (Zhao, Luo and Suh, 2004).

A review of the entry mode literature suggests a vast domain dominated by three theoretical paradigms, namely the market imperfection paradigm, the behavioural paradigm and the market failure paradigm (Sharma and Erramilli, 2004). The paradigms embody at least six key entry mode choice theories including Product Life Cycle, Internationalization, Internalization, Eclectic and the Transaction Cost Theory that provide theoretical explanations of foreign entry mode choice. The paradigms provide a framework for understanding key drivers and motivations behind companies' international engagement and predicting behaviour when confronted with entry choice considerations. (See Chapter 2. for more detail on paradigm origins and scope).

As the main concern of this study is the impact of the *external environmental uncertainty*, the paradigm with the most explanatory strength is considered the market failure paradigm and the Transaction Cost Theory framework. Previous literature has ascertained that TCE has served as the overriding perspective for theorizing entry mode choice, and accordingly transaction-cost related covariates

have been recognized as major determinants of entry mode decisions (Zhao, Luo and Suh, 2004; Ellram, Tate and Billington, 2008; Lopez-Duarte and Vidal-Suarez, 2010; Martinez and Garcia, 2011).

While other perspectives supplement the entry mode choice discussion, the basis for this research is that entry mode choice is an economic decision, and the firm is expected to choose the entry mode that offers the highest risk-adjusted return on investment (ROI) (Anderson and Gatignon, 1986). On this basis the assessment of TCE determinants remain important as the alignment between entry mode and transaction properties has consequences for the firm and the offshoring operation (Zhao, Luo and Suh, 2004). In this context political risk is addressed by transaction cost analysis, in which a firm weighs in the costs and benefits of governance structures, polices and likely political exposure in the host country. The following section will highlight the key premises of TCE explanations of foreign entry mode choice in light of *uncertainty in environmental conditions* and its relevance to the research.

1.3.2 The concept of uncertainty in Transaction Cost Economics

The Transaction Cost Economics (TCE) approach focuses on the *cost of making each contract* i.e. the process of supplier evaluation, negotiation and monitoring (Coase, 1937). These costs relate to the "*transaction*" of the process, and appear both when engaging with markets (outsourcing) and in hierarchy (internalization). The TCE approach fundamentally focuses on the *identification of the governance structure that entails the least cost per transaction*. The transactions take place in an environment based on *information asymmetry and bounded rationality* i.e. the inability to predict an outcome and possible opportunistic behavior of the other entities in the market place (Ellram, Tate and Billington, 2008) and the characteristics of transactions focus on *asset specificity*, *uncertainty, performance measurement* and *frequency* (Williamson, 1985).

Empirical studies have supported the basic principles of transaction cost variables (Aubert, Rivard and Patry, 2004) and TCE attributes are considered key

in determining the governance form for offshore engagements. TCE predicts offshore outsourcing to prevail for transactions of low-frequency, characterized by a low level of uncertainty, with few transaction specific investments and simple performance measurement requirements. Alternatively, when the transaction is high due to above factors, the firm will prefer to internalize the transaction and enter the market through a subsidiary (Madhok and Tallman, 2006). Hence the TCE framework provides an indication of when certain products or services are internalized, or in the international context produced through a wholly-owned subsidiary (captive), and when firms prefer outsourcing to the market, based on relative cost and risk considerations associated with a given operation. The key consideration of TCE is hence cost minimization in terms of selecting the governance form that will minimize the sum of transaction costs (Zhao, Luo and Suh, 2004).

According to TCE a rational firm will prefer its transactions to be governed by the market if transaction costs are low, however if the costs of adaption, performance monitoring and safe guarding against opportunistic behavior is too high, the firm will prefer an internal governance structure such as a wholly owned subsidiary or dominant joint venture (Zhao, Luo and Suh, 2004). In cases where the limitations of bounded rationality are substantial and opportunistic behavior more likely, an internal governance structure will be considered more attractive (Anderson and Gatignon, 1986). For example, in host countries with limited governance infrastructure or institutional capacity local suppliers may use loopholes in the legal system or bureaucracy to act opportunistic (Slangen and Tulder, 2009), hence constituting a risk of opportunistic behavior.

The TCE perspective therefore views the entry mode choice as a critical decision of governance anchored on the interplay of the two key assumptions of bounded rationality and opportunism, and the three key dimensions of transaction i.e. asset specificity, uncertainty and frequency (Williamson, 1995; Zhao, Luo and Suh, 2004).

1.3.3 External uncertainty and the entry mode choice

The term "*uncertainty*" has been used in the literature as a means to refer to the unpredictability or lack of data on the environmental variables that impact corporate performance (Van Wyk, 2010). Hence uncertainty about environmental variables reduces the predictability of corporate performance, which in turn increases the risk (Miller, 1992). In the TCE literature uncertainty tends to be categorized as the sum of *internal uncertainty* and *external uncertainty* (Erramilli, 1992), stating that both external and internal uncertainties surrounding a transaction will influence entry mode choice.

Previous work has established that uncertainty in the international environment in turn affects the choice of the international entry mode (Miller, 1992; Brouthers, 1995; Demirbag and Glaister, 2010; Werner, Brouthers and Brouthers, 1996). This previous research has suggested that, firstly, international risk plays a critical role in entry strategy formation, and secondly, a multi-dimensional perspective of risk yields a more complete understanding of risks impact on risk strategy decisions (Brouthers, Brouthers and Werner, 2002).

TCE states that *internal uncertainty* arises when a firm is unable to accurately assess its agent's performance through output measures (Anderson and Gatignon, 1986), often manifested through the firm's lack of experience or knowledge of foreign markets, which will impact on their willingness to pursue foreign market entry aggressively (Zhao, Luo and Suh, 2004). From the TCE perspective the notion of *external uncertainty* has both been defined as the degree of cultural distance (CD) between the home and the host countries (informal environment), and the degree of political risk observed in the host countries (formal environment) (Agarwal and Feils, 2007; Miller, 1992; López-Duarte and Vidal-Suárez, 2010). In addition research has suggested that external uncertainty can be conditioned by language difference (LD) as a third component of external uncertainty (Lopez-Duarte and Vidal-Suarez, 2010). An overview of empirical studies testing the impact of cultural distance on the choice between JV and WOS indicates MNEs are inclined to invest through JV rather than WOS

when investing in culturally distant countries, suggesting that cultural distance is an important proxy for external uncertainty (Slangen and Tulder, 2009).

While research has expanded and empirically verified the external uncertainty concept in the informal environment, uncertainty in the *formal environment*, often defined as country or political risk remain under-conceptualized. Several studies have used the level of political risk in the host countries as a proxy for formal external uncertainty, referring to the likelihood of an unfavorable change in the government regime or policies issued by this regime (Miller, 1992; Henisz, 2000). However, emerging literature has criticized the narrowly defined concept of political risk for only covering limited aspects of the formal environment. It is contended that external uncertainty needs to be conceptualized more broadly and also include the concept of *governance infrastructure* of host countries covering *"public institutions and policies created by governments as a framework for economic, legal and social relations"* (Slangen and Tulder, 2009, p. 279), predicting that the lower the quality of governance infrastructure, the higher the level of external uncertainty. Other research suggest that determinants of foreign investment flows should be extended beyond the traditional factors like government stability, internal/external conflict and ethnic tensions, to also include aspects of local corruption, quality of bureaucracy and law and order (Busse and Hefeker, 2008).

The emerging research highlights the need to expand the conceptualization and operationalization of formal external uncertainty, and encourage entry modes research to measure external uncertainty through a broader spectrum of political dimensions such as government effectiveness, regulatory quality and control of corruption.

1.3.4 Re-visiting the conceptualization of external uncertainty

This research proposes that the inconclusive findings on uncertainty and entry mode choice are partly due to the non-diversified and simplistic operationalization of the concept of political risk. As highlighted by the literature the integration of mechanisms to capture institutional differentiations is one added dimension of an

expanded conceptualization of external uncertainty beyond the reliance on composite political risk indicators (Slangen and Tulder, 2009; Zhao, Luo and Suh, 2004). It has further been suggested that the influence of the uncertainty type on a firm's entry mode choice has not been sufficiently highlighted (Kulkarni, 2001) or the linkage between risk perceptions and strategic decisions has not been well established (Brouthers, Brouthers and Werner, 2002).

Similarly, as indicated all TCE determinants are considered industry specific, underlining the need to consider a differentiated approach to various forms of offshoring activities i.e. ITO, BPO and KPO. As external uncertainty can impact at a firm, industry and country specific level, TCE predictions would be subject to industry specific control parameters. Zhao, Luo and Suh (2004) propose that the industry moderating effect on country risk may be eliminated if more dimensions of environmental uncertainty such as protection of intellectual property rights, can be captured in future empirical testing to offer more insights into the relationship between external uncertainty and OBE (Zhao, Luo and Suh, 2004).

The following section develops an expanded operationalization of political risk definition in offshore outsourcing, which captures broader dimensions of risk towards business activities.

1.4 Developing a Political Risk Definition for Offshoring

There is no consensus in the offshoring literature on a coherent definition of political risk, and hence the term has been applied across a broad range of risk types and contexts (Alon, Gurumoorthy, Mitchell and Steen, 2006; Alon and Herbert, 2009). Despite the expanding literature base, it is argued that no satisfactory definition has yet been developed that takes into account the unique dimensions of political risk in global supply or service chains, since the literature only provides a range of independent definitions and conceptualizations that fails to distinguish terms such as risks, uncertainties, vulnerabilities with sources of risk (Manuj and Mentzer, 2008).

Political risk was originally referred to as "*discontinuities*" occurring in the business environment and in order to constitute risk, changes in the business environment need potential for significantly affecting the profit or other goals of a particular enterprise (Robock, 1971; Kobrin, 1981). Similar perspectives defined political risk as host government policies that constrain the business operations of a given foreign investment (Schmidt, 1986). The Weston and Sorge (1972) definition is representative, stating that *"political risk arises from the actions of national governments which interfere with or prevent business transactions, or change the terms of agreements, or cause the confiscation of wholly or partially owned business property"* in (Weston and Sorge, 1972 cited in Kobrin, 1979, p.67). According to this government centric definition the loss types for investors would mainly involve confiscation; contract repudiation; currency inconvertibility; discriminatory taxation; embargo; expropriation of property; nationalization; or war risk (Howell, 2007).

The earlier definitions of political risk has focused on the role and actions of national governments vis-à-vis foreign investors i.e. the likelihood that political forces will cause drastic changes in a country's business environment affecting profit and strategic goals of the particular business enterprise (Gilliespie, 1989). However, the number of outright expropriations has reduced from 336 in the period 1970-1975, to only 2 in the period 1986-1992 (Minor, 1994, cited in Clark and Tunaru, 2003). These findings indicate that the nature of political risk, and its sources and implications, are changing suggesting a need to broaden the scope of the definition to enhance practical utility.

Fitzpatrick classified political risk into several categories, namely political risk referring to government or sovereign action; occurrences of political events or constraints imposed at the specific industry level; and finally political risk within a larger conceptual environment (Fitzpatrick, 1983). Fitzpatrick thereby broadened the perspective beyond the focus on events and added the notion of process, recognizing that political risk emanates from political processes which are in turn influenced by various environmental variables (Fitzpatrick, 1983).

Further to this perspective political risk has been defined as the probability of politically motivated change that affect the outcome of (FDI) activities, distinguishing between explicit events and ongoing change (Clark and Tunaru, 2003). Explicit *events* referring to actions like expropriation, nationalization, devaluations or *direct actions* such as strikes, boycotts and terrorist attacks (Clark and Tunaru, 2003). On-going *change* on the other hand, takes the form of continuous activities such as macroeconomic management and monetary policy, legislation, social or political evolution that affects the overall environment (Clark and Tunaru, 2003). This notion established the differentiation between risk events and risk environment, and underlines the need to conceptually separate the two in order to establish causality and potential impact on offshoring activities.

As research has changed focus from events to sources of risk, research has applied definitions understanding political risk as negative perceptions emanating from internal instability, intergovernmental relationships, anticipated and non-anticipated government actions, or government discontinuities all brought about by social, economic, or political imperatives existing in a country's internal or relevant external environment (Fatehi-Sedeh and Safizadeh, 1989). This approach supports the notion that the separation of economic and social dynamics from politics is arbitrary, as many political issues concern economic issues and therefore inseparable, managers should monitor key economic and social variables, as well as political variables (Rice and Mahmoud, 1990).

The difficulty of separating political and economic risk is also noted by Robock (1971) and Sethi & Luther (1986), highlighting that environmental changes can prompt government action and visa-versa, determining an *interdependent relationship* between the political, economic and societal dimensions of political risk. On this basis it has been argued that political risk should not be seen in isolation but rather understood in the context of broader country risk, determined as a function of the economic and political events occurring at the sovereign or sub-sovereign level in a country that threaten firm profitability and are the result of forces and conditions external to the firm and its industry (Oetzel, 2005).

Furthermore, actions in the political domain resulting in business losses, do not necessarily emanate from the government itself. Often national governments are not the authoritative source of loss problems, meaning that increasingly regional, provincial, state and local governments are dealing with investors directly in ways that the national governments is unable to control (Howell, 1992). The external agents cause threat and disruption outside the control of legitimate governments and may include nationalistic buyers, suppliers, employees and other key stakeholders (Agarwal and Feils, 2007); (Hanner, 1979). Mudambi and Navarra (2003) further notes that political risk literature has overly focused on observable government policies towards MNEs, ignoring the more subtle aspects of local business culture (Mudambi and Navarra, 2003).

In order to establish definitional clarity and enhance utility for practical application, it is suggested that political risk should be viewed as a broader concept grounded in and influenced by many environmental factors (Alon and Herbert, 2009). For example the definition of the US governments Overseas Private Investment Corporation (OPIC) focuses their risk definition only on expropriation, inconvertibility, war damage, civil strife damage and breach of contract by a government or by reason of government interference. However, this insurance-based definition does not address the wider list of politically-based damage directly or indirectly due to corruption, interference in personnel decisions, security concerns for personnel, deteriorating political and social situations that may impact on the investment assumptions (Howell, 1994).

Based on this view a definition has been proposed which includes both the more obvious political risks, as well as the more subtle mentioned above, defining risk as "*the possibility that political decisions, events or conditions in a country, including those that might be referred to as social, will affect the business environment*" (Howell and Chaddick, 1994, p. 71). Political risk is therefore understood as the possibility that political decisions, events or conditions in a country, including those that might be referred to as social, will affect the business environment such that investors will lose money or have a reduced profit margin (Howell and Chaddick, 1994).

Encompassing this notion, Simon (1984) defined political risk as *"governmental or social actions and polices, originating either within or outside the host country, and negatively affecting either a select group of, or the majority of foreign business operations and investments"* (Simon, 1984, p. 68). This definition reflects the emerging perspective on political risk and the incorporation of environmental context, and was further expanded by the delineation of the economic underpinnings of political risk (Rice and Mahmoud, 1990; Alon and Herbert, 2009). Simon's definition is broadly accepted in the literature (Alon, Gurumoorthy, Mitchell and Steen, 2006; Alon and Herbert, 2009), and will form the foundation of the broadened political risk definition informing this research.

1.4.1 Introducing an expanded political risk definition

From above definitional discussion it is clear that political risk in one form or the other is present in most international offshoring activities, whether a captive or contract-based offshoring, and that it arises from a wide range of disparate sources. Political risk is the critical interface between the external environments and the local political system and needs to both analytically and operationally capture the full scope of risks that can impact on the various forms of offshoring modes.

On this note Agarwal and Feils (2007) propose a political definition that encompass the various types of international business activities, defined as *"the probability that an actual or opportunity loss will occur due to the exposure (of firms involved in international business) to a set of contingencies that range from the total seizure of corporate assets without compensation to the unprovoked interference of external agents, with or without governmental sanction, with normal operations and performance expected from the firm"* (Agarwal and Feils, 2007, p. 167).

The definition further needs to capture risks associated with empowerment of local, regional and non-governmental interests, including cultural and religious interests, non-governmental organizations and transnational crime (Garver, 2009). This implies an understanding of a range of declared and un-declared

political stakeholders including losses resulting from government decisions, lower level government decisions and independent social actions. Finally, the definition should acknowledge the potential importance of alternative power structures of many low cost countries, where the legitimate state apparatus may be wholly or partially "captured" by elites or independent actions of organized crime.

The definition of political risk has further been deepened to address micro risks that are industry, firm or even project specific (Robock, 1971; Kobrin, 1981; Micallef, 1981; Erol, 1985). Micro political risk can be defined as *"the uncertainty associated with outcomes or events from political processes, which have potential and specific consequences for the firm*" (Alon and Herbert, 2009, p.130). While political risk analysis has focused on macro-level political analysis i.e. national political developments and government policies towards FDI, research has highlighted that most politically risk originate from the micro level (Oetzel, 2005; Rice and Mahmoud, 1990). On this note an analysis of political risk would need to consider both micro and macro levels of politics and business (Simon, 1985; Brewer, 1993), in order to address the industry specific nature of political risk impact on offshoring outcomes.

For the purpose of this study political risk will therefore be defined as "*the exposure of offshoring companies to unprovoked interference of external agents, with or without governmental sanction, originating either within or outside the host country, resulting in the overall restriction of business operating conditions or the industry specific environment, and negatively impacting on the company's subsidiary or outsourcing supplier's ability to ensure continuity of service delivery with consistent quality and at agreed cost".* The extended definition will allow a holistic approach to understanding political risk and the explicit effects on various industry specific offshoring entry modes, in line with the call for research on the effects of political risks on company operations. Based on the identified concepts from Transaction Cost Economics (TCE) and the extended definition of political risk in the context of offshore outsourcing, the following section will outline the research strategy and ontological considerations underpinning the study.

1.5 Overview of Research Process and Methods

1.5.1 Theoretical position and methodology

As a fundamental part of any social enquiry the following section will outline the main choices and implications of the chosen research strategies.

1.5.2 Research strategy

The logic of inquiry guiding the research is based on a combination of an inductive and deductive reasoning approach applying mixed methods. The notion of inductive reasoning involves the movement from specific statements to general statements, while the deductive reasoning involves the movement from general statements to specific cases (Blakie, 2007).

With the combination of an inductive and deductive strategy the logic of the overall research process follows the cycle of theory construction and testing proposed by (Wallace, 1971 cited in Blakie, 2007). The scheme proposes to combine inductive and deductive approaches to overcome, on one side naïve induction and naïve falsification on the other side, by two sets of overlapping research processes. Wallace argues that these processes are related in a series of cyclical stages beginning with observations, then moving from empirical generalization to theory development, to hypothesis development, to testing of the hypotheses, finally leading to further observations (Blakie, 2007).

Following this logic the research strategy starts with addressing RQ (1) by exploring the nature of political risk impacting on offshore service engagements, both contract-based and captive, and establishing generalizations based on pattern explanations. For Wallace (1971) this is the inductive research stage of the cycle in which concepts are measured and associations established. In the research this process is achieved through a qualitative interview process engaging offshoring practitioners across an industry-wide sample of companies, and discussing political risk implications for case specific offshoring engagements.

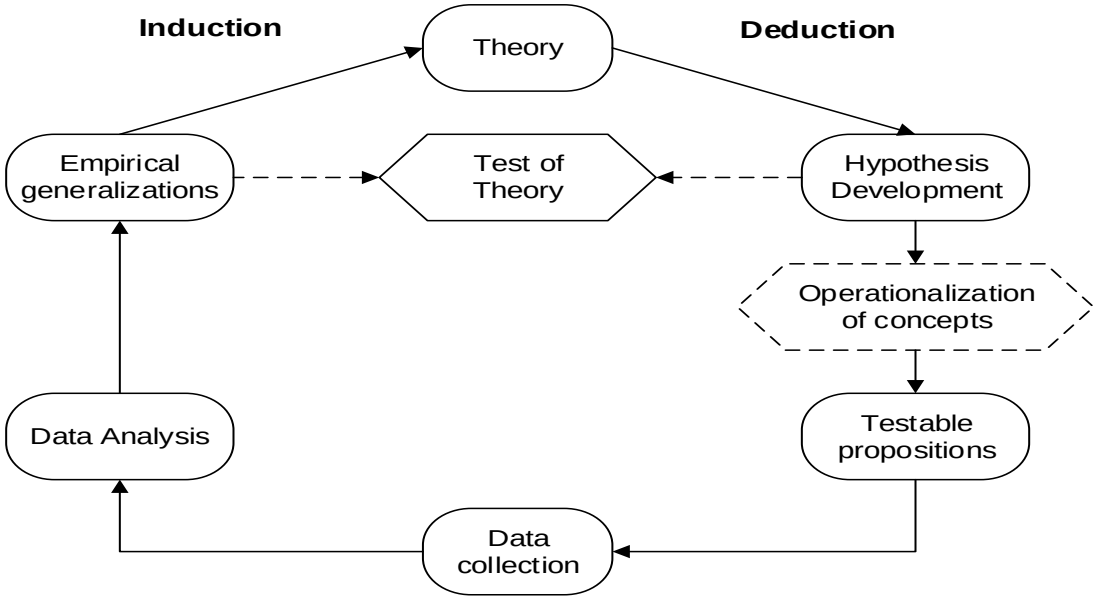
These findings provide a descriptive answer to “what” kind of political risk impact the industry is exposured to and allows the description of characteristics and patterns of industry relevant political risk manifestations. As per the systematic literature review, it is necessary to first determine the nature of the political risk constructs specific for the contract-based offshore service industry, as no previous research had been conducted on this phenomenon previously.

Based on the findings from the inductive research, Transaction Cost Theory was applied to provide a model for explaining the implications of external uncertainty for offshore location flows within the offshore service industry. The TCE provided a framework for hypothesizing on the implications of firm behaviour by applying the political risk constructs identified by the exploratory research within the context of the offshore service industry.

Following the inductive theorizing stage, applying theoretical concepts from TCE, a series of hypothesises were deduced with the objective of testing the concepts through a deductive approach in order to address RQ (2). As the deductive research stage requires the translation of the concepts in the hypothesis into *“measurement procedures and involving instruments, scales and sampling techniques*” (Blakie, 2007, p. 82), the political risk constructs were operationalized through deriving data from the World Economic Forum (WEF) and Political Risk Services (PRS) sources. Similarly, historical data of offshore service flows was extracted from IMF Balance of Payment (BoP) data.

Finally, the hypothesises were tested by matching them with the established data sets using quantitative statistical methods, leading to a series of full and partial validations of TCE concepts within a contract-based and captive entry mode context.

Figure 2: Wallace's cycle of theory construction and testing



1.5.3 Methodological approach

As further to the review of the research strategy, the following section will introduce the objective and challenges with the methodological approach.

1.5.3.1 The mixed method approach

For the purpose of reaching the research objective the study has applied a mixed methods research design. In general, mixed methods has been defined "as *research that involves collecting, analysing, and interpreting quantitative and qualitative data in a single study or in a series of studies that investigate the same underlying phenomenon"* (Leech and Onwuegbuzie, 2009, p. 267). While the use of mixed methods is growing within the disciplines of social sciences (Cameron, 2011), there is a standing critic in the literature on mixing research paradigms and hence a need to reflect on the potential ontological and epistemological tensions (Modell, 2009).

In order to position the research within the mixed method domain it is useful to refer to the three-dimensional typology developed by Leech and Onwauegbuzie, (2009). As the research design applies qualitative method as an exploratory first stage of redefining the constructs of political risk, followed by a hypothesis testing

stage using quantitative method, the design would be classified as a "*partially mixed sequential equal status design*" (Leech and Onwuegbuzie 2009, p. 269). The notion that the design is only partially mixed, implies that each stage of the research applies one method only, and that it is a sequential process of application. For this research the qualitative and quantitative components are conducted sequentially and in their entirety, before being synthesized at the final data interpretation stage. For this research the qualitative exploratory findings, together with the findings from the systematic literature review, inform hypothesises formulation for quantitative testing. It is argued that hypothesises emerging from qualitative studies are hence corroborated by subsequent quantitative research, as long "*as there are no unresolved construct or internal validity threats"* (Modell 2010, p. 210).

An advantage of using mixed methods is the notion of using triangulation as a technique for addressing internal and external validity of constructs. The main value of conducting the practitioner oriented interviews was to develop and validate the constructs of political risk in the specific context of the offshore service industry, hence ensuring high construct validity before launching the wider quantitative study. The qualitative data further substantiated causal explanations between different offshoring engagements and risk types. For example elaborating on the implications of experience and risk appetite to explain company specific risk perceptions. The identification of potential alternative causal explanations enhances internal validity and further informs areas of future research beyond the immediate scope of this study.

Another advantage of mixed methods is that it supports the logic of the inductive-deductive research cycle, allowing the study to engage in both theory generation and hypothesis testing within the same research continuum. Previous studies on application of mixed methods has highlighted that by matching the inductive-deductive dichotomies at the methodological level better inferences is provided when studying a social phenomenon (Jogulu and Pansiri, 2011). This is also confirmed by this study, where the initial exploratory qualitative engagements with the industry allowed a rich contextualization of the risk constructs and an

insight into the mind-set driving individual practitioners. The outsider position of the researcher also permitted a better understanding of the key drivers and challenges facing the industry. This added knowledge allowed a better matching of the interviewee's subjective interpretations and explanations with the offshoring trends established through the quantitative research to make more confident inferences.

1.5.4 Research paradigm

The following section outlines the philosophical and theoretical position of the research in order to explain the underlying ontological and epistemological assumptions about the reality as perceived by the researcher.

1.5.4.1 Ontological assumptions

Some critics of using mixed methods due to potential ontological and epistemological inconsistencies suggest that triangulation is not a legitimate validation technique when research incorporates both functionalist and interpretive paradigms (Modell, 2010). The following section will seek to bridge this critic and explain the ontological stance of the study.

The use of an inductive research strategy implies the embodiment of a realist ontology, which generally assumes that *"there is a reality out there with regularities that can be described and explained*" (Blakie, 2007, p. 60). The inductive research strategy therefore implies that research simply requires numerous observations of the phenomenon under investigation in order for the researcher to provide descriptions of patterns and association (Blakie, 2007).

As this research is limited to engaging with a sample size of offshoring practitioners it is not assumed to produce the full *truth*. Instead the research applies a *revised inductive strategy* using a more cautious inductive logic aiming at *"establishing limited generalizations about the distribution, patterns of association"* (Blakie, 2007, p.64) amongst engagements and political risk manifestations in the offshore service industry. The more cautious interpretation

of the findings generated by the inductive logic revises the ontological assumption to one of cautious realism.

A deductive research strategy is also generally based on cautious realist ontology and the epistemology of falsification, commencing the research process by developing proposed answers to the research problem (Blakie, 2007). The cautious realist ontological stance applied in the inductive component of the research is therefore in line with the ontology of the deductive research strategy for the second research component. While the realist approach is based on the underlying view of reality as an objective, unified and readily observable entity, it is acknowledged that if reality is subjectively constructed within an interpretive processes with the individual offshoring practitioners, the meaning of the political risk constructs would potentially vary in meaning and hence be ontologically inconsistent with the realist approach. To bridge this gap the research takes a critical realism stance that softens the need to produce *accurate* representations of an objective empirical reality.

Within the stratified ontology domain of critical realism, which incorporates *real objects and mechanisms, actual events and empirical experience*, it is acknowledged that "*humans are able to experience actual events generated by the causal powers embedded in real mechanisms"* (Modell, 2010, p. 212). If that is the case these *event observations* can be recorded through a qualitative method, like a Repertory Grid Technique (RGT) applied in this research, to identify appropriate risk constructs. This notion, combined with the critical theory stance that human social and political structures are generally characterized by longevity and durability (Modell, 2010), it is suggested that a critical realism approach allows a consistent ontology across the partial and sequential mixed method design of this research.

1.5.4.2 Epistemological assumptions

For the purpose of this research TCE theory is applied, based on the patterns established by the use of the initial descriptive inductive process, to explain offshoring firms behaviour under varied forms of external uncertainty. By nature

the outcomes of a deductive process is understood as being tentative truths i.e. subject to revision once further falsified (Blakie, 2007). Hence the position of the research is not to find the final truth, but deduce explanations of offshoring behaviour that would be regarded as one among other possible explanations. The same epistemology can be adopted for the revised inductive research strategy more associated with the pragmatic conventionalism approach, when used in conjunction with a deductive strategy (Blakie, 2007). The findings should therefore be seen as part of an iterative process of developing knowledge, even tentative, within the domain of offshoring firm behaviour. The following table provides an overview of the research strategies, methodology applied and the corresponding ontological/epistemological position implicit in the research design.

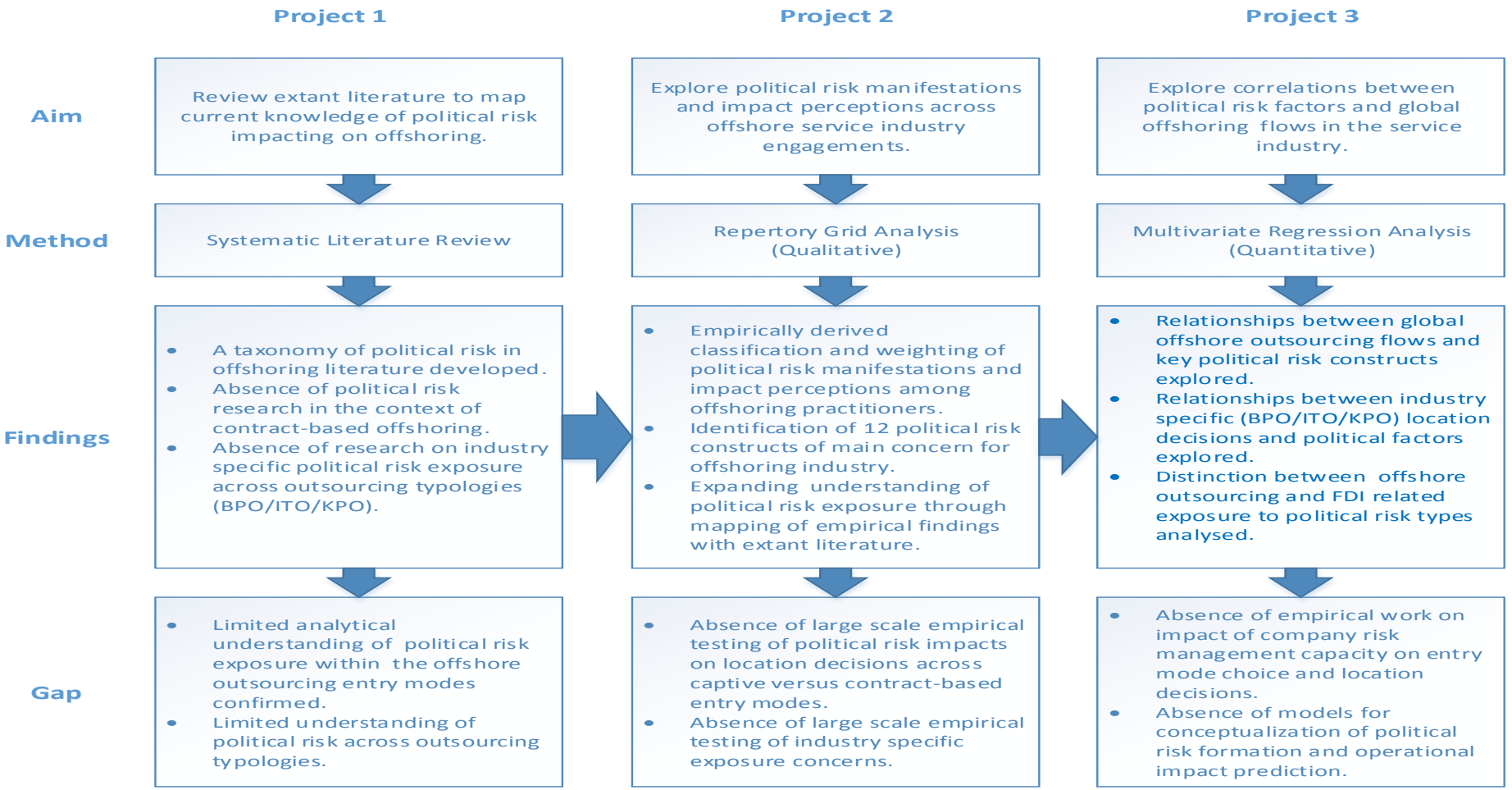
Table 1: Overview of the research strategies and theoretical position

	Inductive	**Deductive**
Research Stage:	Project 2	Project 3
Aim:	To establish descriptions of characteristics and patterns of political risk experiences in offshore outsourcing	To test TCE concepts, to eliminate or develop theory
Ontology:	Cautious realist/critical realist	Cautious realist/critical realist
Epistemology:	Conventionalism	Falsification
Start:	Collect data on characteristics and/or patters and produce descriptions	Identify a regularity to be explained and deduce hypothesis
Finish:	Develop relevant risk constructs	Test the hypothesis by matching them with data
Methodology:	(Qualitative): Repertory Grid Analysis in semi-structured interviews	(Quantitative): Multivariate analysis using linear regression

1.5.5 Research framework and project linkages

This section provides an introduction to the research process followed during the development of the DBA, structured according to the three milestone projects, (i) the systematic literature review, (ii) the qualitative empirical study and finally (iii) the quantitative empirical study, with each milestone building on the preceding findings. The research process and interlinkages are captured in the following diagram for visualization.

Figure 3: Overview of research process



1.5.6 Project 1 – The systematic literature review

The following sections will outline the main findings of the literature review and discuss implications for design of the proposed research agenda.

1.5.6.1 Main findings of the literature review

Based on the review of the extant literature on political risk in offshoring, the key political typology dimensions and their underlying manifestations were mapped and classified by merging the risk classifications presented by (Miller, 1992; Agarwal and Feils, 2007; Rao and Goldsby, 2009). The framework incorporates prevalent risk types for both FDI and offshore outsourcing modalities accordingly.

From the review it is suggested that Transaction Cost Theory (TCE) remains the main basis for the academic conversation on political risk and implications on offshoring strategies, mainly in the form of analysing determinants of firm entry modes. The TCE framework has mainly lent conceptual support to the linkage between uncertainty and offshore strategy decisions, however firm specific considerations such as experience and cultural distance has also been researched under the framework of Internationalization and Motivational Theory.

The descriptive review of the political risk literature on offshoring highlights that the literature domain is rooted in a vast volume of conceptual contributions with a primary focus on ownership-based offshoring (OBO) in the context of FDI, and with a weighting on North American, and later European business oriented research. While the literature has mostly been conceptual, the empirical work on political risk has mainly been quantitative of nature, with only few qualitative semi-structured interviews and case studies undertaken. The research focus has been mainly on FDI determinants and political risk assessment, with limited focus on developing comprehensive models integrating risk management considerations into theoretical frameworks.

The empirical findings across FDI research has generally been consistent in determining a negative correlation between FDI inflow activities and higher levels of political risk, underlining the negative correlation between perception of high

political risk and investment activity. Prevailing research has however been unable to distinguish between the relative significance of political risk variables and shown limited ability to provide guidance on offshore strategy choice and industry specific risk mitigation measures.

The review confirms that existing research on political risk has focused on ownership based offshoring leaning on FDI theory, with only nascent research on contract-based or offshore outsourcing. The literature remains unable to analytically disentangle offshoring activities and demonstrate causality between political risks and their impact on various entry mode strategies, and whether the same political typologies would apply equally to contract-based ownership outsourcing. While the literature base on political risk in contract-based outsourcing is relatively limited, the emerging research underlines the relevance of the subject, both within the theoretical and practitioner domain.

The review produces a set of political risk typologies from the extant literature, on which basis a comparison of further industry specific empirical findings can be structured and compared.

The findings affirm the need to expand the analysis of political risk against a broader spectrum of entry modes extending from fully controlled subsidiaries, to the more flexible offshore outsourcing modalities. The growing importance of offshore outsourcing as a business activity reiterates the need for extending political risk and offshoring entry mode research. On this background the research will seek to establish a more in-depth understanding of the political risk factors that impact on various offshoring modes by developing differentiated political risk typologies capable of measuring business impacts on various industry types. The systematic literature review provided the basis for determining the research questions guiding the design of the empirical study in Project 2:

- What are the key contingent political risk factors impacting on offshore outsourcing activities?
- How do these key political risk factors differ in importance depending on the offshore entry mode?

1.5.7 Project 2 – Mapping political risk in the offshore service industry

Following the mapping of the political risk constructs from the extant literature in the Systematic Literature Review, the P2 was designed to identify the key contingent political risk factors impacting on the offshore service industry to understand political risk dynamics across a wider spectrum of entry modes.

1.5.7.1 Methodological selection and process

A qualitative research design was applied to identify and map political risk types experienced within the offshore outsourcing industry, using a repertory grid-analysis technique to capture frequency and perceived impact on offshoring engagements (More on Repertory Grid Analysis Technique in section 3.2.). The qualitative design was selected as the most appropriate research method based on a methodological fit discussion, allowing for an evidence-based approach, soliciting data from 25 interviewees and reviewing a total of 91 individual offshore outsourcing engagements. The application of repertory grid technique for conducting qualitative semi-structured interviews for exploring risk perceptions is innovative and underlines the utility of the methodology outside marketing studies. The use of repertory grid analysis in the context of political risk research has allowed the project to fill a qualitative void within the domain as identified in the literature review.

1.5.7.2 Key findings of the study

The findings of the exploratory research are summarized as follows:

Finding 1: The traditional political risk definition confirmed insufficient to capture the exposure of offshore outsourcing firms: The comparison of the empirical findings and the extant literature suggest that political risk research has mainly explored traditional location considerations, like concerns with organized crime, social unrest, host country bureaucracy**,** geo-political risk and limitations to revenue repatriation, and not focused on addressing a series of key risks affecting offshore outsourcing activities. In fact, only the loss of IP rights, corruption and currency fluctuations has featured in the extant literature to date, while the top

offshore outsourcing exposures like organized labour strike and home country risk have not been addressed. Similarly, emerging risks pertaining to legal transparency, change of data management regulatory frameworks, predictability of labour regulations, policy change on foreign ownership and wage inflation suggest that discussions on external uncertainty, based on a narrow concept of political risk, is insufficient to capture the exposure of offshore outsourcing activities.

Finding 2: The nature of offshore outsourcing risk exposure revolves increasingly around policy and legal predictability and institutional capacity: The identified risk pertaining to changes in data management and HR regulatory frameworks, closely followed by loss of intellectual property (IP) and corruption, suggest that the nature of offshore outsourcing political risk exposure revolves increasingly around the key categories of regulatory policy, legal predictability and institutional capacity, confirming the relevance of integrating mechanisms to capture institutional differentiations as a means of expanded conceptualization of external uncertainty. The findings support emerging critic contending that external uncertainty needs to be conceptualized more broadly and should incorporate the concept of governance infrastructure of host countries. The exploratory research confirms the need to expand the conceptualization and operationalization of formal external uncertainty, and the need for entry modes research to measure external uncertainty by other political dimensions such as government effectiveness, regulatory quality and control of corruption.

Finding 3: Increased importance of home/client-country political fall-out or change of regulatory frameworks with implications for the outsourcing business model: In regards to risk types and perceived impact on offshore outsourcing activities it was established that political risk concerns related to home/client-country political fall-out or change of regulatory frameworks with implications for the offshoring business model was most prominent. This observation highlights that political risk exposure has a dual nature with potential impact on both the location side and the manner in which the outsourcing activity is executed. The impact of the home political risk was further determined to be sector specific i.e. the highly regularized

utility industry would be more exposed to policy changes pertaining to data access and security profiling. The significance of the featured risks pertaining to home country repercussions or change of regulatory requirements, and the strong emphasis on labour and regulatory related vulnerabilities, highlight that a broader conceptualization of political risk considerations is valid and the need to define political risk in a manner that allows for unambiguous classification against relevance and impact.

Finding 4: Political risk exposure determined by the nature of the offshoring activity (knowledge content): Finally the findings suggest that there is limited evidence that ITO and BPO engagements are detrimentally different in terms of political risk exposure. However, compared with the KPO findings it was possible to observe a scope shift towards concerns relating to regulatory frameworks and contract enforcement, hence more impacted by potential IP loss, contract enforcement limitations and legal predictability. The association of Knowledge-based Outsourcing (KPO) with loss of IP, policy change on foreign ownership and contract enforcement risks, suggests that institutional capacity i.e. legal enforcement of IP rights and contracts becomes increasingly important as the value of product or service is enhanced. The findings suggest that the firm specific risk profile changes subject to the level of value or knowledge content involved in the offshoring engagement and that risk should be considered in the context of low versus high value/knowledge service delivery as a key distinction for the nature and level of exposure.

The exploratory research suggests that the constraining nature of regulations and policies have an impact on offshoring activities, and more importantly that a poorly designed regulatory framework or erratic enforcement of regulations can have a negative effect on offshore activities as it has the potential to alter the underlying costing assumptions of the business model. Hence the key concern pertains to the unpredictability of policy and regulatory application and enforcement of same.

Finally, the exploratory research highlighted a series of external business variables like available support infrastructure, educated workforce and research talent for upstream knowledge-based outsourcing, with a potentially moderating effect on location choice.

1.5.8 Project 3 – Measuring impact of political risk on offshoring flows

Based on the literature review and the findings of the exploratory P2 study on post-contract political risk exposure among offshoring practitioners, a series of proposed correlations between offshoring flows and political risk constellations were hypothesized for empirical testing in P3.

According to the literature review, the perception is that since offshore outsourcing modalities have less capital at stake and no physical facilities at risk on the ground, political risk considerations are a less significant concern. However, according to the exploratory research findings in P2, the distribution and attributes of political risk in the context of contract-based offshoring engagements, were very similar to those of captive engagements. Applying the new political risk typologies for offshore outsourcing identified in the exploratory research, the relationship between offshore outsourcing and political risk is explored. The research first analyses the effect of political risk on predicting offshore outsourcing flows, and secondly, compares offshore outsourcing and regular FDI in terms of the sensitivity to political risk in their offshore engagements. The research is guided by the following hypothesis:

Hypothesis 1: Offshore outsourcing activities, as a non-equity and contract-based modality, are less sensitive to political risk considerations than general inward Foreign Direct Investment (FDI) in the choice of offshore locations.

The findings of the exploratory research further suggested that the nature of offshore political risk exposure revolves increasingly around policy and legal predictability, including institutional capacity, confirming the relevance of incorporating institutional differentiations in the determination of external

uncertainty. The findings supplement emerging research suggesting that determinants of foreign investment flows should be extended beyond the traditional factors like government stability, internal/external conflict and ethnic tensions, to also include aspects of local corruption, quality of bureaucracy and law and order (Busse and Hefeker, 2008). Other research argues that using a narrow political risk definition in exploring uncertainty in the formal external environment is suboptimal, contending that government quality is a better proxy for determining external uncertainty. (Slangen and Tulder, 2009). On this basis the research explores the impact of institutional and regulatory factors in predicting contract-based offshoring flows.

Hypothesis 2: When the institutional and regulatory factors in the host country are strengthened, the volume of overall (ITO/BPO/KPO) contract-based offshore outsourcing will increase.

The further association of Knowledge-based Outsourcing (KPO) with loss of IP, policy change on foreign ownership and contract enforcement risks, suggested that institutional capacity i.e. legal enforcement of IP rights and contracts becomes increasingly important as the knowledge content and value of services are enhanced. The findings imply that the company specific risk profile changes subject to the level of service value or knowledge content involved in the offshoring engagement and that risk should be considered in the context of low versus high knowledge content or value of the services as a key distinction for the nature and level of exposure. Hence for purely transactional work most firms appear comfortable outsourcing to third-party, while for high-end activities they prefer to keep the process internal through a captive entry mode or under strong IP regulation.

Hypothesis 3: *When the institutional and regulatory factors in the host country are strengthened, the offshore outsourcing volumes of business activities with a higher knowledge content (KPO) is likely to increase.*

1.5.8.1 Methodological selection and process

The application of quantitative methods and regression analysis to political risk research is a common approach within the political risk research domain (See Annex. C.2).To analyse the significance of the hypothesises the research applied a linear multiple regression methodology based on aggregate and activity specific (ITO, KPO and BPO) offshoring volumes generated from the IMF Balance of Payment (BoP) database to function as the dependent variables. For the purpose of identifying appropriate data sources to operationalize the identified political risk indicators as independent variable datasets, a comprehensive review of existing governance and country indicators was conducted (See Annex C.1) and a dataset compiled from various sources, including the ICRG Index and the Global Competitiveness Index (GCI) from the World Economic Forum (WEF). As research on offshore outsourcing has been hampered by the absence of available data, one additional contribution of this research is the design and compilation of a dataset capturing location specific offshore outsourcing flows and the corresponding break-down into ITO, KPO and BPO specific categories (For more detail see P3 methodology in Section 4.3).

The main application of the regression variate was to determine the relative importance of the individual political risk indicators in determining offshoring flows across entry modes and business activities (ITO/BPO/KPO). The methodology further allowed for a measure of the individual impact of each political risk variable as a predictor of offshore flows, as a means for classification of relative importance and potentially forming the basis for developing a weighted risk index.

1.5.8.2 Key findings of the study

Firstly, the quantitative research validated that political risk is a genuine issue of concern in offshore outsourcing, despite being contract-based, and therefore technically a means of “outsourcing” risks to the suppliers. The research indicated that the 12 identified political risks accounted for 38.0% of the variability in the offshoring outsourcing flows implying that concerns about service disruptions

and/or cost implications of external uncertainties features as a factor in considering supplier and location choice.

The findings further highlight a consistent overlap of key predicative variables, including intellectual property protection; quality of bureaucracy and burden of customs all significant at <0.001 for both for offshore outsourcing and captive activities. This is a significant finding as it highlights that for both captive and outsourcing activities, institutional and regulatory factors in the host country are a key concern. Furthermore, it is indicated that the domestic market size is a key external business variable for both modalities suggesting an interlinkage between entry mode strategies, and that offshore outsourcing should not be seen in isolation from companies longer-term market entry considerations.

The important distinction between offshore outsourcing and captive activities identified from the research, is not whether political risk is a concern, but specifically w*hat kind of* political risks is a concern. The research yielded significant and positive relationships with intellectual property protection and bureaucracy, for both offshore outsourcing and captive activities, while captive engagements were also significantly related to security and internal/external conflict related variables. The findings confirm logically that political risks, like security and conflict, will have a higher impact on investments with a physical presence including captive manufacturing plants or service centres, while contract-based outsourcing and captive activities will be equally concerned with risks concerning IP loss and quality of bureaucracy.

Another interesting finding is that the innovation capacity associated with offshoring locations appear to be a stronger predicative feature for contract-based offshoring than for captive engagements. This findings suggest that while captive engagements is often designed as a means to access foreign markets or leverage labour arbitrage for manufacturing, offshore outsourcing is often more than a cost consideration and also a means to access foreign talent and knowledge for competitive advantage. As these talent pools may not be available

on the home market, or cost restrictive, offshore outsourcing becomes a tool for tapping into accessible innovation centres around the world.

Secondly, the results validated the findings of the exploratory research, by confirming a positive relationship between offshoring flows and institutional and regulatory factors. The research findings highlighted a positive and significant relationship between both intellectual property protection and the quality of bureaucracy, and increased inflows of contract-based offshore outsourcing activities. The findings validated the hypothesis that "*When the institutional and regulatory factors in the host country are strengthened, the volume of overall (ITO/BPO/KPO) contract-based offshore outsourcing will increase".*

Thirdly, the research analysed activity specific offshore activities and mapped the political risk accounting for the highest variability in the offshoring flows. The findings showed a dispersed distribution of political risk variables across ITO, BPO and KPO engagements, confirming the relevance of also analysing offshore according to the nature of the offshoring activity, rather than solely as a consolidated industry. Despite the mixed results from the cross-industry analysis, the research obtained a significant (and positive) coefficient for intellectual property rights protection with a very high beta-value for KPO activities, a significant but lower positive relationship for BPO and no indicated importance for ITO activities. Hence, for KPO outsourcing flows, a positive relationship with intellectual property protection, with the highest Beta value, was noted. While a statistical positive relationship was noted between KPO outsourcing flows and intellectual property rights protection, the research does not establish the basis for causality, however suggests a partial validation of hypothesis #3: *When the institutional and regulatory factors in the host country are strengthened, the offshore outsourcing volumes of business activities with a higher knowledge content (KPO) is likely to increase.*

In terms of external business variables, domestic market size and basic electricity and telephony were found to be the most important factors across all offshore activities. While the need for a functioning basic electricity and telephone

infrastructure is intuitive it is surprising in the sense that most of the offshoring activities are assumed to take place in developing economies, and hence the infrastructure requirements will, despite any cost incentives, bring a natural limit to offshoring flows to many economies. More surprising is perhaps the effect of a large domestic market, as contract-based offshoring is generally assumed to serve external entities i.e. through call centre activities, IT application management etc. The pull-effect of larger markets, and positioning of contract-based offshore outsourcing activities in potential domestic markets, suggests that offshore outsourcing could be considered part of a larger market entry strategy.

As potential host countries compete to attract offshore activities as a basis for enhancing employment and knowledge transfer opportunities into their economies, it would be prudent to take note of the perceived importance of strengthening institutional and regulatory factors. If the host country is seeking to attract contracts within the areas of R&D, it would be especially important to ensure that the appropriate IP regulatory frameworks are in place, while for the more labour intensive BPO activities, a well-functioning labour market and minimal bureaucracy would have a high impact.

1.6 Discussion of Findings and Contribution

The following section highlights the existing knowledge gaps identified in the extant literature and presents the theoretical contributions to the literature domain and the practical application of the findings within the offshore service industry.

1.6.1 Extant knowledge and gaps

Based on the literature review there is an established need to examine the specific *political risk scenarios* associated with each offshore entry modality and tailor political risk assessment to different entry modes in foreign markets (Agarwal and Feils, 2007). In extension, Luo highlights that while several studies have shed light on the range of critical factors underlying entry mode selection, some factors remain unexplored, including *host governmental intervention and environmental uncertainty* (Luo, 2001). In addition, Luo (2001) concludes that

applicability of major results from prior studies on risk and entry modes is largely limited to developed market economies, and issues pertaining to *emerging economies* need to be advanced, as these are often the destination of offshoring activities (Luo, 2001).

1.6.1.1 Gap in research on offshore outsourcing entry modes

While previous studies of entry mode has focused on captive offshoring and joint ventures (Zhao, Luo and Suh, 2004), the emergence of a growing offshore outsourcing industry prompts the interest in extending the entry mode research typologies. The offshore outsourcing literature reaffirms the relevance of analysing external risks such as political instability and legal infrastructure in vendor host countries, including differences in legislation towards intellectual property rights, labour contracting and employment law (Weiss and Azaran, 2007). The need to conduct country risk analysis for offshore outsourcing projects, preempting political risk that can impact on partner company performance, is well established (Goodman and Ramer, 2007). In fact, the Gartner Group coined the phrase "*country before company*" to describe the precedence of country location selection over vender selection in strategic offshoring decisions (Hahn, Doh, and Bunyaratave, 2009).

Despite the increased relevance of researching external uncertainties relating to the offshore outsourcing entry mode, limited systematic research has been focused on identifying the specific risk sources and consequences of political risks facing offshore outsourcing firms (Alon and Herbert, 2009). The evidence-based identification and ranking of significant political risks conducted in this research project is therefore a significant contribution. As previously argued, *"it still remains largely unclear whether the same factors that promote ownership based offshoring encourage the firm to make an outsourcing decision in which control is passed to the foreign vendor/partner"* (Hatonen, Eriksson and Paju, 2009, p. 162*).* Similarly, Agarwal and Feils (2007) identify that "*there is a need to examine carefully the various entry modes of internationalization and the specific*

political risk scenarios associated with each entry modality within an integrated theoretical framework" (Agarwal and Feils, 2007, p. 178).

1.6.1.2 Gap in research on moderating impact of industry type

According to the literature the cumulative understanding of the TCE determinants in relation to entry mode is mixed and inconclusive, with disparate results and inconsistent findings generated by a range of methodologies (Zhao, Luo and Suh, 2004). Based on a meta-analytical review, covering 38 empirical studies on entry mode choice from the period 1986-2002, the study offers a comprehensive review of empirical findings from prior studies on predictive abilities of TCE, including the application of external uncertainty (Zhao, Luo and Suh, 2004). The aggregate results of the review suggests that all six TCE determinants are found to be significantly influencing ownership-based entry (OBE) choice, while country risk and international experience both score the highest, country risk, representing external uncertainty turns out as *"the single most influential determinant of OBE choice"* (Zhao, Luo and Suh, 2004, p. 530).

Importantly, the meta-analysis highlights the impact of *moderators* on predictions, including the effect of the country of origin, offshoring location and industry type in various TCE based studies. The moderating effects have raised concerns about the generalizability of TCE predictions across national and industry settings (Zhao, Luo and Suh, 2004). The moderating effect of the country of origin refer to findings suggesting effects of cultural distance, international experience and advertising intensity vary significantly depending on firm's home country. For example, a study by Hahn, Doh, and Bunyaratave (2009) examined determinants of firm offshoring behaviour with respect to location risk within the information system industry. The findings suggest that firm-specific experience and the core "risk-gap" between home and host country is predictive of companies pursuing progressively riskier locations, but that their effects dissipate as environment-wide experience is incorporated (Hahn, Doh, and Bunyaratave, 2009).

The effect of industry type is found to moderate all TCE variables, suggesting that TCE determinants are industry specific, highlighting the need to treat different

industries separately when analysing entry modes determinants. It is noted that while all TCE determinants were impacted by the moderators, country risk, as an external uncertainty factor was least affected by the moderators among all TCE determinants (Zhao, Luo and Suh, 2004). While TCE points to external uncertainty as a decisive factor in conditioning entry mode choice, it has not been conclusive on *how* and *when* external uncertainty affects the strategic entry mode decision, and how perception of external uncertainty and corresponding firm behaviour might vary depending on industry and firm specific attributes.

From the literature it is apparent that TCE can accommodate inherently contradictory predictions of firm behaviour towards external uncertainty. In accordance with TCE, the greater the external uncertainty the higher the transaction cost of managing the contracts, as bounded rationality would prevent the firm from anticipating all contingencies and institutional unpredictability hinder ability to enforce corporate contracts. On this notion TCE would predict that firms would prefer to internalize the business process through establishment of wholly-owned subsidiaries (captives) (Williamson, 2002; Williamson, 1995).

On the other hand empirical evidence has been fairly consistent in determining that countries with high external uncertainty are more likely to be entered through a non-equity modality rather than WOS, compelling firms to choose a flexible entry mode rather than an ownership-based entry mode (Zhao, Luo and Suh, 2004; Slangen and Tulder, 2009). Similarly research on MNEs choice of capital structure in response to political risk suggest that as political risk increases ownership tends to decrease, which is in contradiction with the premise of TCE stipulating that if uncertainty increases, the level of internalization will increase accordingly (Kesternich, 2010).

On one side it can therefore be expected that when informal and formal sources of external uncertainty increase, firms prefer investing through entry modes which guarantee a higher level of control over their internalized project. On the other side, in an offshore setting, firms facing higher external uncertainty may prefer flexibility and be less willing to commit resources. The existence of contradictory

empirical evidence suggests that the factors of external uncertainty need to be explored in more depth.

1.6.2 Contribution to theoretical knowledge

The theoretical contribution of the proposed research is significant, as while TCE has been the main theoretical framework for the conversation on political risk and offshoring strategies, the theory and corresponding empirical findings have not been conclusive on how the notion of *external uncertainty* impacts on offshoring entry mode decisions. This research has offered a new conceptualization and operationalization of the formal external uncertainty concept within TCE, allowing empirically based differentiation between various dimensions of formal uncertainty and implications subject to entry mode choice and offshoring activity.

The identification of new industry relevant political risk factors, like home country risk and institutional framework, support emerging critic contending that external uncertainty in TCE needs to be conceptualized more broadly and incorporate the wider concept of governance infrastructure. As highlighted by Zhao, Luo and Suh (2004) and Slangen and Tulder (2009), the integration of mechanisms to capture institutional differentiations is one added dimension of an expanded conceptualization of external uncertainty beyond the reliance on composite political risk indicators (Slangen and Tulder, 2009; Zhao, Luo and Suh, 2004).

The findings further confirm the importance of incorporating industry-specific moderators into TCE-based entry mode perceptions of external uncertainty. As indicated all TCE determinants are considered industry specific, underlining the need to also consider a differentiated approach to various forms of offshoring activities i.e. ITO, BPO and KPO. A review of the relationship with key political risk variables across offshore outsourcing engagements confirm that the offshore outsourcing industry cannot be assessed as one holistic group in terms of risk exposure, but should be reviewed through the lens of their activities. This confirms that external uncertainty exposure is moderated by the industry type and activity, and needs to be systematically incorporated into the TCE application of external uncertainty impact on entry mode determination.

The research validated that institutional capacity i.e. legal enforcement of IP rights and contract enforcement, becomes increasingly important as the knowledge increases. These findings support the TCE notion that cases where the market is imperfect due to bounded rationality and opportunism leading to increased transaction costs due to uncertainty, an internal governance structure will be considered more attractive (Anderson and Gatignon, 1986). For example, in host countries with limited governance infrastructure or institutional capacity local suppliers may use loopholes in the legal system or bureaucracy to act in self-interest, hence constituting a risk of opportunistic behavior. Similarly, the findings touch upon the notion of asset specificity, which is another principle factor to which TCE explain vertical integration (Williamson, 1985). TCE has distinguished asset specificity as either site specificity, physical asset specificity, human asset specificity and dedicated specificity with the main premise suggesting that when asset specificity increases, the "*balance shifts in the favor of internal organization"* (Williamson, 1985, p.90). In the context of offshoring of services, the research proposes to introduce the additional concept of *knowledge specificity* to be considered as an additional determining aspect of vertical integration decision.

Consistent with the TCE perspective the research suggests that companies engaged in the offshore service industry will ensure higher control or avoid locations, when engaged in service offshoring with a high-knowledge-content and in environment of high institutional and legal uncertainty. Therefore as the institutional and legal uncertainty decreases at an offshoring location the level of offshoring activity with a higher knowledge-content will increase.

1.6.3 Contribution to practice

In practical terms, the research is in line with the call for more research on the questions of *how* and *where* to source (Kotabe and Murray, 2004). While the political risk research is extensive, research remains unable to analytically disentangle causality between political risk types and their impact on various investment strategies. The key practical contribution is the development of

differentiated political risk map of typologies that can capture the nuances in offshore business risks, allowing for more accurate risk assessment of various offshoring locations and advise on the optimal risk-adjusted investment model, plus ensure effective monitoring of post-contract political risk exposure. The research findings has allowed for a clear classification of political risk indicators influencing offshoring location decisions and forms the basis for establishing a framework for more effective post-contract award risk monitoring.

The categorization of barriers and enablers attracting offshore investment in the form of captive hubs or offshore outsourcing is a strong tool for informing policy formulation and investment partnership strategies formulated by national governments. As potential host countries compete to attract offshored business activities, as a basis to enhance employment and knowledge transfer opportunities into their economies, it would be important to take note of the perceived importance of strengthening institutional and regulatory factors. If the host country is seeking to attract investments or outsourcing contracts within the areas of R&D, it would be especially important to ensure that the appropriate IP regulatory frameworks are in place, while for the more labour intensive BPO activities, a well-functioning labour market and minimal bureaucracy would have a high impact.

While beyond the immediate scope of this research, the findings also capture the relative importance of non-political predictors of offshoring flows including educational levels, infrastructure, and technology and innovation space. The findings provide an instrument for policy formulation beyond political risk. For example important to acknowledge that a well-functioning supporting ITC infrastructure in potential host countries is fundamental in order to attract offshore outsourcing activities. Similarly, the findings suggest opportunities for innovation centres that compete on more parameters than merely cost efficiencies, but also provides opportunities for tapping into local talent and education pools.

1.6.3.1 Developing an industry-specific risk monitoring platform

As per the empirical findings the offshore industry have to date established limited capacity for ensuring monitoring of supplier location specific risk indicators, exposing them to potential service disruption. With an increasing volume and scope of business services being offshored, systematic monitoring of political risk indicators should feature in all business process offshoring strategies and extended Enterprise Risk Management frameworks. From a practical perspective the research highlights the need for developing managerial tools to improve timely identification and monitoring of both existing and emerging risks. The systematic categorization and impact weighting of the relevant political risk indicators within the industry, allows for the development of a web-based risk monitoring platform that can both inform the initial offshoring location decisions and continue monitoring indicators during the contract implementation period.

The weighted risk index of offshoring locations can provide real-time location analysis and trends, followed by systematic event mapping in the form of heat maps informing buyers of developing location specific events with disruption potential for their specific offshoring activity. Based on the event notifications provided by the automated platform, the service buyers are able to engage in timely disruption mitigating measures with the concerned supplier, or initiate scale-up of service delivery from alternative suppliers at other locations unaffected by the emerging events. An industry-wide risk monitoring platform can potentially leverage existing Big Data sources, like Google Big Data or GDELT, providing daily codified country events data for operationalizing the identified risk indicators and activity-specific impact weightings. An automated risk monitoring platform supporting the offshoring industry in navigating location risks and proactively monitoring the supplier operating environment is a powerful contribution to enhancing confidence in offshored supply and service chains, reducing the need for investing in excess capacities, inventories or multiple sources of supply, hence improving efficiencies and overall performance of offshore operations. The domains and extent of the contribution are summarized and shown in the “Contribution to Knowledge Table”.

Table 2: Contribution to knowledge

Domains of Contribution	Extent of Contribution (Cranfield School of Management – Table)		
	What has been confirmed	**What has been developed**	**What has been found which is new**
Theoretical Knowledge	▪ The traditional political risk definition confirmed insufficient to capture the exposure of offshore outsourcing firms.	▪ Developed and operationalized an expanded political risk definition applicable for contemporary offshoring based on a robust systematic review of extant literature. ▪ Findings of additional political risk factors support emerging critic contending that external uncertainty in Transaction Cost Theory needs to be conceptualized more broadly and incorporate the concept of governance infrastructure. ▪ Findings empirically support that IP considerations and enforcement is a key feature in companies R&D offshore location and entry mode decisions.	
Empirical evidence	▪ Statistically confirming a positive relationship between offshore outsourcing flows and institutional and regulatory factors for both Offshore Outsourcing and FDI activities.	▪ The research has confirmed that the nature of offshore outsourcing risk exposure revolves increasingly around policy/legal predictability and institutional capacity of host country.	▪ Identified the importance of *home country* political fall-out or change of regulatory frameworks with implications for the offshoring business model. This observation highlights that political risk exposure has a dual nature. ▪ The findings validated that when institutional and regulatory factors in the host country are strengthened, the volume of overall (ITO/BPO/KPO) contract-based offshore outsourcing will increase.
Knowledge of practice		▪ Developed a comprehensive and systematic taxonomy of political risk constructs and impact perceptions across the offshore outsourcing industry to inform industry risk management.	▪ Determined the relevance of political risk management in offshore outsourcing engagements and identified relative importance of political risk indicators in supplier location choices. The findings provide the basis for development of a weighted location risk indexes for the industry.

1.7 Research Limitations and Areas for Further Research

1.7.1 Research limitations

In the qualitative component of P2, the study was able to elicit political risk experiences from a total of 91 offshore outsourcing engagements, with a sample of interviewees at 25 outsourcing practitioners from a varied group across industry types. While the overall number of engagements and interview sample size is significant at a total of 91 engagements, the sample size decreases substantially when divided across the three main outsourcing types i.e. 32 BPO engagements, 33 ITO engagements and 26 KPO engagements. Due to the limited industry specific sample size, the research component was classified as exploratory, due to a clear limitation in terms deriving industry wide generalizability, and potential bias should be expected from host country locations, company size and experience which was not compensated for in the analysis. In terms of offshoring locations it should be noted that the distribution of samples with a majority (30.8%) in South Asia, (17%) in East Asia & China, followed by (17.7% in EU) and (8.8 % non-EU) and (9.9%) in Latina America is representative of the general offshoring industry trends, suggesting an appropriate distribution of sample engagements.

With reference to the key components of PCT it should also be considered that repertory grid analysis elicits constructs that are specific to the individual, and therefore it may not be possible to derive results that are representative of a population. Similarly, critics of RGT highlight that constructs changes over time and hence are time specific highlights the question of reliability of the results. The extracted data therefore needs to be understood to be time specific of nature. For these reasons the study should be viewed as exploratory work which has elicited constructs which can be validated using surveys of larger samples. However, overall the use of RGT provides a clear trail of evidence which is available for reanalysis by other researchers, and hence enhances transparency.

In the qualitative component of the P3, the research was faced with data completeness constraints when applying the combined data from the Global Competitiveness Index (GCI) and the PRS Group Political Risk Index. For the GCI data most variables did not include comparable data from before 2005, due to a change in the data collection methodology, and hence limited the scope of timeline analysis. In regards to the PRS Political Risk Index the number of case countries and potential outsourcing destinations were excluded, like Mauritius. Similarly data constraints emerged when building a database from IMF Balance of Payment (BoP) data. Due to the varied methods of collecting BoP data across national economies, the sourced does not yield a comprehensive set of country BoP data for several key outsourcing destinations like Mexico, Indonesia. Furthermore, the inconsistent categorization of services across Computer Services, R&D and Other Business Services across countries can form a bias in the more detailed cross-typology analysis. The implication of the missing or inconsistent data has necessitated the removal of national economies with incomplete datasets and hence ultimately limiting the scope of cases in the analysis.

As indicated in the section on Country Samples, there are some data completeness constraints with using the Global Competitiveness Report and the PRS Group Political Risk Index, as not all countries are represented with complete data sets. For the GCI data the key limitation is that most variables do not provide comparable data from before 2005, due to a change in the data collection methodology, and hence limits the scope of timeline analysis. Similarly, due to the varied methods of collecting BoP data across national economies, does not yield a comprehensive set of country BoP data for all countries, plus the potential for inconsistent categorization of services across Computer Services, R&D and Other Business Services which can form a bias in the more detailed cross-typology analysis. The implication of the missing or inconsistent data has been the removal of national economies with incomplete datasets and hence limiting the scope of analysis.

Finally, the time-series regression analysis likely involves some level of autocorrelation of the disturbances as indicated by the standard Durbin–Watson d statistic. For the political risk models the Durbin-Watson value ranges from .265 for the ITO specific analysis to .486 for the Aggregate political risk analysis, indicating a positive first-order serial correlation for the data sample. One consequence of autocorrelation might be that some or all estimated coefficients are biased, which could affect the interpretation of the relative impact of the indicators for political risk on offshore outsourcing. Subsequently, the analysis of the relative impact of the political risk variables will need to be assessed with some caution.

1.7.2 Areas for further research

Firstly, the findings suggest that firm perception of uncertainty is conditioned by the perceived ability of the firm to mitigate more objective external uncertainties through proactive political risk management mechanisms. On this note it may be interesting to integrate risk management ability (or perception of ability) into the overall function of entry mode uncertainty determination. Such a study would explore the (risk) adaptive behaviour patterns of firms, as well as the implications on entry mode strategies.

Secondly, the exploratory research established that political risk concerns relating to home/client-country political fall-out or change of regulatory frameworks with implications for the offshoring business model was one of the most prominent concerns. This observation highlights that political risk exposure has a dual nature with potential impact on both the location side and the manner in which the outsourcing activity is executed, a dynamic that remains unexplored. While the exploratory research suggested that the impact of home political risk was sector specific and regional, it would be interesting to further explore the actual impact on offshoring decisions and determine whether the risk is mostly rhetoric or real in its consequence.

Finally, the findings suggests that a review of the impact of political risk considerations in offshoring entry modes would need to include moderators

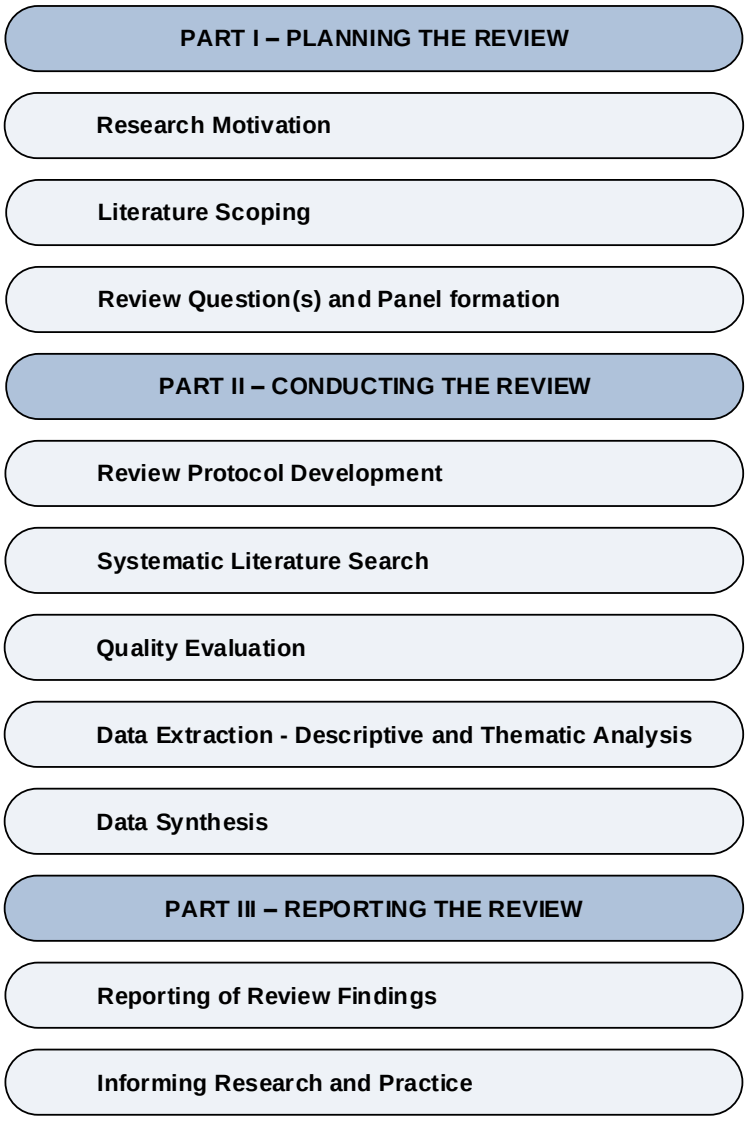
pertaining to firm experience and business volume. The findings therefore suggest that the premise of TCE alone may be insufficient to explain a firm's decisions on applying a contract-based or captive entry mode when offshoring BPO/ITO or KPO business processes. In fact, the findings tentatively suggest that the choice of Entry Mode is not only influenced by level of external uncertainty, but also by business considerations relating to volume of trade, consideration to control requirements of the particular business processes i.e. data security or proprietary nature. Similarly, previous operationalization of the TCE framework has not factored the conditioning effect of the risk adaptive behaviour patterns of firms, as well as the implications of this adaptive behaviour for the application of TCE itself.

The following sections will present the Systematic Literature Review (P1), plus the two empirical research components (P2 & P3) in their entirety, as per the milestone requirements for the DBA.

2 A Systematic Literature Review

2.1 Structure of the Review

As per the Cranfield University guidelines, the following components provide the outline for the Systematic Review Framework.



2.2 The Systematic Literature Review Protocol

The systematic literature review is a means of identifying, evaluating and interpreting all available research relevant to the review questions pertaining to political risk in international offshoring strategies. The main reason for undertaking the systematic review is:

- To summarize the existing evidence concerning political risk effects on offshore outsourcing strategy development and corresponding entry mode choice;
- To determine the relevance of the proposed research by providing insights for intervention into the operational needs of practitioners;
- To provide a framework/background of existing knowledge in order position the planned research activities.

The overall objective of the literature review is hence to map and assess the relevant knowledge within the research area, in a systematic, transparent and reproducible manner, in order to specify a relevant research question which will further develop the knowledge base (Tranfield, Denyer and Smart, 2003).

The systematic literature review follows an evidence-based approach adopting a replicable scientific and transparent process aiming at minimizing bias and providing an audit trail of review decisions, procedures and conclusions. The protocol methodology for the systematic review fulfils the premise of documenting the review in sufficient detail to enable the study to be replicated by others, thereby allowing an increased reliability of the findings. The protocol is hence considered a roadmap that protects objectivity through explicit description of the search strategy for identification of relevant studies and the criteria for inclusion and exclusion of studies in the review (Tranfield, Denyer and Smart, 2003).

2.2.1 The systematic literature review question

The literature review will be guided by the following review question:

Review question: What are the types and dynamics of political risk that impact on international offshoring strategies?

2.2.2 Key word identification

The systematic search was commenced with the identification of keywords and search terms extracted from the review question and from the definition of key concepts to form the below search strings to guide the systematic review process. Acknowledging that the literature is discussing the phenomenon of political risk and offshore

outsourcing by use of various synonyms, a range of OR synonyms identified in the literature was included in the search string design.

2.2.3 Applied search strings

The keyword search strings were developed using the Boolean Logic (OR, AND, NOT) to isolate the most relevant research.

Table 3: Review search strings

Review Question: What are the types and dynamics of political risks that impact on international offshoring strategies?				
Root search word	Sub- search word(s) 1		Sub- search word(s) 2	Search area
offshor* OR outsourc* OR sourc* OR International Business	AND	poli*OR geo-poli* OR countr*OR location* OR environment*	AND	Risk* OR hazard* OR uncertaint*OR contingenc* OR vulnerabilit* OR turbulenc*	Title, abstract, keywords

2.2.4 Identifying information sources

The primary source of information is academic journals and books, which are searchable through academic databases. The University of Cranfield Library data base was reviewed and analysed, and the following databases were identified as providing the most relevant coverage; ProQuest, EBSCO, Emerald Journals and Science Direct. The four main databases were then further tested for the coverage of offshoring literature by first inserting the key words (Offshoring OR Outsourcing) to determine the volume of coverage to determine the substantive content of the databases relating to the specific subject matter. From this pilot it was established that ABI/ProQuest and EBSCO yielded the highest search result on the overall offshoring literature. Furthermore, it was established that ABI/ProQuest and EBSCO are the largest and most comprehensive of the four databases and that Emerald is a publisher database, which should therefore be captured within the former two databases. On this basis it was decided to exclusively use ABI/ProQuest and EBSCO as they supplement each other in terms of coverage.

Table 4: Identification of database resources

Name of Database	Coverage (extracted from website)	Search in:	Keywords: Offshoring OR Outsourcing
ABI Inform Complete (ProQuest)	Full-text access to approximately 2,500 international business periodicals contained within the ABI Inform Global, Trade and Industry and Dateline databases. Coverage: 1971 – current.	ALL	102,663
Business Source Complete (EBSCO)	Full-text access to more than 2,800 scholarly business publications including over 900 peer-reviewed journals. Also includes book content, conference proceedings, and industry and market reports. Coverage: variable, 1922 – current.	ALL	35,962
Emerald Journals	Full text archives back to 1994. Subject coverage spans a spectrum of management disciplines as well as a substantial number of engineering, applied science and technology titles	ALL	5,668
Science Direct (Elsevier Science Journals)	Full text journal articles in the field of science and technology. Also provides a current awareness service and a powerful scientific internet search engine called Scirus.	ALL	12,770
Date of search results: 28th December 2011			

A secondary source of non-academic applied literature, including insurance company reports, World Bank (MIGA), individual or company consultancy reports, and company annual reports was important in establishing the research motivation. However, for the purpose of conducting the Systematic Literature Review only peer-reviewed journal articles were considered under the assumption that peer reviewed research will have undergone a minimum level of scrutiny in regards to quality and academic methodology. In addition to the results obtained through the systematic application of the search strings and references, additional relevant papers identified previous to the review process were added following confirmation that they met the pre-defined criteria.

2.2.5 The search methodology

As per the Systematic Literature Review protocol, only studies that met pre-defined inclusion criteria specified in the review protocol, and which did not feature any of the

exclusion criteria, were incorporated into the review process. The following eligibility criteria were established accordingly.

2.2.6 Basic review eligibility criteria

Table 5: Eligibility criteria

No.	Area	Inclusion criteria	Exclusion criteria	Justification
1	**Language**	English or French	Any other language not formally translated	Limited resources for translation
2	**Peer Review**	Peer reviewed journals only	Non-peer reviewed documents	The notion that a journal has undergone a peer review assumes a minimum quality in terms of data quality and methodology applied.
3	**Risk Type**	Political, economic, social and other country risk	Financial risk	A large amount of literature has focused on financial risk management in terms of Basil 1 & 2, which will not be included in the review.
4	**Industry**	Manufacturing, Services and Knowledge & Research		Useful to map the varied risk exposure from manufacturing, to services and to knowledge based outsourcing.
5	**Location**	Offshore Low Cost Countries	High income countries	See previous definitions
6	**Entry Mode**	Ownership-based, Contract based and hybrid sourcing	Domestic outsourcing, franchising and export	
7	**Sources**	Published journals listed in identified bibliographic databases, including conference proceedings and unpublished studies.	Non-academic sources	Valuable information is expected from i.e. books, company annual reports, consultancy reports, World Bank (MIGA), insurance company reports etc., however these sources will be excluded from the Systematic Review process.
8	**Research methods**	All included	Need to meet minimum quality criteria	

For the purpose of identifying the most relevant literature and establishing the scope of the existing knowledge base within political risk management in offshoring, the review established a set of filters to select and identify studies. This method provides a systematic and explicit approach in its selection of studies and is designed to mitigate bias when using subjective criteria. The method has been modified from the outline provided in previous research (David and Han, 2004).

2.2.7 Filtering methodology - applying the eligibility criteria

- The first filter isolates articles from the pre-identified databases with substantive relevance for the overall research i.e. those which include the root search word and at least one of the sub-search words per sub-review question. Only the articles that include minimum one of the additional keyword(s) or their synonyms in the title or abstract would be included.
- The second filter reviews the identified literature against the pre-established eligibility criteria.
- The third filter eliminates any duplicates.
- The fourth filter review remaining articles for substantive relevance and academic quality. The quality review will include the criteria stipulated in the Quality Criteria section.
- The final filter includes a full review of the entire article for substantive, theoretical, conceptual, special relevance and quality as per the criteria stipulated in the Data Extraction Form.

Table 6: Literature review filters

No.	Filter type	Description	Inclusion criteria	Exclusion Criteria	Focus
1	Substantive	Root search string	Articles that include the root search word plus one of each additional search category (AND XYZ)	Articles not including the search words in the title or abstract	Title & Abstract
2	Substantive	Mode of offshoring	Articles concerning contract based and ownership based sourcing – and any hybrids	Domestic sourcing	Title & Abstract
	Substantive	Geographic	Articles with reference to low cost countries or synonyms	High income country locations	Title & Abstract
	Substantive	Industry	All		Title & Abstract
	Methodological	Method	Empirical and Conceptual articles		Title & Abstract
3	Duplicates		Deletion of duplicates		Full text
4	Substantive	Quality	Articles that meet the quality requirements in check list		Full text
5	Substantive	Review of full article			Full text

2.3 The Systematic Literature Search

2.3.1 Identifying and selecting studies

The following matrixes illustrate the selection flow of the key articles for the literature review based on the pre-defined protocol steps and criteria.

Table 7: Review selection flow

No.	Filter type	Description	ABI/ Proquest	EBSCO	Reduction	Total
1	Substantive	Root search string(s)	1657	1241		2898
2	Substantive	Title & Abstract screening	154	94	(2650)	248
3	Duplicates	Remove duplicates			(24)	224
4	Substantive	Eligibility criteria			(128)	96
(Inclusion of relevant referenced articles)						19
5	Substantive	Quality Evaluation			(81)	115
6	Substantive	Review of full article				36

2.3.2 Quality assessment criteria

The quality assessment criteria applied for filter 4 are modified from papers on conducting Systematic Literature Reviews (Tranfield, Denyer and Smart, 2003; Denyer and Aken, 2008; Denyer and Tranfield, 2009) and will follow the self-explanatory grading system below.

Table 8: The quality assessment criteria

Elements to consider	Level				
	0-Absence	**1-Low**	**2-Medium**	**3-High**	**Not Applicable**
1. Literature review	The article does not provide enough information to assess this element.	Literature review is inadequate.	Basic understanding of the issues around the topic being discussed.	Excellent review of previous literature.	This element is not applicable to this paper.
2. Contribution	The article does not provide enough information to assess this element.	The Paper adds little to the body of knowledge in this area.	Contribution to knowledge is trivial in importance and significance.	Significant addition to current knowledge and fills an important theory gab.	This element is not applicable to this paper.
3. Theory	The article does not provide enough information to assess this element.	No underlying theory base.	Theoretical base is not well articulated.	Strong theoretical basis.	This element is not applicable to this paper.
4. Methodology	The article does not provide enough information to assess this element.	The idea of study is poorly executed with inappropriate methods.	Justified research design but not fully executed.	Strong research design and solid methodological execution.	This element is not applicable to this paper.
5. Data Analysis	The article does not provide enough information to assess this element.	The data sample is insufficient. Inconclusive findings and weak connection between results and theory.	Limiting data sample. The results relate to the theoretical framework.	Adequate data sample. Well explained results and linkage to theory. Include limitation analysis.	This element is not applicable to this paper.

2.4 Data Extraction – Descriptive and Thematic Review

Based on the detailed review and quality appraisal a list of key articles were compiled for in-depth analysis and will constitute the core of the literature review on political risk in offshoring. The journals are rated according to the Cranfield University rating of academic journals and annexed in Appendix A-2.

The articles selection was based on an individual quality assessment and scoring captured in the data extraction form of the total of 115 articles and constitutes the responds to Sub-Review Question 1. The 35 core articles were selected based on the filtering process against the pre-defined quality assessment criteria sorting all articles with a total score of minimum 9 out of 15, and a minimum contribution score of 2 out of 3. Note that while the listing will form the basis of the data analysis and synthesis of the Literature Review, the full 115 articles will be included in the descriptive and thematic review of the political risk literature.

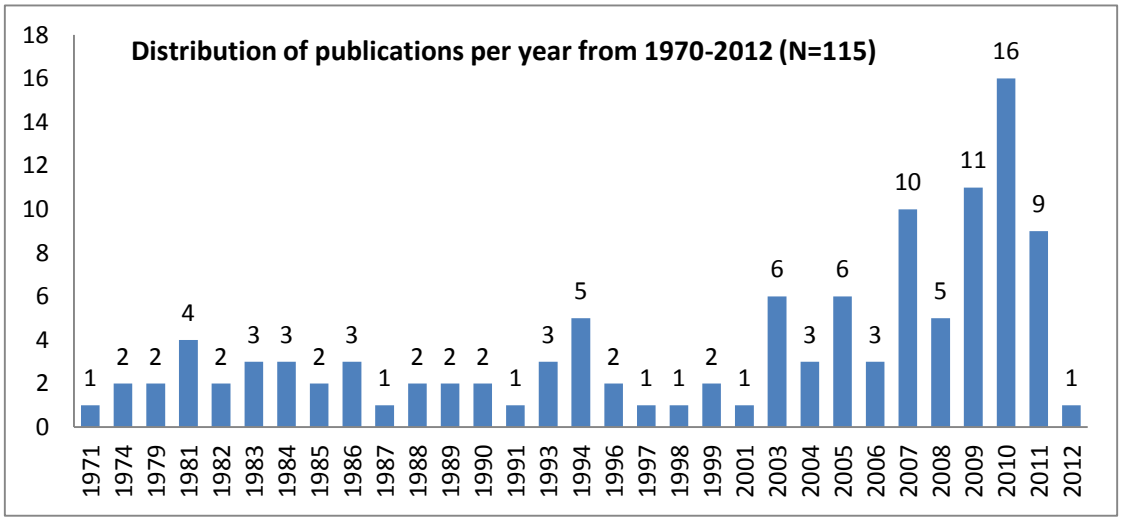
The descriptive and thematic analysis is conducted by application of descriptive statistics using the categories from the data extraction form (Tranfield, Denyer and Smart, 2003). The purpose of descriptive statistics is to reduce large data samples into a simpler summary to describe patterns and general trends in a data set and is used to examine one variable at a time. On review of the articles the findings were inserted into the data extraction matrix in binary form allowing for cross tabulation with the use of pivot tables and organized into the descriptive and thematic tables presented in this section.

2.4.1 Historical distribution of research

As indicated the basic body of political risk literature reviewed comprised of 115 papers. The allocation of the publications over the span of the research period 1970 – 2012 (Feb) is captured in the figure below. Political risk is not a new phenomenon in international business. Based on the Review the academic focus on political risk seems to have emerged in the context of decolonization in the 1960's with an early managerial focus on major discontinuities in the international system, such as the revolution in Cuba, Nicaragua and Iran, and the

corresponding implications for US companies especially (Kobrin, 1981). The academic publications on political risk in offshoring as a research subject has since escalated in volume in recent years, indicating a consistent and evolving research interest in the subject.

Table 9: Distribution of publications per year from 1970-2012



It is telling that the distribution of articles focusing on political risk in offshoring is weighted more than 60% towards the last decade, indicating an intense increase in research interest and relevance.

Table 10: Distribution of research from 1971 – 2012 (Feb)

1971-1980	1981-1990	1991-2000	2001-2011	
5	22	17	70	N=115
4.4%	19.3%	14.9%	61.4%	

2.4.2 Distribution across offshoring modalities

The main focus of political risk literature has been on ownership-based forms of offshoring, dating back to the early 1970's. It is indicative that among 115 articles on political risk in offshoring, as many as 80 had a defined ownership-based offshoring (OBO), or joint venture focus. The Contract-based Offshoring (CBO)

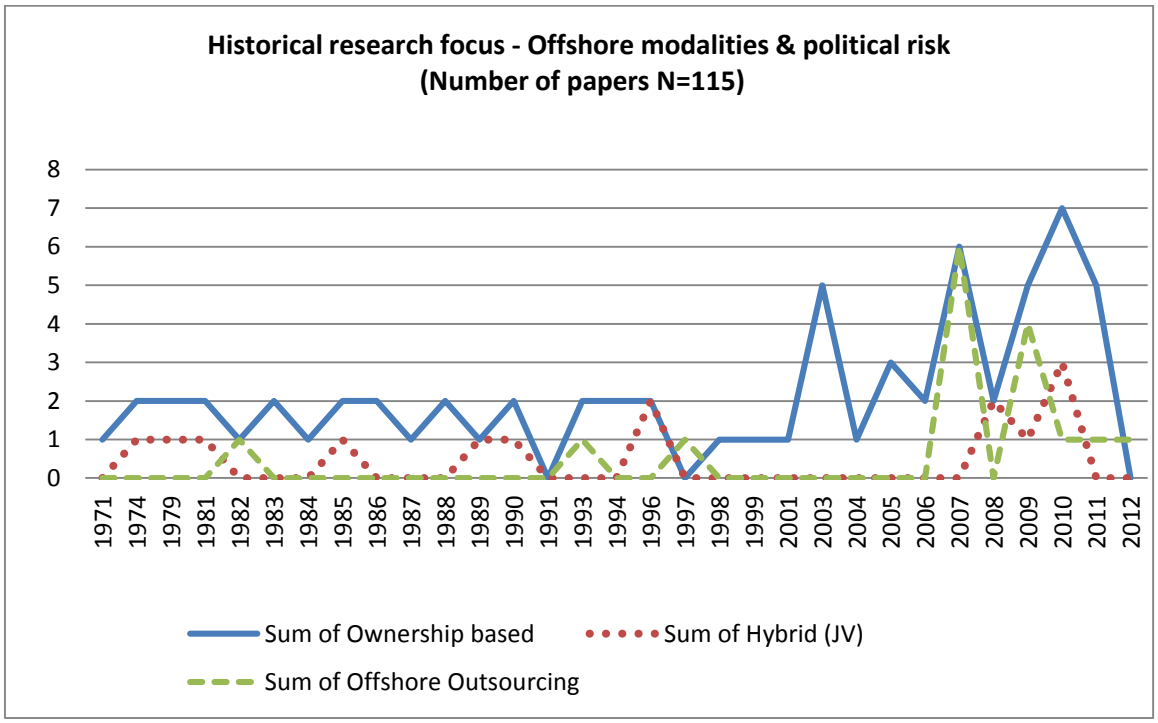
focused research on political risk has increased in line with the emergence and growth of the outsourcing industry, especially from 2005 and onwards.

Table 11: Distribution over offshoring modalities

	Ownership-based offshoring (OBO)	Hybrid (JV)	Contract-based offshoring (CBO)	Unspecified
Total	66	14	16	19

The overview also suggests a consistent and growing research interest in political risk on both OBO and CBO from beginning of this decade and onwards. The below provides a visualization of the historical focus of political risk research in offshoring distributed according to year of publication and in accordance with offshoring modality.

Table 12: Historical distribution of research offshoring research



2.4.3 Geographical and industry distribution

While political risk research was conceptualized in the period 1970-80, the bulk of empirical work originates primarily from North America, focusing on the MENA region (Gillespie, 1989) and Latin America (Cupitt, 1990; Rice and Mahmoud,

1990). A later spike of interest focused on European firms and offshoring into Eastern Europe (Pfohl and Large, 1993); and investment decisions among Spanish companies within the EU and abroad (Jiménez, Durán and De, 2011; Jiménez, 2010; Belso-Martinez, 2010).

Table 13: Origin versus offshoring modalities

	US & Canada	Europe	Asia	Total
OBO	Click, 2005; Cupitt, 1990; Desbordes, 2010; Fatehi-Sedeh, 1989; Kyaw and Zong, 2011; Rice, 1990; Zhao, 2003; Keillor, Wilkinson and Owens, 2005.	Jiménez, Durán and De, 2011; Kesternich, 2010; López-Duarte, 2010; Pedersen and Ørberg Jensen, 2011).	Delios, 2003; Henisz and Delios, 2004.	15
CBO	Ramarapu, Parzinger and Lado, 1997.	Pfohl and Large, 1993; Pedersen and Ørberg Jensen, 2011).	Wan, Wan and Zhang, 2010.	3
Total	9	6	3	18

The following table provides an overview of research with empirical work targeting political risk considerations related to particular offshoring destinations.

Table 14: Destinations versus offshoring modalities

	OBO	CBO	Total
East Euro	Wade, 2005; Liuhto, Heikkila and Laaksonen, 2009.	Pfohl and Large, 1993	3
Russia & CIS	Jakobsen, 2010.		1
India	Prasad, 2006.		1
China	Zhang and Zhao, 2007; Zhao, 2003; Blackman, 1999; Wan, Wan and Zhang, 2010.	Wan, Wan and Zhang, 2010;	5
MENA	Gillespie, 1989; Wyk, 2010, (Fatehi-Sedeh and Safizadeh, 1989;		3
South-East Asia	Jakobsen, 2010; Lam, 2011; Howell and Xie, 1996.		3
Latin America	Jakobsen, 2010; Cupitt, 1990; Oetzel, 2005; Palacios and Griffin, 2011.		4
EU	Mudambi and Navarra, 2003.		1
Africa	Simon, 1984.		1
	21	2	23

From both tables there appears to be a dominance of political risk research among firms originating either in North America or Europe with very limited representation from other regions. Similarly, the destination focus has been on

mainstream offshoring markets in China, Eastern Europe, Latin America and South-east Asia.

2.4.4 Distribution of industry specific outsourcing research

The following table provides an overview of the industry focus distribution among offshoring literature and political risk considerations. In this regard it is interesting to note the increased interest in the emerging outsourcing industries including ITO, BPO and KPO sectors.

Table 15: Overview of industry specific outsourcing research

	Manufacturing	Services (BPO)	Services (ITO)	R&D (KPO)	Total
CBO	1	1	7	1	10
OBO	5	3	2	2	52
Total	6	4	9	3	62

2.4.5 Distribution of research focus

The articles were differentiated into thematic categories subject to their key research orientation and focus. The review reveals that a bulk of the literature has been focused on political risk assessment and analysis within the realm of ownership-based FDI or in terms of verifying the relative strengths of political risk assessment indexes (Howell and Chaddick, 1994; Oetzel, Bettis, and Zenner, 2001. Another major research focus area has been on FDI location determinants exploring correlations between various country risks and inward FDI flow (Fatehi-Sedeh and Safizadeh, 1989; Palacios and Griffin, 2011; Zhao, 2003). It is noteworthy that research on offshore outsourcing and direct or indirect political risk considerations is emerging as a major focus area, also linked to supply chain risk considerations. The review highlights a limited focus on risk management in the post-location stage, and instead underlines a focus on the pre-location decision process and risk assessment. While emerging research is questioning the mainstream political literature for taking the political environment as exogenous and considering firms as passive actors only (Frynas and Mellahi,

2003), the review suggests that there has been relative limited research on firm political risk management and attempts to develop a comprehensive risk management model.

Table 16: Distribution of research focus	
Risk Assessment & Awareness	33
FDI location determinants	13
Risk analysis (Root causes)	12
Offshore Outsourcing risk, decision and implementation	10
Risk Management	8
Risk Forecasting	5
Supply Chain Risk Assessment and mitigation	5
Determination of entry modes	4
Institutional Assessment	3
Sovereign Risk	2
Risk Impact Measure	1
Risk implications	1
Sourcing risks	1
Supplier selection	1
Economic regionalization	1
Others - (Home political risk; Global conflict; Diplomatic risk; Security risk; Post-location risks; Market exit strategies and Industrial strategies)	6
Unclassified	*7*
	(N=115)

2.4.6 Theoretical perspectives

The review suggests a general absence of explicit theoretical underpinnings and perspective in the majority of the offshoring political risk literature. The majority of papers are conceptual with a focus on political risk assessment or limited to establishing correlations between business investment trends and countries with high perceptions of political risk. Only a limited number of studies have linked organizational perspectives to the concept of political risk in order to highlight

managerial implications of the phenomenon in international business and the impact on firm offshore strategies.

Within this category the application of Transaction Cost Theory (TCE), either alone or in combination with premises from OLI framework, resource-based view (RBV) is confirmed as the dominating approach. The TCE framework has mainly provided conceptual support for the link between trade internalization and uncertainty (Feinberg and Gupta, 2009); analysing the fit between destination attributes and the attributes of offshored business activities (Pedersen and Ørberg Jensen, 2011) or in determining firms outsourcing decisions and corresponding supplier monitoring requirements (Vitharana and Dharwadkar, 2007).

Similarly, the Stages Model of Internationalization (Johanson and Vahlne, 1977) has been used to determine the correlation between firm experience and entry strategies (Delios and Henisz, 2003; Henisz and Delios, 2004), highlighting the need to include firm specific considerations in explaining internationalization strategies. The OLI framework has been applied to explain FDI location decisions, including the impact of HR considerations (Graf and Mudambi, 2005) and local political risk considerations (Mudambi and Navarra, 2003). RBV is less prevalent and applied in the context of developing propositions in regard to the interactions among firm, industry and non-market actors as well as the impact of various forms of political behaviour approach on strategic management (Boddewyn and Brewer, 1994). Finally, motivational theory has been used to measure impact of socio-cultural differences integrating socio-cultural variables with other non-economic factors into a comprehensive qualitative but structured approach to country risk assessment (Leavy, 1984).

On a more isolated basis neo-contingency theory has been applied to examine the importance of sourcing country factors in explaining the level of FDI in China (Zhao, 2003); portfolio theory has been used to explore the impact of political risk on investors required return (Butler and Joaquin, 1998) and stakeholder theory to understand political risks and corresponding risk management strategies (Gao,

2009). Different approaches have been applied including the SCOR model and Uncertainty Circle Model for supply chain risk analysis (Sanchez-Rodrigues and Naim, 2010); Krugman's Economic Geography model for deterring FDI investment impacts on regional economic integration (Zhang and Zhao, 2007) and the Comparative Capitalisms approach for understanding institutional diversity and its implications for international business (Jackson and Deeg, 2008).

Table 17: Theoretical perspectives applied

No explicit theoretical perspective	92
Transaction Cost Theory (TCE)	4
Transaction Cost Theory (TCE) & OLI framework	2
Transaction Cost Theory (TCE) & OLI framework & Resource-based View (RBV)	2
Transaction Cost Theory (TCE) & Institutional Theory	1
Transaction Cost Theory (TCE) & Internationalization Theory	1
OLI framework	1
OLI framework & Investment Development Path (IDP)	1
Resource-based View (RBV)	1
Resource-based View (RBV) and Political behavior theory	1
SCOR model and Uncertainty Circle Model for supply chain risk analysis	1
Comparative Capitalisms (CC) approach	1
Economic Geography model (Krugman)	1
Linking Net Present Value (NPV) method and Prince Political Accounting method	1
Motivational Theory	1
Multinational Network Hypothesis (MNH) & Internalization Theory	1
Neo-contingency Theory	1
Political System Approach drawn from Political Science	1
Portfolio Theory	1
Stages Model of Internationalization	1
Stakeholder Theory	1
	(N=115)

2.4.7 Distribution of research methodologies

The review was differentiated between five research methodologies, namely: Conceptual Papers; Literature Reviews; Empirical quantitative studies; Case studies; and Qualitative interviews. The following table provides an overview of the distribution of applied research methods within the political risk literature. The

distribution suggests an overweight of conceptual contributions and quantitative empirical research, highlighting a scarcity of qualitative empirical research.

Table 18: Distribution of research methodologies

Conceptual papers	Literature reviews	Quantitative studies	Case studies	Qualitative interviews
39	6	37	4	6

The use of empirical quantitative methods is by far the most applied methodology and can be clustered into the following main groups of data applications. Firstly, several *surveys* have focused on clusters of national firms engaged in various forms of offshoring, including Canadian companies (Agarwal and Feils, 2007); Japanese manufacturing firms (Delios and Henisz, 2003; Henisz and Delios, 2004; Spanish firms (Jiménez, Durán and De, 2011) and Danish firms (Pedersen and Ørberg Jensen, 2011). The application of *country specific trade data* for comparison with country risk profiles has also been applied, including research on the relationship between policy changes and governmental instability by analysis of national trade data (115 countries) in the period 1973-79 (Brewer, 1983); or identifying patterns of Latin American countries (12 countries) liberalizing or stiffing non-tariff trade barriers (Cupitt, 1990); and finally exploring the role of political risk and institutions reviewing national data (83 countries) covering the period 1984-2003 (Busse and Hefeker, 2007).

Other research have applied data from the US State Department for Commerce using time series and cross country Return on Assets (ROA) estimates to identify to construct a new index of political risk (Click, 2005) or examining the importance of source country factors in explaining the level of FDI in China by multiple regression of data from the Almanac of China's Foreign Economic Relations and Trade in the period 1983-1999 (Zhao, 2003). Similar datasets have been extracted from *International Organizations*, including the merging of datasets from the World Bank Worldwide Governance Indicators (WGI) (Hahn, Doh, and Bunyaratave, 2009); Heritage Foundation, World Bank Freedom Index,

UNCTAD[1] and Transparency International (Jiménez, De and Duran, 2011) or IMF's International Financial Statistics Database (Straub, 2008). Finally, several authors have used various *political risk indices* to support quantitative analysis including ICRG[2] risk indexes combined with Belgium Export data (ONDD) (Jensen and Johnston, 2011); ICRG risk indexes combined with data from the Deutsche Bundesbank (Kesternich and Schnitzer, 2010) or as an independent composite to evaluate country risk (Desbordes, 2010); alternatively research has applied data from the PITF[3] (Rios-Morales, Gamberger, Smuc and Azuaje, 2009) as a base for measuring political risk levels.

The empirical *case studies* include testing FDI non-entry modes after the Iranian regime change in 1979 with a case study on the US-Iranian Tribunal (Gillespie, 1989) and a case study on the Bauxite and Aluminium industry (Jakobsen, 2010), both focusing on FDI ownership–based offshoring in the extraction industry. Similar case studies have been undertaken to research offshore outsourcing, including Samsung Electronics' supply chain risks in the consumer electronics industry (Sodhi and Lee, 2007) and a case exploring risk factors for a software service company outsourcing from Hong Kong to Guangdong (Wan, Wan and Zhang, 2010).

The use of *qualitative interviews* has mainly focused on expert and practitioner opinions on relevant risk factors, including risks to IT outsourcing projects interviewing 30+ outsourcing experts (Nakatsu and Iacovou, 2009) and holding discussions with outsourcing executives on outsourcing typologies and risks (Sanders, Locke, Moore and Autry, 2007). Another study researched the awareness of risk management activities within public and private sector organizations using semi-structured interviews engaging a group of buyers (Gholami, 2012).

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1 United Nations Conference on Trade and Development
2 International Country Risk Guide
3 Political Instability Task Force

2.4.8 Distribution of stakeholder focus

The following table captures the distribution of actor specific research within the offshoring literature, reiterating a focus on the dyadic relationship between government and MNC within the domain of ownership-based offshoring. While the scope of actors have included non-government actors such as NGOs, local business and institutions as a separate unit of analysis, the main concern has remained the Government as an independent entity of analysis. The findings further highlight that much of the political risk research has had an unspecified stakeholder focus.

Thereby the research has been limited to generic notions of political risk, rather than identifying the source of the risk as a means of differentiation and potential basis for risk mitigation.

Table 19: Distribution of stakeholder focus

Actors	(N=115)	OBO	CBO
Government	15	13	2
Local Government	3	3	0
Political Institutions	2	3	0
Society (NGO)	2	2	0
Local Business	2	2	0
Home political actors	3	1	2
Unspecified	*89*	-	-

2.4.9 Dimensions of political risk addressed in extant literature

For the purpose of identifying the key dimensions of political risk captured in offshoring research, the key focus area of each article was inserted in binary form into the data extraction form during the review process. The review yielded around 50 individual research dimensions which were analysed either separately or in combination in the literature. By undertaking a thematic clustering exercise the following political risk dimensions were highlighted as the main areas of research focus.

Table 20: Dimensions of political risk	**(N=115)**
Political instability	23
Instability of socio-economic environment	10
Corruption	5
Legal unpredictability	4
Bureaucracy	4
Regime instability	3
Policy unpredictability	3
Unspecified	*63*

As captured in the above table, the vast amount of research articles have focused on political stability considerations, either in terms of *political instability and turmoil* (Bergner, 1982; Brewer, 1983; Coplin and O'Leary, 1983; Cupitt, 1990; Fatehi-Sedeh and Safizadeh, 1989; Goodman and Ramer, 2007; Green, 1974; Liuhto, Heikkilä and Laaksonen, 2009; Oetzel, 2005; Pfohl and Large, 1993; Robock, 1971; Wade, 2005; Herath and Kishore, 2009; Kobrin, 1981; Kumar and Sosnoski, 2009; Rios-Morales, Gamberger, Smuc and Azuaje, 2009) *election upheaval* (Oetzel, 2005) and *internal conflict* (Busse and Hefeker, 2007); or more broader incorporating the potential *instability of neighbour countries* (Oetzel, 2005; Howell and Xie 1996) and *external regional threats* (Busse and Hefeker, 2007; Howell, 2007).

In extension of the political stability literature a relatively large body of articles included consideration to *social stability or socio-cultural differences* (Leavy, 1984) in terms of considering the level of *ethnic divide and religious tension* (Busse and Hefeker, 2007); the presence of *socio-political grievances* (Jakobsen, 2010; Busse and Hefeker, 2007; or in terms of consequence and focusing on *social unrest* (Liuhto, Heikkila and Laaksonen, 2009; Kumar and Sosnoski, 2009; Jakobsen, 2010) and *law and order* (Gholami, 2012). More recently research has considered *unemployment*; (Liuhto, Heikkila and Laaksonen, 2009, 2009); and *level of foreign debt* (Agarwal and Feils, 2007) as location decision considerations with potential performance impact. Other research has included *regime stability***;** (Busse and Hefeker, 2007; Coplin and O'Leary, 1983) *stability of ruling party*

(Agarwal and Feils, 2007) in combination with *predictability and frequent changes of government policy* (Green, 1974**;** Brewer, 1993; Oetzel, 2005**;** Howell and Xie, 1996), which has historically been on the research agenda.

Beyond the more traditional political risk dimensions more recent research has increased focused on c*orruption* (Busse and Hefeker, 2007; Straub, 2008; Rios-Morales, Gamberger, Smuc and Azuaje, 2009; Wade, 2005); or *corrupt local government* (Oetzel, 2005) and the impact on FDI inflow. Similarly, issues relating to *legal predictability*; (Busse and Hefeker, 2007); *accountability* (Herath and Kishore, 2009; Gholami, 2012) *privacy rules* (Gholami, 2012), as major constraints to offshoring are emerging as new research areas. Finally, offshoring research has included the notion of *bureaucracy* (Busse and Hefeker, 2007); or *quality of bureaucracy* (Gholami, 2012; Herath and Kishore, 2009), or similarly the degree of *red tape* (Agarwal and Feils, 2007) into the portfolio of offshoring considerations.

2.4.10 Distribution of political risk manifestations

The actual manifestation of political risk in the offshoring industry has been much less researched in specific terms. As indicated in the table below only a limited number of studies have focused on specific risk events and their manifestations. It is noteworthy that the most represented risk events are linked to more recent research focusing on *currency exchange fluctuations* and stability of *foreign exchange rates* (Agarwal and Feils, 2007; Liuhto, Heikkila and Laaksonen, 2009; Oetzel, 2005)**.** Equally prominent is the recent focus on *loss of intellectual property rights* (Ramarapu, Parzinger and Lado, 1997; Kesternich, 2011; Weiss and Azaran, 2007; Kumar et al., 2009; Herath and Kishore, 2009), particularly linked to the offshoring outsourcing literature. Another emerging research focus is *compliance risk*, relating to local laws and regulations, and their impact on offshoring activities (Ramarapu, Parzinger and Lado, 1997; Weiss and Azaran, 2007; Kumar and Sosnoski, 2009).

As was the case with stakeholder focus, much of the political research explored through the literature review maintained an unspecific notion of risk, hence not

differentiating between the various nature and sources of the risks and their individual impacts on the business activity.

Table 21: Dimensions of political risk events	**(N=115)**
Currency exchange fluctuations	5
Loss of intellectual property rights	5
Expropriation	4
Labour disturbance/strike	3
Capital outflow repatriation restrictions	3
Compliance risk (laws & regulations)	3
Import/export restrictions	1
Unspecified	*91*

The more traditional risk event focus has been on *expropriation* (Bergner, 1982; Kesternich and Schnitzer, 2010; Micallef, 1981; Gillespie, 1989) and the risk to MNC's, mostly in the context of decolonization in the 1970s. Similarly, *capital outflow restrictions/profit repatriation* or *capital outflow restrictions* (Agarwal and Feils, 2007); *profit repatriation* (Bergner, 1982); and *import/export restrictions* (Bergner, 1982) has been a consistent research focus.

In conjunction with the earlier indicated diversification of political risk actors, the corresponding manifestations of events has included *political influence of local suppliers* (Oetzel, 2005) and acts by *non-government actors* (Jakobsen, 2010). The expansion of unit of analysis has also allowed the inclusion of consideration to *labour disturbance/strike* (Palacios and Griffin, 2011; Pfohl and Large, 1993; Ramarapu, Parzinger and Lado, 1997) as an independent phenomenon of analysis. Other more general restrictions in international business (Coplin and O'Leary, 1983) have included the *level of protectionism* (Agarwal and Feils, 2007), *non-tariff trade barriers* (Cupitt, 1990) or *confiscatory taxes* (Kesternich and Schnitzer, 2010).

2.5 Data Analysis and Synthesis

The following data synthesis phase is divided into two parts: (1) data analysis, or "dissecting" individual studies into their component parts, extracting key

concepts, ideas, and theories; and (2) data synthesis, or making connections between the individual studies, overall themes and generalizations, and re-casting the data into a new framework.

2.5.1 Developing political risk typologies

Previous attempts to categorize uncertainties includes Miller's three level division of environmental and organizational components consisting of general environment; industry and firm specific variables each including a number of uncertainty components (Miller, 1992). The general environmental uncertainties include factors that affect businesses across industries including; Political uncertainties; Government policy uncertainties; Macroeconomic uncertainties; Social uncertainties and Natural uncertainties.

In a similar attempt in formulating a framework for political risk factors Agarwal and Felis (2007) developed four categories of country-level political risk factors; internal-economic, external-economic, internal-political and external political. However, the limitation of this attempt was the exclusion of social factors, like ethnic and religious conflict, terrorism and crime, as a separate dimension. Rao and Goldsby (2009) developed, based on (Miller, 1992), a comprehensive range of supply chain risk typologies integrating the a three-level approach by classifying supply chain risk into variables constituting "framework factors", consisting of environmental, industry and organizational factors (Rao and Goldsby, 2009).

In this framework political uncertainties refer to major changes in political regimes, or changes in the political system as a result of war, revolutions, coup d'état or other political disturbances. Policy uncertainties refers to changes in government policy that impact the business community, including tax policies, employment laws, regulations and tariffs etc. (Miller, 1991) argues that the basis for differentiating between political uncertainty and policy uncertainty is that changes in the government may not necessarily result in changes in government policy affecting businesses (Miller, 1992). The term macro-economic uncertainty refers to fluctuations in prices of inputs including relative prices of labor, materials,

interest rates and currency stability. For labor intensive offshoring, this indicator can have a tremendous impact on ROI calculations. The notion of social uncertainty follows from the beliefs, values and attitudes of the population that are not reflected in the current government policy. According to Freeman (1984) in (Rao and Goldsby, 2009), the rational for separating political and social uncertainty is that they deal with two different, but interconnected stakeholders, the government and society at large. From this follows illegal activities outside the political system, including terrorism or organized crime activities that can impact on the offshore supply chain.

A study by Busse and Hefeker (2007) of 83 developing countries over the period 1984-2003, indicated that government stability, internal and external conflicts, corruption, law and order, ethnic tensions, democratic accountability and bureaucratic quality of governance matter for the investment decision of MNCs. The strongest indicators relate to governance, internal conflict, law and order and economic conditions, while corruption matters over time but only marginally (Busse and Hefeker, 2007). Similar, emerging research has featured institutional profile and strengths as a significant determinant of FDI-decision making processes and there is an emerging focus on the role of institutional analysis within the field of international business (Jackson and Deeg, 2008; Slangen and Tulder, 2009; Henisz and Henisz, 2000; Henisz, 2004). Institutional hazards are argued to impact on firms operations in various ways, including the risk of weak enforcement of contracts and unreasonable delay payments (Feinberg and Gupta, 2009). Previous research by Agarwal and Feils (2007) concluded that red tape emerged as the most important political risk factor in export modalities and significantly in FDI modalities (Agarwal and Feils, 2007). The results indicate that exporters assign greater importance to external economic factors, while assigned greater importance to internal and external political factors with regard to the FDI mode (Agarwal and Feils, 2007).

The framework incorporates prevalent risk types for both FDI and outsourcing modalities form the basis for hypothesizing about the differentiated impact on various offshoring strategies identified through the literature review.

Table 22: Political risk typology dimensions

Political instability	*Political instability and turmoil* (Bergner, 1982; Brewer, 1983; Coplin and O'Leary, 1983; Cupitt, 1990; Fatehi-Sedeh and Safizadeh, 1989; Goodman and Ramer, 2007; Green, 1974; Liuhto, Heikkila and Laaksonen, 2009; Oetzel, 2005; Pfohl and Large, 1993; Robock, 1971; Wade, 2005; Herath and Kishore, 2009; Kobrin, 1981; Kumar and Sosnoski, 2009; Rios-Morales, Gamberger, Smuc and Azuaje, 2009) *election upheaval* (Oetzel, 2005) and *internal conflict* (Busse and Hefeker, 2007); or more broader incorporating the potential *instability of neighbour countries* (Oetzel, 2005; Howell and Xie, 1996) and *external regional threats* (Busse and Hefeker, 2007; Howell, 2007).
Instability of socio-economic environment	*Social stability or socio-cultural differences* (Leavy, 1984); in terms of considering the level of *ethnic divide and religious tension* (Busse and Hefeker, 2007); the presence of *socio-political grievances* (Jakobsen, 2010); (Busse and Hefeker, 2007); or in terms of consequence and focusing on *social unrest* (Liuhto, Heikkila and Laaksonen, 2009; Kumar, Kwong and Misra, 2009; Jakobsen, 2010) and *law and order* (upgrading). More recently research has considered *unemployment* (Liuhto, Heikkila and Laaksonen, 2009, 2009).
Macro-economic instability	Level of foreign debt (Agarwal and Feils, 2007).
Policy predictability	*Regime stability* (Busse and Hefeker, 2007; Coplin and O'Leary, 1983; *stability of ruling party* (Agarwal and Feils, 2007) in combination with predictability and frequent *changes of government policy* (Green, 1974**;** Brewer, 1993; Oetzel, 2005**;** Howell and Xie (1996).
Institutional capacity limitations	*Corruption* (Busse and Hefeker, 2007; Straub, 2008; Rios-Morales, Gamberger, Smuc and Azuaje, 2009; Wade, 2005) or *corrupt local government* (Oetzel, 2005); *bureaucracy* (Busse and Hefeker, 2007); or *quality of bureaucracy* (Gholami, 2012; Herath and Kishore, 2009), or *degree of red tape* (Agarwal and Feils, 2007).
Legal unpredictability	*Legal predictability* (Busse & Hefeker, 2007); *accountability* (Herath and Kishore, 2009; Gholami, 2012); *privacy rules* (Gholami, 2012).

2.5.2 Variables of political risk analysis and empirical findings

The complexity of political analysis may explain why Root originally found an apparent lack of any systematic methods being used to estimate political risk (Root, 1969, cited in Green, 1974). As political risk research emerged in the context of decolonization in the 1960's and later, inspired by events in Cuba and

Iran, the managerial focus was narrowly concerned with mainly three host government actions, including expropriation, controls of profit remittances and war/instability (Kobrin, 1979); (Robock, 1971), and later contract repudiation (Brewer, 1983). The specific concern with major conflict and internal violence leading to regime change motivated the earlier attempts to develop analytical models for political instability (Green and Korth, 1974; Green, 1974). On this background a group of research has focused on radical political change, which refers to the "*ascendancy to power of a person or group holding a different political philosophy than the person or group it replaced"* (Green, 1974, p. 29). The analysis of main types of political systems and the corresponding risk of radical change provided an indicator of the political conditions for FDI in the early stages of political risk analysis (Green, 1974). However, in accordance with quantitative studies focusing on political instability (Kobrin, 1976; Brewer, 1983) there are diverse types of instability with various implications for international business, hence political risk should not be treated as a one-dimensional concept (Brewer, 1993). On this basis a range of variables and dimensions of political risk has been explored in the context of international business as indicated in the descriptive analysis.

As indicated, the political risk literature on offshoring has mainly explored the association between investment flows and various explicit events of political risk, mainly instability and social unrest. In an attempt to determine correlation between US MNCs investment (FDI) patterns and political instability, Fatehi and Safizadeh (1989) reviewed US FDI investment from 1950-82 across 15 countries, applying multiple regression analysis with FDI serving as dependent variable and frequencies of socio-political unrest serving as the independent variable (Fatehi-Sedeh and Safizadeh, 1989). The analysis suggested that symptoms of *socio-political instability* by and large have lasting negative effects on US FDI inflows.

Similarly, research has explored the correlation between various country risks and inward FDI flow in Latin America using multi linear regressions, highlighting that *labour risk* and *exchange fluctuations* as key risk types limiting FDI inflow (Palacios and Griffin, 2011). A study on FDI inflow in China examined empirically

the importance of source country factors in explaining the level of FDI using multiple regression and trade data. The study revealed a high level of growth when the market exhibited a higher growth rate than the source countries and when the source countries had a relative stronger currency, however FDI flow was low when China had a relatively less stable political environment and higher operational risk (Zhao, 2003). Similarly emerging literature has suggested empirical support for the predictions that *institutional hazards* will reduce the likelihood of FDI in-flows; however research has been mainly conceptual with limited empirical verification (Feinberg and Gupta, 2009; Jiménez and Durán, 2011). One study develops a model using a conditional Poisson process for measuring the effect of a countable number of mutually dependent political risks on the outcome of FDI, establishing the role of political risk, importance of institutions and host country economic variables while also confirming that regional distinction exists (Clark and Tunaru, 2003).

Other studies examined the effects of local political traditions on MNE investment decisions and concluded that local political tradition is not a significant determinant of MNE investment decisions while country risk is highly correlated with location factors i.e. high risk locations are likely to have inferior facilities while low risk countries have superior facilities (Mudambi and Navarra, 2003). Alternatively, conceptual papers have noted a series of non-political risk moderators impacting on FDI in-flows, including direct skilled-labour availability and the role of country size as potential in-flow constraints (Zhang and Markusen, 1999).

The offshore outsourcing risk literature has at large focused on non-political dimensions of the location decisions. A comprehensive study analysed the fit between destination attributes and the attributes of offshored business activities revealing a multi-faceted location pattern in which firm strategies to some degree follow a logic where manufacturing is relocated to low-cost destinations and R&D is relocated to high-cost destinations (Pedersen and Ørberg Jensen, 2011). Similarly, qualitative research based on interviews with senior executives has sought to develop a generalizable outsourcing typology classification system

encompassing the full range of outsourcing options including; out-tasking; co-managed services; managed services and full outsourcing differentiates between different levels of criticality linking the framework to client-supplier relationships (Sanders, Locke, Moore and Autry, 2007). While the conceptual frameworks are useful in terms of differentiating outsourcing operations in terms of scope and criticality and their respective risks, there is no inclusion of political risk considerations or potential impact. Finally, a study by Hahn, Doh, and Bunyaratave (2009) examined determinants of firm offshoring behaviour with respect to firm offshoring location risk within the information system industry finding that firm-specific experience and the core "risk-gap" between home and host country are predictive of companies pursuing progressively riskier locations, but that their effects dissipate as environment-wide experience is incorporated (Hahn, Doh, and Bunyaratave, 2009).

Other outsourcing oriented studies have nevertheless highlighted the intrinsic consideration of political risk in offshore outsourcing operations. A KPO industry specific study address the trend of increasing R&D outsourcing and the corresponding location choice considerations, noting that there has been limited previous literature in regards to country risk analysis for KPO. At the regional level the study findings indicate that the R&D wage difference and knowledge infrastructure difference between home and host countries, the science and engineering talent pool size, and the political risk level of host countries are important determining factors. At the firm level, experience of overseas R&D projects and prior experience with research in the host country are also found to be important location determinants (Demirbag and Glaister, 2010). Other ITO specific industry studies have focused on risk factors important to IT managers in outsourcing, ranking categories and criteria, highlighting including financial risk, technical risk, hardware risk, software risk, managerial risk and legal and political risk as important concerns (Gholami, 2012). Similarly, risk analysis for domestic and outsourced software development projects found political instability at offshore destinations and currency fluctuations as considerable challenges (Nakatsu and Iacovou, 2009).

2.6 Findings of the Systematic Literature Review

The following section will outline the main findings of the literature review and discus implications for design of the research agenda on political risk in international offshore outsourcing strategies.

2.6.1 Overview of entry mode literature domain

The descriptive review of the entry mode literature identified a vast literature domain dominated by three theoretical paradigms of the firm, namely the market imperfection paradigm, the behavioural paradigm and the market failure paradigm (Sharma and Erramilli, 2004). The paradigms embody at least six key entry mode choice theories including Product Life Cycle, Internationalization, Internalization, Eclectic and the Transaction Cost Theory that provide theoretical explanations of foreign entry mode choice. The approaches provide the main insights into what may be considered the key academic conversations on the topic providing a framework for understanding key drivers and motivations behind firm's international engagement and predicting firm behaviour when confronted with entry choice considerations. The *market imperfection paradigm* focuses on explaining Foreign Direct Investment (FDI) modes based on the degree of market imperfection i.e. when the firm can benefit from monopolistic advantages. Similarly, Life Cycle Stage theory states that export is the preferred mode in the early stage of a product life time and FDI is chosen at the later stage. The key contribution is the notion of exploitation of a firm's monopolistic entry advantage as the primary motive for foreign market entry.

The *behavioural paradigm* tends to explain the internationalization process of firms over time by applying the concept of psychic distance and experimental knowledge. The paradigm applies the concept of market commitment and market uncertainty to explain an establishment chain comprising of four modes starting at indirect export to wholly owned subsidiary. This approach is built on the evolutionary logic applied in internationalization theory (Johanson and Vahlne, 1990) highlighting the importance of learning experience and cultural familiarity as determinants of entry mode choice. The process of internationalization can be

defined as *"the process of adapting a firms operation (strategy, structure, resource etc.) to international environments"* (Calof and Beamish 1995, p.116). In accordance with Johanson and Valne's theory of internationalization, firms are predicted to move sequentially through different stages as they develop their international experience and learn to deal with *uncertainty* by developing firm specific skills (Agarwal and Feils, 2007). Whereas the paradigm considers *uncertainty* in its determination of entry mode migration from export to subsidiary, the theory does not cover contractual and joint venture modes.

The *market failure paradigm* is grounded on a market versus hierarchies understanding, as the two alternative modes of performing an economic function. Under perfect competition, the market mode is the more efficient, however if the market fails the firm is better off internalizing the function. The Internalization, Eclectic Paradigm and Transaction Cost theories are based on the market versus hierarchies understanding and have been the dominant paradigm for the past decades. The OLI framework illustrates that multinational activities are driven by *ownership*, *location* and *internalization advantages* (OLI) and it is the configuration of this set of advantages that either encourages or discourages a firm from undertaking foreign activities (Dunning, 1980)[4]. The eclectic theory is based on various theories, and it is argued that the strength of OLI is that it provides a framework for theories to interact and together provide comprehensive explanatory insight (Dunning, 1980, Dunning, 2000). The OLI framework only offers general hypothesis about the nature of the relationship between the O, L and I variables, as the paradigm itself is not context specific.

In addition to the three main mentioned paradigms, attempts have also been made to apply the Resource-Based View (RBV) of the firm and explain entry mode choices from the perspective of a firm's resource endowment and

[4] The OLI framework was re-evaluated and made more dynamic by extending the framework to embrace both asset augmenting and alliance related cross-border ventures, in recognition of the growing importance of inter-firm alliances for competitive advantage making it more up-to-date in scope (Dunning, 2000).

deployment (Brouthers et al., 2008; Frynas, Mellahi and Pigman, 2006; Madhok, 2002). According to RBV offshoring would be motivated by the need to fill resources gabs or to pursue a longer term strategy i.e. entry to foreign market or access to strategic resources. Whereas the main focus of the RBV approach is concerned with competitive positioning, it provides limited ability to explore firm behaviour under uncertainty and therefore not pursued as a platform for conceptualization for this research. However, the RBV approach underlines the potential importance of risk management capacities of firms in the sense that a "first mover" strategy may create a competitive advantage due to its unique historical and social complexity propelling firms on a risk management learning path which is difficult for other firms to imitate. The importance of firm learning and experience either as per the migration path in Internationalization Theory or through a unique historical or social process as per the RBV approach, indicates that risk management capacity should be considered an important determinant in entry mode decisions.

2.6.2 Application of transaction cost theory in offshore research

As the main concern of this study is the impact of the *external environmental uncertainty*, the paradigm with the most explanatory strength is considered the market failure paradigm and the Transaction Cost Theory framework. Previous literature has ascertained that TCE has served as the overriding perspective for theorizing entry mode choice, and accordingly transaction-cost related covariates have been recognized as major determinants of entry mode decision (Zhao, Luo and Suh, 2004; Ellram, Tate and Billington, 2008; Lopez-Duarte and Vidal-Suarez, 2010; Martinez-Noya and Garcia-Canal, 2011). While other perspectives supplement the entry mode choice discussion, the basis for this research is that entry mode choice is an economic decision, and the firm is expected to choose the entry mode that offers the highest risk-adjusted return on investment (Anderson and Gatignon, 1986). On this basis the assessment of TCE determinants remains important as the alignment between entry mode and transaction properties has subsequent performance consequences for the firm and the offshoring operation (Zhao, Luo and Suh, 2004). In this context political

risk is addressed by transaction cost analysis in which a firm weighs in the costs and benefits of political governance structures, polices and likely political hazards in the host country. The following section will highlight the key premises of TCE explanations of foreign entry mode choice in light of *uncertainty in environmental conditions*.

From the review it is suggested that Transaction Cost Theory (TCE) remains the main basis for the academic conversation on political risk and implications on offshoring strategies, mainly in the form of analysing determinants of firm entry modes. The TCE framework has mainly lent conceptual support to the linkage between uncertainty and offshore strategy decisions, however firm specific considerations such as firm experience and cultural distance has also been researched under the framework of Internationalization and Motivational Theory. The review also indicates that the research on political risk has been mostly unspecific in terms of differentiating various dimensions of political risk that may impact on business operations and mostly been operationalized through the application of composite risk indexes provided by ICRG, PRS or similar risks analysis providers.

While the domain has been dominated by research on political risk considerations focused on ownership-based offshoring, there has been a recent surge of focus on broader risk management issues relating to offshore outsourcing, especially within the ITO and later the KPO sector. While the literature base on political risks in contract-based outsourcing is relatively limited, the emerging research underlines the relevance of the subject both within the theoretical and practitioner domain.

2.6.3 Empirical findings on offshoring and political risk correlations

The empirical findings are generally consistent in determining a negative correlation between FDI inflow activities and higher levels of uncertainty underlining the correlation between perception of high political risk and investment activity. However prevailing research has been unable distinguish between the relative importance of various political risk variables for a given

economic activity and hence associated risk mitigation options. Also research applying quantitative correlations between general variables has shown limited ability to provide guidance on offshore strategy choice and industry specific risk exposures. The analysis of location determinants for FDI remains a static assessment of the current environmental factors in a given country setting, without the dynamic ability to predict the outputs or risks to the industry specific activity.

2.6.4 Concluding comments

The descriptive review of the political risk literature on offshoring suggests that the domain is rooted in a vast volume of mostly conceptual contributions with a primary focus on ownership-based offshoring (OBO). The research focus has been on identifying FDI location determinants.

The literature presents an overweight of quantitative research, with only a few qualitative semi-structured interviews and case studies undertaken. In most of the analysis the notion of political risk has been applied in generic forms with an either unspecific form or mainly government centric. The empirical findings are generally found to be consistent in determining a negative correlation between FDI inflow activities and relative higher levels of generically defined political risk. However, there has been limited attempts to conduct any deeper analysis on the nature of political risk constructs and their implications across a wider segment of engagement types.

The review shows evidence of an increased interest in broader risk management issues relating to offshore outsourcing, underlining the relevance of the subject both within the theoretical and practitioner domain. The offshore outsourcing risk literature has at large focused on non-political dimensions of the location decisions and from the literature review there is no evidence of any previous research undertaken to explicitly explore the political risk constructs and impact on offshore outsourcing operations.

In the context of offshoring, disruptions can be caused irrespective of the offshoring modality applied i.e. ownership or contract-based entry modes, however the trade-offs and interrelationships between risks have not been clearly established between the use of various entry modalities. The existing research on political risk within the domain of international business has mainly focused on ownership based outsourcing leaning on theory from FDI, and there has been no attempts to determine whether the same political typologies would apply equally to contract-based ownership outsourcing. The literature therefore seems unable to analytically disentangle offshoring activities and demonstrate causality between political risks and their impact on various entry mode strategies.

The review affirms the need to expand the analysis of political risk against a broader spectrum of entry modes extending from fully controlled subsidiaries, to the more flexible offshore outsourcing modalities. The growing importance of offshore outsourcing as a business activity confirms the need for a realignment of political risk and offshoring entry mode research. On this note it is important to establish a better understanding and conceptual clarity of the political risk factors that impact on various offshoring modes by developing differentiated political risk typologies capable of measuring business impacts on various industry types.

3 (Project 2): Exploring Political Risk in the Offshore Service Industry

3.1 Objectives of Research

The following section will identify and categorize political risk experience in offshore outsourcing engagements and determine the level of functional impact on business activities. The research will identify both political risk manifestations and the perceived impact on business activities to provide a deeper and more diversified understanding of political risk dynamics in offshore outsourcing operations.

As originally emphasized by Kobrin (1979); "*we need to be concerned not with political events but their potential manifestations as constraints upon foreign investors*" (Kobrin, 1979, p. 77). From this notion follows that changes in the political environment that do not change the business environment do not represent political risk, nor is political risk for one firm necessarily a risk for another firm, meaning that political risk is firm specific (Robock, 1971). Or as stated, in assessing political risks one is not concerned with the likelihood of change itself, but rather with the criteria that the "*rules of the game*" change under which the firms made its calculations of risk and return (Micallef, 1981, p.47).

It is the need to understand the critical interface between the outputs of the external political environment and the corresponding implications on business operations that this research addresses by providing a detailed classification of political risks facing various offshoring strategies across industry and entry mode typologies.

The following research component will:

- Identify political risk manifestations experienced by offshoring practitioners implementing contract-based or captive offshoring engagements across BPO/ITO/KPO activities.
- Explore the perceived significance of political risk manifestations across risk typologies, business activity and entry mode.

3.2 Research Design and Data Collection

The previous chapters have introduced the research problem concerning political risk in offshore outsourcing business activities, and have highlighted the key findings of the systematic literature review. The aim of this section is to present a methodological foundation for the research component and discuss methodological and research design considerations.

3.2.1 Unit of analysis

The risk management literature reveals a range of risk definitions which emphasize the subjective nature of risk perception, including definitions like "*risk is inherently subjective construct that deals with the possibility of loss"* (Yates and Stone, 1992, cited in Zsidisin (2003). This notion suggests that risk and subsequent risk management is a combination of risk identification and subjective interpretation and prioritization.

From this perspective risk is experienced as a matter of subjective assessment as represented in the individual perception, as the detection and assessment of risk still requires thinking, judgment and decision-making by individual (Zuckerman, 2007). In a managerial context, it is further suggested that it is the aggregation and interaction of these individual assessments, in relatively small organizational groupings, that drive business strategies (Smith, 2008).

On this basis the research design will focus on the risk perceptions of offshoring practitioner's, as these perceptions are assumed to form the basis for managerial decision-making on entry mode considerations. The key informant is therefore the practitioner, either at the level of offshoring manager or advisor, as he/she would be aware of political risk manifestations across outsourcing activities. The study follows the line of previous research of supply chain risk by focusing on reviewing managerial perceptions in an attempt to assess and manage corresponding risks (Zsidisin and Ellram, 2003).

It is acknowledged that the risk perception of company "management" does not necessarily constitute objective reality due to various human heuristics and the ways in which risk is perceived and translated (Smith, 2008). To limit this challenge the

research applies an evidence-based approach by eliciting political risk manifestations that have had a direct impact on the offshoring operations by focusing on actual offshore engagement cases.

By focusing on engagement specific political risk events, which the practitioner was directly involved in, the research limits eliciting generic perceptions of risk that the individual manager may have solicited from the general environment. This approach is designed to limit heuristic bias in terms of identifying the *actual political risk manifestations* experienced. In terms of rating the impact of risk manifestations, the assumption is that whether or not the risk perceptions of the individual sourcing managers are accurate, they remain relevant as they become true in their consequence, as they ultimately inform and guide entry mode decisions.

3.2.2 Methodological fit

To support methodologically consistent management research, Edmonson and McManus (2007), introduced a framework for assessing and promoting "methodological fit" as an overarching criterion for informing field research design.

Within this framework methodological fit is defined as *"internal consistency among elements of a research project*", and field research as "s*ystematic studies that rely on the collection of original data – qualitative or quantitative – in real organizations" (*Edmonson and McManus 2007, p. 1155). The framework argues that the state of prior knowledge and theory is a key determinant of appropriate research methodology, and suggests that theory in management research falls along a continuum from mature to nascent.

In this context mature theory presents a framework with well-developed constructs and models that have been studied over time with increasing precision and presents a body of consistent work representing the cumulative knowledge gained. Nascent theory on the other hand only proposes tentative answers to novel questions suggesting new connections between phenomena. An intermediate theory is in-between, representing provisional explanations, often introducing a new construct or new relationships between existing constructs (Edmonson and McManus 2007).

This continuum is understood as a social construction that allows the development of archetypes, where the state of prior theory in the field would then drive a range of methodological choices. The archetypes of methodological fit are summarized in the table below:

Table 23: Archetypes of methodological fit in management research

State of prior theory and research	Nascent	Intermediate	Mature
Research questions	Open-ended inquiry about a phenomenon of interest	Proposed relationships between new and established constructs	Focused questions and/or hypotheses relating existing constructs
Type of data collected	Qualitative, initially open-ended data that need to be interpreted for meaning	Hybrid (both qualitative and quantitative)	Quantitative data; focused measures where extent or amount is meaningful
Illustrative methods for collecting data	Interviews; observations; obtaining documents or other material from field sites relevant to the phenomena of interest	Interviews; observations; surveys; obtaining material from field sites relevant to the phenomena of interest	Surveys; interviews or observations designed to be coded and quantified; obtaining data that measure the extent or amount of salient constructs
Constructs and measures	Typically new constructs, few formal measures	Typically one or more new constructs and/or new measures	Typically relying heavily on existing constructs and measures
Goal of data analysis	Pattern identification	Preliminary or exploratory testing of new propositions and/or new constructs	Formal hypothesis testing
Data analysis methods	Thematic content analysis coding for evidence of constructs	Content analysis, exploratory statistics, and preliminary tests	Statistical inference, standard statistical analyses
Theoretical contributions	A suggestive theory, often an invitation for further work on the issue or set of issues opened up by the study	A provisional theory, often one that integrates previously separate bodies of work	A supported theory that may add specificity, new mechanisms, or new boundaries to existing theories

Source: Edmondson and McManus (2007)

The Edmondson and McManus (2007) continuum highlights that the research question, the literature review, the research design and the contribution to literature,

should be influenced by the stage of the development of the current literature at the time of the research. On this basis, if less is known about the research topic the more open-ended the research question and more exploratory the research method should be. If on the other hand the phenomenon of interest has been researched extensively, the researcher can rely on prior literature to identify critical variables to explain relations underlying the phenomenon.

For the purpose of this study Transaction Cost Economic (TCE) theory has been highlighted as the logical entry point for understanding impact of political risk in offshore outsourcing and firm entry mode decisions. While TCE theory can be considered a mature theoretical framework in accordance with the Edmondson and McManus (2007) classification, it is suggested to consider the phenomenon under research as the basis for judging maturity and not the theories used to explain it.

Following this line of argument, the literature review suggested that while the phenomenon of political risk has been extensively researched in light of offshore captive investments, there remains limited or no research involving offshore outsourcing activities. Hence the phenomenon under research is considered at an intermediate stage, with a range of existing knowledge generated from the FDI domain, which can be tested and verified in the new context of offshore outsourcing.

3.2.3 Research method for exploratory empirical component

As the research will identify the political risk experience and impact perceptions of significance among individual outsourcing practitioners regarding various forms of outsourcing, a qualitative interview approach was selected as the most appropriate research method based on the methodological fit discussion. The interviews are conducted with individual offshoring practitioners and selected as the primary tool for examining their risk experience and perception of impact on offshoring operations.

3.2.4 Semi-structured interviews and Repertory Grid Technique (RGT)

As a basis for exploring the underlying constructs of risk perceptions the qualitative method of Repertory Grid Technic (RGT) was applied as a useful framework for data extraction and analysis. Similar, qualitative approaches have been used in

management research to uncover interviewees understanding of complex issues (Edmondson and McManus, 2007).

The Repertory Grid analysis method, stems from Personal Construct Theory (PCT) introduced by George Kelly (1955) as a form of structured interviewing, enabling the respondents to articulate their views on complex issues (Goffin et al., 2012). The PCT framework is based on the notion that in order to make sense of the world people develop rules by which they view and categorize situations, people, relationships and objects, and almost any phenomenon with which they are confronted. The approach assumes that all individuals develop and test constructs as a way of explaining and anticipating events and that these constructs will be constantly updated, as they prove useful or less useful in interpreting events (Goffin, 2009).

3.2.5 Implementation of the Repertory Grid Technique (RGT)

The main decisions in the design of the repertory grid interview process were; the selection and presentation of the elements; construct elicitation; the rating of the elements against the constructs and the interview administration. The following section outlines the design of the RGT approach as applied for this study.

3.2.5.1 Eliciting elements

Following an introduction to the research objective and methodology, the interviewees were asked to identify up to six offshore outsourcing engagements that they were involved in where their firm or client firm experienced political risk exposure that affected the company's operation. These cases where then classified in terms of activity type, host location, buyer location, industry and entry mode type, and written on random pre-numbered cards (I.e. 5; 1; 4; 3; 2; 6).

3.2.5.2 Eliciting constructs

For the purpose of eliciting risk constructs, groups of three cards (triads) were selected and presented to the interviewee who is asked to compare them. The elements were presented using the dyadic method where two elements are changed for every presentation (Goffin, 2009).

A key component of construct elicitation is the question posed with each triad. The interviewer asked *"please think about how two of these cases are similar or different from the 3rd in terms of impact on your offshore outsourcing operation.* The use of the qualifying phrase of "*in terms of impact on your outsourcing operation"* is applied to ensure focus on risk that actually impacted on their firm operations. The interviewee explanations of why the two of the elements are similar and different from the third constitute the interviewees risk constructs or the attributes on which the interviewee differentiates between the risks. The interviewee is not allowed to repeat constructs and so each new triad elicits at least one new construct.

3.2.5.3 Rating elements

Following the extraction of the risk constructs, the interviewee was asked to rate the triad elements on a pre-decided scale against each specific risk construct, including all other elements (outsourcing engagements) and enter on the pre-prepared grid against a 1-5 scale. Previous studies have highlighted that while various scales have been used in repertory grid testing, the choice of number of points on the scale is situational i.e. if the respondents are sophisticated they can deal with more complicated scales (Goffin, 1994). While the 1 to 5 scale is most common, previous research has applied both seven or nine-point scales to present greater opportunity for discriminatory judgment (Hudson, 1974, cited in Goffin, 1994). On this note the pilot phase concluded that the 5 point-scale was best understood by respondents and therefore determined the best fit for the proposed study.

3.2.6 Method of data collection

For the purpose of establishing accessing interviewees involved in managing extended global operations, contact was established with the International Association of Outsourcing Practitioners (IAOP). Given the position of IAOP as the leading professional association for organizations and individuals involved in outsourcing and offshoring, and with a community of more than 120,000 IAOP members worldwide, support was sought to access outsourcing companies and key practitioners for the purpose of conducting the empirical research. The identification of interviewees through IAOP supports the notion of systematic sampling and verifiable data collection, reinforcing credibility of the research project. Furthermore, the cross-

industry and geographical scope of IAOP membership allows for sample diversification, minimizing country bias and further enhancing generalizability of the findings.

3.2.7 Interview administration

The three most common methods of data collection are mail surveys, face-to-face interviews and telephone interviews, each with strength and weaknesses (Walton, 1997). For the purpose of this study the interviews were conducted through the use of telephone, considering that the geographical spread of interviewees, face-to-face interviews would be too restrictive in terms of practical application. While the use of telephone interviews is less applied than surveys and face-to-face interviews, Walton (1997) establishes that structured telephone surveys tend to provide more control over data quality, collection speed and cost efficiencies, and can meet the Seven R's of challenges in research.

The Seven R's are defined as *"the challenge of contacting the right person with the right information at the right time in order to ask the right questions using the right instrument for the collection of the right data at the right cost"* (Walton 1997, p. 221). Based on a comparison between surveys, telephone interviews and face-to-face, Walton (1997) rated telephone survey highest and states that the implementation of the telephone survey method can make dramatic contributions to the field by enabling researchers to meet the challenges of the Seven R's and collect more complete and less biased data (Walton, 1997). However a major limitation with telephone interviews remain the limited ability to use visual aids, and hence the pilot study explored the possible use of repertory grid web applications to bridging this gap. The pilot explored the use of the applications like http://www.enquirewithin.co.nz, http://flexigrid.info and http://gigi.cpsc.ucalgary.ca, and determined that neither were suitable, and in fact the interviewee's easily understood the process of the RGA methodology without visual aids.

In addition to the administrative format, two essential tools for interviewing were developed, namely the interview script and pre-prepared blank grid. The script includes the introductory explanation for the interviewee and the question to be asked as each triad is presented. The blank grid is annotated with constructs and respective

ratings during the interview accordingly. The research protocol, including the interview script and pre-prepared blank grid, is a means of increasing the reliability of the semi-structured interview process. The interview script and pre-prepared blank grid are attached as Appendix B1 and B2. The interviews were scheduled for 60 minutes each.

3.2.8 Piloting the research design

In order to ensure the appropriateness of the selected research methodology, both in terms of the data yielded from the use of the RGT and the practicality of the process, a pilot was conducted before the commencement of the primary data collection exercise. The objective of the pilot was to evaluate:

- The feasibility of applying RGT effectively through the use of a telephone interview technique.
- If the 5 or 7-point scale was most appropriate for ensuring better discriminatory judgment in the determination of perceived impact.

At an administrative level the pilot confirmed that the RGT interviews could be effectively conducted via phone with no visual aid requirements and the process was understood by the interviewees. The interviews were recorded via a digital recorder and the RGT extraction matrix was completed with notes during the interview process. The pilot further highlighted that the use of a 7-point scale was not intuitive for the interviewees and the 5-point scale was adopted for the remaining interviews.

On a conceptual level the pilot interviews further confirmed that eliciting of political risk concerns and implications would need to be case-specific due to i) the outsourcing industry is generally organized in a manner where individual companies are managing a portfolio of diverse kinds of outsourcing i.e. ITO, BPO and even KPO ii) the non-case specific political risks concerns appeared generic and not evidence-based, iii) the attempt to elicit impact constructs only yielded standard sourcing risks relating to disruption and cost implications. Furthermore the pilot revealed that there was a general confusion with the use of outsourcing terminology and therefore each case engagement would need to be clearly classified according to the following criteria:

- Outsourcing business activity (BPO, ITO and KPO)
- Outsourcing proximity (Offshore, Near shore and Onshore)

- Entry Mode (Contract-based or Captive)
- Location (Origin of outsourcing firm and host location)
- Industry type (Utilities, Pharmaceuticals, Health etc.)
- A brief description of the outsourced activity for cross-verification.

3.2.9 Validity and reliability considerations

It is understood that high quality research must apply the most rigorous methods possible, evaluated on construct validity, internal validity, external validity and reliability. The use of qualitative methods has often been criticized for lack of rigor and not adequately explaining how data were analysed (Goffin et al., 2012). In this regard it has been argued that RGT brings a quantitative angle to qualitative data and hence enhances the ability of demonstrating methodological rigor in the use of the qualitative method.

Previous studies have shown that the use of RGT has enabled managers to more fully articulate views on the phenomenon of research, identify the most important risk constructs through the scoring and weighting process inherent in the RGT method. The technique has been utilized at least 78 times in management studies in the period 2002-2012, including as a means of exploring relationships between manufacturers and suppliers, and perceptions of customer support (Goffin et al., 2012). These previous applications of RGT in management research has shown its utility in providing clarity when extant literature fails to define unambiguous constructs and can uncover when frequently mentioned constructs are not the most important ones (Goffin et al., 2012). On this basis, and with an appreciation of the inherent limitations, the following study will apply RGT in order to identify political risk experience and impact perceptions in the context of offshore outsourcing operations.

3.2.10 Limitations of repertory grid testing

With reference to the key components of Principle Component Analysis (PCA) it should be considered that repertory grid analysis will elicit risk constructs and perceived impact that are specific to the individual, and therefore it may not be possible to derive results that are representative of a population. Similarly, while the study will include 25 interviewees, the number of samples remains a limitation. For these

reasons the study will be viewed as exploratory work that elicit risk constructs for further validation using larger quantitative survey techniques.

3.2.11 Data collection process

As per the research protocol the International Association of Outsourcing Practitioners (IAOP) provided a list of 40 members who had responded positively to the IAOP invitation to participate in the research project. The listed IAOP members where contacted directly with an invitation letter indicating the scope of the survey and methodology to be applied, including a copy of the political risk definition developed for the research. Data collection took place via phone using a digital recorder with an earpiece for documenting the content. In total 25 additional Repgrid interviews were conducted plus five additional non-Repgrid interviews, all lasting between 45-70 minutes.

The 25 Repgrid interviews followed a standard triadic elicitation process. Each respondent was asked to name six offshoring engagements which, in their opinion, experienced some level of political risk exposure. Based on these six pre-identified cases, triads were formulated and presented to the respondent. With each triad presented to the respondent, the following question was posed: *"Can you think of any ways in which two of these cases are similar to each other and yet different from the third in terms of the political risk experienced?"* This stimulated respondents to discuss how they perceived political risk exposure and manifestations in the given engagement.

Triads composed of a different subset of the cases were then presented to the interviewee with the same question asked each time until the interviewee could no longer identify any new political risk experiences. With each successive triad presented, respondents were reminded that they had to formulate new political risk types than the ones previously identified. This was done because often the first constraints mentioned are the most obvious and once a respondent moves past those, the risks that are more subtle, yet with a large amount of significance, come through (Raja et al., 2013). The respondents were then asked to take the risks identified in the triadic elicitation process and rate the cases on a scale from 1 to 5, where 1 was

indicative of the political risk having no impact on the outsourcing activity and 5 was indicative of the political risk having a large impact on the outsourcing activity.

3.2.12 Sample distribution

A total of twenty-five (25) outsourcing practitioners were interviewed and included in the Repgrid analysis, during the period between April 2013 and August 2014. Of the 25 interviewees, 14 represented US-based companies (56%), three Canadian or Australian firms (12%), 7 European (28%) and only one non-Western (4%).

Table 24: Regional distribution of sample cases

Region	No. cases	(%)	Host countries
South Asia	28	30.8	India, Bangladesh
East Asia	17	18.7	China, Philippines, Vietnam
Europe (EU)	16	17.6	Latvia, Estonia Croatia, Hungary, Poland and Romania, UK, France, Germany
South & Central America	9	9.9	Argentina, Brazil, Costa Rica and Mexico
Europe (Non-EU)	8	8.8	Belarus, Russia and Ukraine
North America	7	7.7	USA (1), Canada
Middle East and North Africa	3	3.3	Egypt, Oman
Sub-Saharan Africa	2	2.2	Kenya, South Africa
Australia	1	1.0	Australia
Total	91	100	

All the participants were in senior positions and involved in outsourcing for minimum 10 years. In addition 5 interviews were conducted, which did not yield a Repgrid matrix and therefore not included in the analysis, however included as a source of background information. The below table provides an overview of the participants.

Table 25: Survey interview details

No.	Outsourcing role	Firm country of origin	No. of cases
1	Director	USA	5
2	Outsourcing Advisor	UK	4
3	Partner	USA	4
4	Director	USA	6
5	Chairman & CEO	Malaysia	2
6	Operations PM Manager	USA	5
7	Vice President	USA	4
8	Senior Vice President	USA	1
9	Founder & Managing Director	Denmark	7
10	Senior Consultant	USA	3
11	Vice President, Business Engineering	Canada	5
12	Senior Offshore Vendor Manager	USA	6
13	Vice President, Service Delivery	Canada	4
14	Outsourcing Manager	USA	1
15	Outsourcing Manager	USA	3
16	Outsourcing Manager	Denmark	3
17	Advisor	Australia	3
18	Advisor	USA	2
19	Outsourcing Manager	Denmark	5
20	CEO – Outsourcing Advisory Company	USA	3
21	Head of Technology Scouting/Outsourcing	Denmark	1
22	Senior Manager/Global Strategic Outsourcing	Denmark	2
23	Outsourcing Manager	USA	5
24	Head of Partnership Management & Research	Denmark	4
25	Senior Director of Quality Assurance	USA	3
Sub-Total			91
26	Director	USA	Pilot
27	Director	USA	Pilot
28	Principle	USA	Discussion
29	SVP and Head of Group IT	Denmark	Discussion
30	Vice President, Strategic Integration	USA	Discussion

The interviews yielded a total of 91 offshore outsourcing engagements or cases with 32 BPO engagements, 33 ITO engagements, 26 KPO engagements and one manufacturing engagement. In addition to the 91 offshore cases, an additional 6 cases were considered onshore engagements, meaning that they are based within the same country as the service buyer and hence removed from the sample pool.

From the portfolio of 91 offshore cases forty-seven (72) were contract-based (outsourced) engagements and seventeen (19) ownership-based engagements (captives).

Table 26: Portfolio overview

No. Interviewees	Number of Political Risks manifestations	Offshoring activity			Total Offshore Engagements	Offshore entry mode	
		BPO	ITO	KPO		Insourcing (Captive)	Contract-based
25	116	32	33	26	91	19	72

The samples were diversified across industries with the main industry segment being pharmaceuticals (19.7%), banking and financial services (14.3%), health care industry, software development industry (13.2%), web based consumer industry (6.6%), telecoms (5.5%), public utilities (5.5%), insurance & re-insurance (4.4%) and the gaming industry (4.4%). The sample portfolio also included cases from academia, engineering and manufacturing industries. In terms of geographical distribution the samples are diverse and maintain a spread indicative of the industry sourcing trends. The offshoring engagements also covered a wide scope of business processes including clinical testing, data entry, processing of insurance claims and various back offices services and appliances management. (For a full overview of industry and business process distribution see Annex B. 3).

3.3 Descriptive Data Analysis and Findings

The following chapter outlines the process of data analysis and presents key findings.

3.3.1 Descriptive data analysis

In order to present a consolidated overview of the key findings the 25 repertory grid interviews where inserted into an overall matrix presenting the political risk categories with category details, the highlighted operational implications associated with the risk type, and the overall frequency of mention and perceived impact.

Firstly, the findings were categorised in accordance with the overall parent political risk classification established in the literature review. The 70 risk constructs were then defined according to sub-political categories with risk description and associated operational risk implications to enhance the understanding of the risk nature. The frequency of mention was then calculated based on the risk sub-groupings across the 91 offshoring cases by summing the number of times the sub-risk category had been specifically mentioned in an interview grid.

The second step of the analysis was to determine the average risk impact ratings that interviewees assigned to each risk construct category. For this step, the risk impact ratings were summed for the individual risks comprising a construct category. This number was then divided by the number of times the individual risks comprising the category were mentioned.

While frequency of mention is often used as a measure of importance this interpretation has been criticized as frequently mentioned constructs can be “obvious, easily articulated, and of low importance” (Griffin and Hauser, 1993). A more reliable approach to determine key construct categories is to complement frequency of mention with a second criterion, namely average normalized variability (ANV). When a construct category has an ANV that is greater than the variability of constructs, this indicates that the interviewees differentiate more strongly between the different constraints. If the construct category has an ANV that is lower than the variability of constructs, then this indicates that interviewees rated the outsourcing cases similarly on a constraint (Goffin et al., 2012). Calculating the ANV requires the variability figures from different grids to be normalized to make them comparable. The average number of risk constructs per grid was 2.8 ~3 (70 constructs/25 grids = 2.8), which resulted in an average variability of constructs at 20 (100 / 2.8 = 33.3). This method has been used in Repgrid to suggest that a construct category with an ANV higher than the average ANV, in this case 33.3, indicates that the construct differentiates more strongly between the different respondents (Goffin, 2012).

The below matrix provides a complete overview of the categories of Risk Constructs from the Repertory Grid Interviews, highlighting risk categories mentioned by $\geq$20% of respondents, with a variability greater than average and corresponding classification of key risk construct categories. The matrix provides direct quotations on the perceived operational implications to provide a more in-depth understanding of the business impact.

Table 27: Risk constructs classified in terms of frequency of mention

No.	Parent Political Risk Category	Sub –Political Risk Category	Category details	Highlighted operational implications	Overall Frequency of mention[5] (%)	Overall Perceived Impact on Offshore Engagement (1-5 scale)	(ANV)	Key Risk Construct Category (Y/N)
1	Policy Predictability	Home-Country Risk	▪ Home Country Risk ▪ Client Country - Change in Audit regulations ▪ Restrictive immigration laws ▪ Client Country - Evolving Privacy Rules ▪ Client Country changes in security requirements ▪ Client Country - Work visa processing	When client countries put a cap on volumes to be outsourced "the price difference between domestic and offshore location, impacts the clients pricing, which impacts the clients budget. Second the business disruption that happens when you now suddenly have to change location of delivery". "There is certainly a cost implication – but also a time implication because now it takes us longer to acquire the knowledge [due to visa regulations]. Then there is the quality implication too because now that I have all these rules that I have to abide with I have to change my approach on how a transmission the knowledge and because I am doing it over a longer timeframe and with people coming and in and out I properly don't have the same quality of the information that I received, which manifests itself into service risks".	0.48	3.21	12	Y

[5] **Number of grids/Number of risk mention = % Frequency**

				"In France and Germany they are terrified having their names and photographs show up in the newspapers as they would be targeted by political groups and that effects decisions on whether or not to take certain kind of actions is based on the possibility that they might be in the newspaper tomorrow.				
2	Institutional Capacity	Host country bureaucracy	▪ Processing of visa applications ▪ License Regime ▪ Institutional bureaucracy ▪ Bureaucratic rigidness ▪ Delay in visa applications ▪ Import/export clearance (for hardware testing) (4) ▪ Under resourced institutions ▪ Delayed approval processes		0.48	3.06	12	N
3	Policy Predictability	Change of industry and data management regulatory framework	▪ Change of regulations on data storage ▪ Change in regulatory environment (Compliance risks) ▪ Changing rules and regulations ▪ Policy predictability - Data security ▪ Change in regulatory Framework ▪ Change in regulative requirements (Data access/retention cost) ▪ Unpredictable Regulatory Changes	"As new regulations emerge the pricing structure changes due to the new data retention and licenses requirements". "So political risk is sought of the stability of the society and so forth, but there is an increasing concern with data security and data protection that comes along with that – it is part of that consideration".	0.40	2.9	10	Y

			▪ Industry Policy Changes					
4	Legal Predictability	Loss of IP	▪ Loss of intellectual property, breach of confidentiality) ▪ Loss of Intellectual Property Rights ▪ Changing IP policy framework ▪ Loss of IP - Reverse Engineering (hardware testing) ▪ IP Legal Enforcement	"Loss of competitive advantage and the burden of [extensive] contract development to mitigate the risk".	0.40	2.21	10	Y
5	Institutional Capacity	Corruption	▪ Corruption ▪ Corruption (risk of management exposure) ▪ Business ethics	"We wish to avoid the exposure of management staff to unethical practices with possible reputational and legal implications, and seek to train managers in handling these situations". "Corruption is a reflection of different ground rules and detracts from the outsourcing activity being a success".	0.40	2.7	10	Y
6	Legal Predictability	Contract enforcement & Legal Transparency risks	▪ Enforcement of contracts ▪ Lack of institutional capacity to enforce contracts ▪ Lack of political will or culture to enforce contracts ▪ Sovereign immunities ▪ Legal laws and regulations (legislation) ▪ Legal Risk Liabilities ▪ Transparency in legal framework		0.36	2.54	9	Y
7	Policy Predictability	Predictability of labor regulations	▪ Changing restrictive labour laws	Cost and pricing implications Possible reputational implications	0.32	3.03	8	Y

			▪ Changes in country Specific HR regulations ▪ Changing min wages ▪ Regulatory changes on HR ▪ Unstable Labour Law/Practices ▪ Changing safety rules					
8	Macro-economic	Currency Fluctuations	▪ Currency fluctuations ▪ Exchange rate fluctuations	Change in pricing structure and models	0.28	2.19	7	Y
9	Socio-economic	Organized Labor Strike	▪ Organized National/state-wide Labour strike ▪ National/state-wide transportation strikes ▪ On-site labour strikes	Disruption of service supply	0.24	3.17	6	Y
10	Political Instability	Host Government Stability	▪ Regime shift (Party change) ▪ Regime shift (Systemic Change) ▪ Political/parliamentary unrest ▪ Government Level instability	"We want to spread the risk a little bit to avoid being in difficulties that may be down the road. Not in terms of political risk like a new Mao rising in China, but at the same time in a semi-command economy government actions can have a rapid and profound effect on business practices so we like to have some options".	0.20	2.42	5	Y
11	Political Instability	Social unrest	▪ Political instability (social unrest) ▪ Social Unrest ▪ Election upheaval	"That could be a protest or not being able to go to work for a time. Basically be able to operate locally. It could also be power outages which is not necessarily political, but could be politically motivated. Like hostilities between different groups suddenly impacting power supply or telephone networks and therefore services not provided. It is difficult to ring fence. There is the monitoring and oversight - and there is the potential for interruption of production. Those are the two big concerns. "It restricts deployment	0.20	2.23	5	Y

				and limits ability to provide support and oversight (Travel restrictions and Staff Security implications). "There is a cost implication of having these things in place but the other aspect is the on-going monitoring of these kind of risks b both the service provider and the client".				
12	Socio-economic	Wage Inflation	▪ Wage Inflation ▪ Inflation of Cost of Living	Price insurance and service quality implications if cost increase needs to be absorbed by supplier	0.20	3.12	5	Y
13	Policy Predictability	Predictability & transparency of tax regime	▪ Changes in Business revenue taxes ▪ Lack of transparency of taxes systems ▪ Predictability of taxes	"Some locations have a value adding tax on the services that we contract for so we have a 10% premium that we pay for the work in one place compared to another"	0.12	1.43	3	Y
14	Political Instability	Geo-political Risk	▪ Geo-political Risk ▪ Geo-political instability		0.12	3.33	3	N
16	Political Instability	Terrorism	▪ Terrorism (Hostage) ▪ Terrorism (targeting affiliated suppliers)		0.12	2.25	3	N
17	Socio-economic	Organized Crime	▪ Organized Crime ▪ Gang violence		0.12	2.40	3	N
18	Policy Predictability	Audit regulations	▪ External Audit requirements	Regulators asking more and more information on operations, including security measure in place – not just physical but also logical security segregation of duties.	0.04	3.33	1	N
19	Policy Predictability	Revoked subsidies	▪ Revoked government subsidies		0.04	2.75	1	N
20	Legal Predictability	Policy Change on foreign ownership	▪ Unpredictability of foreign ownership		0.04	3.43	1	N
21	Policy Predictability	Limitations to revenue repatriation	▪ Repatriation of Revenues		0.04	4	1	N

To further supplement the descriptive presentation of the findings the following charts outlines the distribution of total frequency of mention and perceived impact levels for the political risk sub-categories that scored > 20% and with an Average Normalized Variability (ANV).

Figure 4: **Distribution of Frequency of Mention**

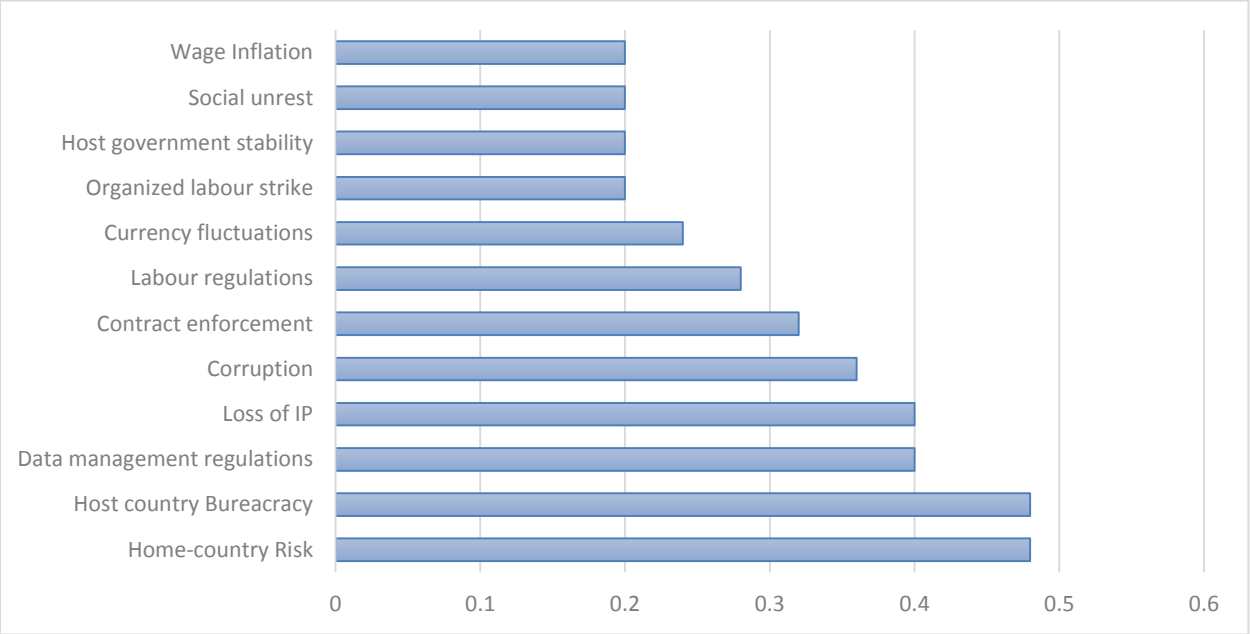
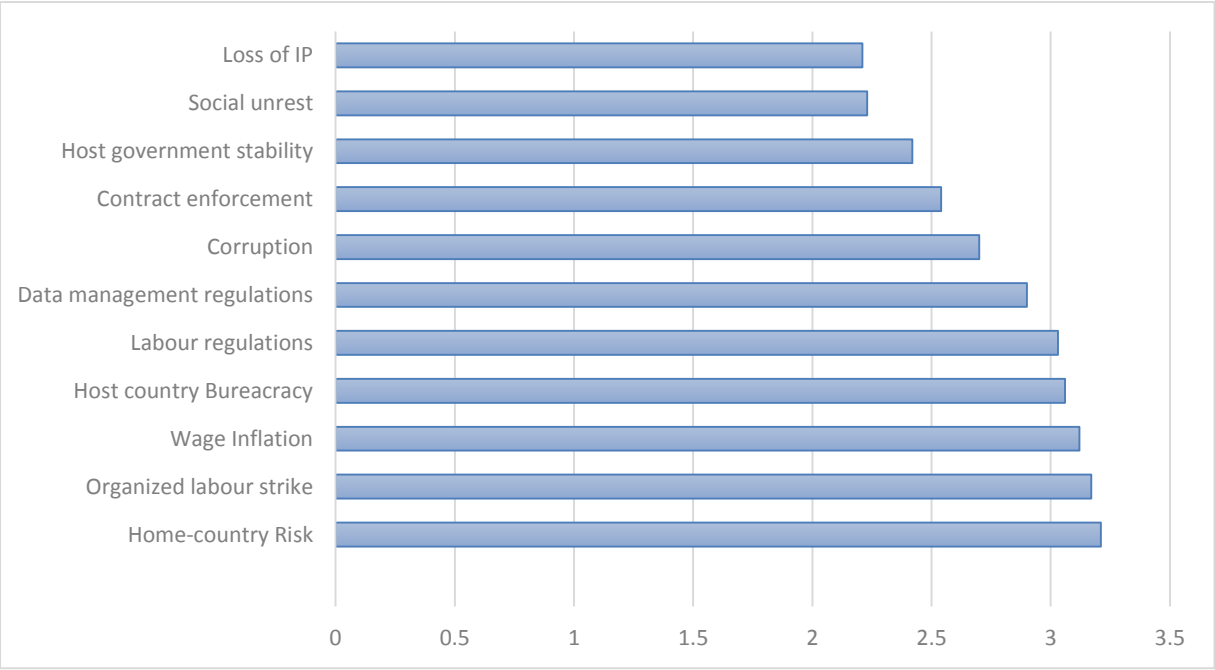


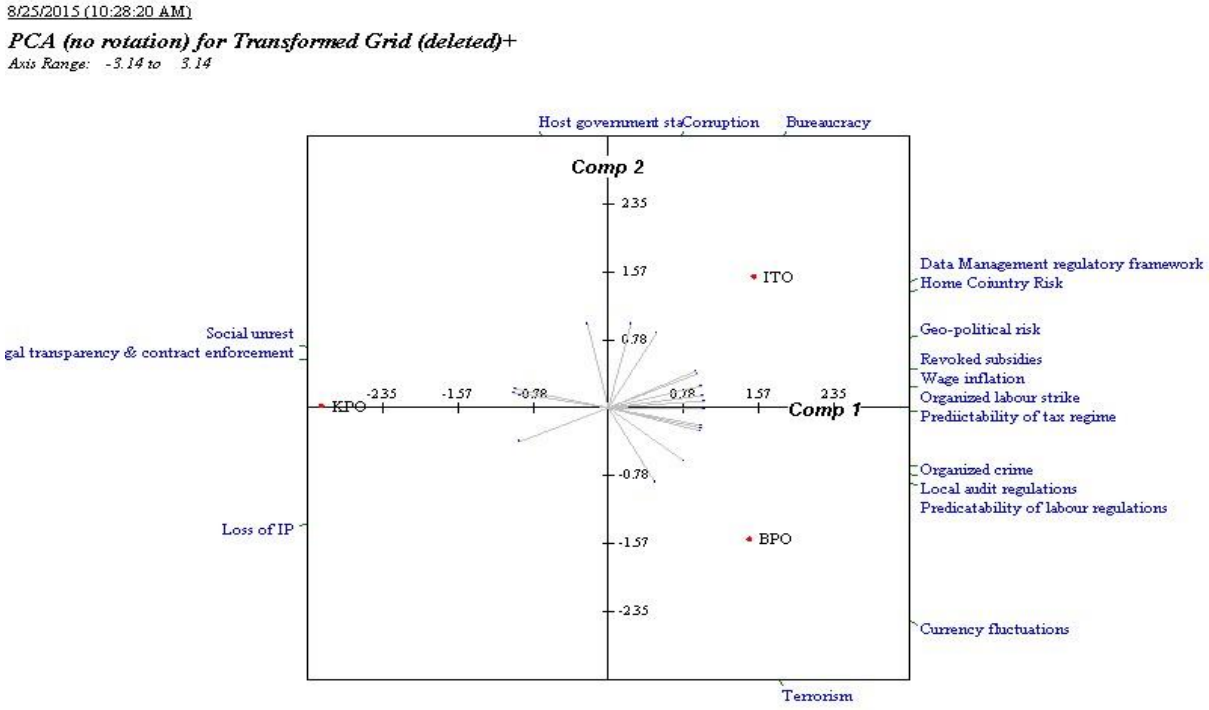
Figure 5: Distribution of Perceived Impact



3.3.2 Impact of political risk categories on offshoring engagements

Using the software Idiogrid, a Principal Components Analysis (PCA) was run to see which of the political risk categories were most closely associated with the various offshoring typologies i.e. ITO, BPO and KPO. Firstly, the average risk ratings were determined for each risk category, stratified by outsourcing type. This was done by isolating the grids by outsourcing type and then within those graphs, identifying the risks mentioned that are part of a given construct category, extracting the risk rating assigned by the interviewee, summing up the total number and then finally, dividing the summed number by the total number of times the constraint was mentioned. This process was repeated for the three outsourcing types and across all constructs categories (see Table 28). The information was then entered into the Idiogrid software to capture which construct categories are associated most strongly with the outsourcing activities. The information in the grid is condensed and summarized in the below two-dimensional plot illustrating how well the various activity types are defined by the political risk constructs elicited from the interview process.

Figure 6: Principal Components Analysis (PCA) Plot – Offshoring activity type



From the analysis it is noted that all the vectors have a reasonable length and relatively of same magnitude, indicating that they are well defined within the space of the two components. Secondly, same reasoning applies regarding the distance between the origin and the activity type (elements). If the activity type had been close to the origin it may be better defined by another component, however as this is not the case it is assumed that the activity type is well defined in the given space. Finally, the distance from the activity type to the given constructs indicates how defined the type is by the given political risk.

3.3.2.1 Entry modes (contract-based versus captive)

Secondly, the average risk ratings were determined for each risk category stratified by outsourcing entry mode. This was done, as before, by isolating the grids from each mode and then within those graphs, identifying the constraints mentioned that are part of a given construct category, extracting the risk rating assigned by the interviewee, summing up the total number and then finally, dividing the summed number by the total number of times the constraint was mentioned.

The information was then entered into the Idiogrid software however there was not enough variability between the two groups to create the graph. This indicates that construct categories are similarly associated strongly with the respective entry modes with no major differentiation.

3.3.2.2 Stratification of political risk across offshoring typologies

Following the presentation in the Idiogrid, the survey results were stratified in accordance with frequency of mention and associated perceived impact on the offshoring engagement. The following tables capture the stratification of survey results across activity type (ITO, BPO and KPO) and entry modes.

Table 28: Stratification across offshoring typologies		*(BPO)* Cases (N=32, 12 Grids)		*(ITO)* – Cases (N=33, 13 Grids)		*(KPO)* - Cases (N=26, 9 Grids)	
Offshoring (Total) -Frequency and significance of political risk manifestations		*Freq.*	*ASR* (1-5)*	*Freq.*	*ASR(1-5)*	*Freq.*	*ASR(1-5)*
Political Risk Family	**Political Risk Event**						
Client Country Political Risk	Home-Country Risk	33.3%	2.9	38.5%	3.1	22.2%	2.6
Policy Predictability	Change of data management regulatory framework	41.7%	2.7	23.1%	3.3	44.4%	1.9
Institutional Capacity	Corruption	41.7%	2.4	23.1%	3.4	55.6%	2.7
Legal Predictability	Loss of IP	25.0%	2.6	38.5%	2.4	44.4%	2.9
Political Instability	Host Government Stability	33.3%	1.2	23.1%	3.75	11.1%	3.0
Political Instability	Social unrest	33.3%	2.1	23.1%	2.3	11.1%	3.0
Policy Predictability	Predictability of labor regulations	58.3%	3.4	23.1%	2.5	0	0
Macro-economic	Currency Fluctuations	41.7%	2.3	23.1%	1.5	11.1%	1.0
Legal Predictability	Legal Transparency & Contract enforcement	16.7%	1.8	15.1%	2.0	22.2%	2.9
Policy Predictability	Predictability & transparency of tax regime	16.7%	1.4	15.1%	1.4	0	0
Socio-economic	Wage Inflation	33.3%	3.0	23.1%	3.3	0	0
Socio-economic	Organized labor Strike	41.7%	2.9	38.5%	2.9	0	0
Socio-economic	Organized Crime	16.7%	2.5	23.1%	2.0	0	0
Political Instability	Terrorism	25.0%	2.5	23.1%	2.0	11.1%	2.0
Institutional Capacity	Host country bureaucracy	0	0	38.5%	2.3	55.6%	3.4
Political Instability	Geo-political Risk	25.0%	2.7	15.1%	3.7	0	0
Policy Predictability	Local Audit regulations	8.3%	3.3	23.1%	2.5	0	0

- Average Significance Rating

Table 29: **Stratification across entry modes**		Offshoring (Contract-based) (Cases N=72, Grid=23)		Offshoring (Captive) - (N=19), Grid = 9)	
Offshoring (Total) -Frequency and significance of political risk manifestations		*Freq.*	*ASR (1-5)**	*Freq.*	*ASR(1-5)*
Political Risk Category	**Political Risk manifestations**				
Client Country Political Risk	Home-Country Risk	26.0%	3.2	33.3%	3.3
Policy Predictability	Change of data management regulatory framework	30.4%	3.8	22.2%	2.7
Institutional Capacity	Corruption	34.8%	2.4	66.6%	2.5
Legal Predictability	Loss of IP	39.1%	2.6	33.3%	3.0
Political Instability	Host Government Stability	17.4%	2.8	22.2%	1.5
Political Instability	Social unrest	21.7%	2.3	22.2%	1.6
Policy Predictability	Predictability of labour regulations	17.4%	2.4	55.5%	2.9
Macro-economic	Currency Fluctuations	21.7%	2.1	17.4%	2.2
Legal Predictability	Legal Transparency & Contract enforcement	17.4%	2.6	17.4%	1.9
Policy Predictability	Predictability & transparency of tax regime	13.0%	1.3	22.2%	2.5
Socio-economic	Wage Inflation	13.0%	2.6	33.3%	3.2
Socio-economic	Organized labour Strike	21.7%	3.3	11.1%	1.4
Socio-economic	Organized Crime	4.3%	2.8	11.1%	2
Political Instability	Terrorism	8.7%	2.25	0	0
Institutional Capacity	Host country bureaucracy	34.8%	3.0	22.2%	2.5
Political Instability	Geo-political Risk	8.7%	3.4	11.1%	1.5
Policy Predictability	Local Audit regulations	4.3%	1	11.1%	3.8

- Average Significance Rating

3.3.3 Descriptive findings

The aim of the empirical research component is to identify political risk manifestations in the offshore service industry and verify the risk types against the general political risk manifestations indicated in the extant literature. An analysis of the findings informs the development of an expanded operationalization of the external uncertainty concept as it is applied in TCE theory.

3.3.3.1 Political risk manifestations in the offshoring industry

From the analysis it is clear that the single largest political risk concern for offshoring companies surprisingly pertain to home/client-country political fall-out or change of home country regulatory frameworks with implications for the offshoring business model. The home-risk category received the highest frequency score at 0.48 and the highest impact score to match at 3.21 (on a scale from 1-5). This places home-country risk as the single most dominating political risk concern for the offshore industry. The risk manifestations elicited from the interviews highlighted negative media or clashes with powerful workers unions with potential for reputational damage, as the main concern. While home-country risk has the highest frequency of mention, the potential reputational impact appears to differentiate between the US and EU, as expressed *"There is a lot of rhetoric in the US but I think the threats don't have much teeth behind it – but in the EU the labour laws are real and have real consequences" (Interviewee#10).*

On the other hand the stricter interpretations of security related requirements i.e. profiling of staff and work locations by home-country regulators, seem to become more apparent in North America, especially within highly regulated sectors like the utility industry, or privacy regulations relating to the banking and health industry. The interviewees expressed less concern with the policies themselves, but more the unpredictability of application and constant changes, making it difficult to develop and maintain realistic costing models. On a similar note the risk of changes of data management regulatory frameworks received a frequency score at 0.40 highlighting the impact on business *"as new regulations emerge the pricing structure changes due to the new data retention and licenses requirements"* (Interviewee#8). Again the risk

for business was the perceived unpredictability of regulations on data security compliance which makes it difficult for businesses to maintain price structures.

Furthermore, the notion of data security was not only a regulatory exposure but also a concern expressed by companies regarding their own proprietary information. As stated, "*there is an increasing concern with data security and data protection – it is part of that consideration*" (Interviewee#16). This concern related mainly to the location of server equipment and the policies or lack of protection surrounding that location. As stated "*if you place your information within their reach [private or government hackers], meaning within an infrastructure – you don't know who enters the data centres with which cables and with which capabilities. Therefore data protection and security is increasingly a political risk because one may judge China as a political stable country, but not necessarily friendly. And you can argue that for the same reason some European countries are concerned with hosting their data with US based organizations, simply because the US legislation is such that the American government is allowed to access data" (Interviewee#16).*

In addition host country bureaucracy received the highest frequency score at 0.48 and an impact score at 3.06 (on a scale from 1-5). This finding implies that political risk emanating from local institutions is one of the single highest concern in the host country environment. The other second highest frequency score pertains to Loss of Intellectual Property (IP) at 0.40 frequency of mention level. The notion of IP loss was often mentioned in terms of a general breach of confidentiality through the use of external suppliers. However, some interviewees express that *"In fact IP [is less a concern] because the regulations are pretty clear on that and the clients are protected upfront. The big area I would say is privacy of the client or the client customers. And that is why legislation that exists keeps evolving. I guess the challenging part of that, as regulations evolve; the service provider has to evolve their practice to be compliant with those legislations*" *(Interviewee#18)*. Other practitioners stressed that loss of IP was a major consideration leading to the necessity of tactics such as product or service dissection i.e. parts being produced at various independent sites, suggesting that concern relating to IP loss be product and outsourcing type specific.

The IP loss or infringement issue is linked to legal predictability and particularly contract enforcement abilities in a given offshore setting. With a frequency rating of 0.36 the potential lack of ability to enforce contracts through local institutions, either due to lack of institutional capacity and pro-longed processes or simply due to lack of political will, the notion that *"your contract is only as good as your ability to enforce it"* is apparent.

Similarly, the notion of corruption was mentioned frequently at 0.40 however mainly attributed to low-level operations at destination, rather than perceived as a strategic concern. In fact, one interviewee stated that corruption did not tend to emerge as an issue *"because these clients come from North America and the suppliers know it is just not the business culture here*" *(Interviewee#18)*. The main concern with corruption appeared to revolve more around management exposure and potential reputational risk. Finally, the political instability risk categories, traditionally associated with political risk analysis, were rated at 0.20 in terms of Host Government Stability and Social Unrest respectively. While both were frequently mentioned a review of the perceived impact positions the category below the 2.5 average score threshold.

The overall distribution across overall risk classifications are captured in Table 30, indicating that concerns mainly focus on predictability of policy regimes, institutional capacity at host country level and transparency of the legal systems.

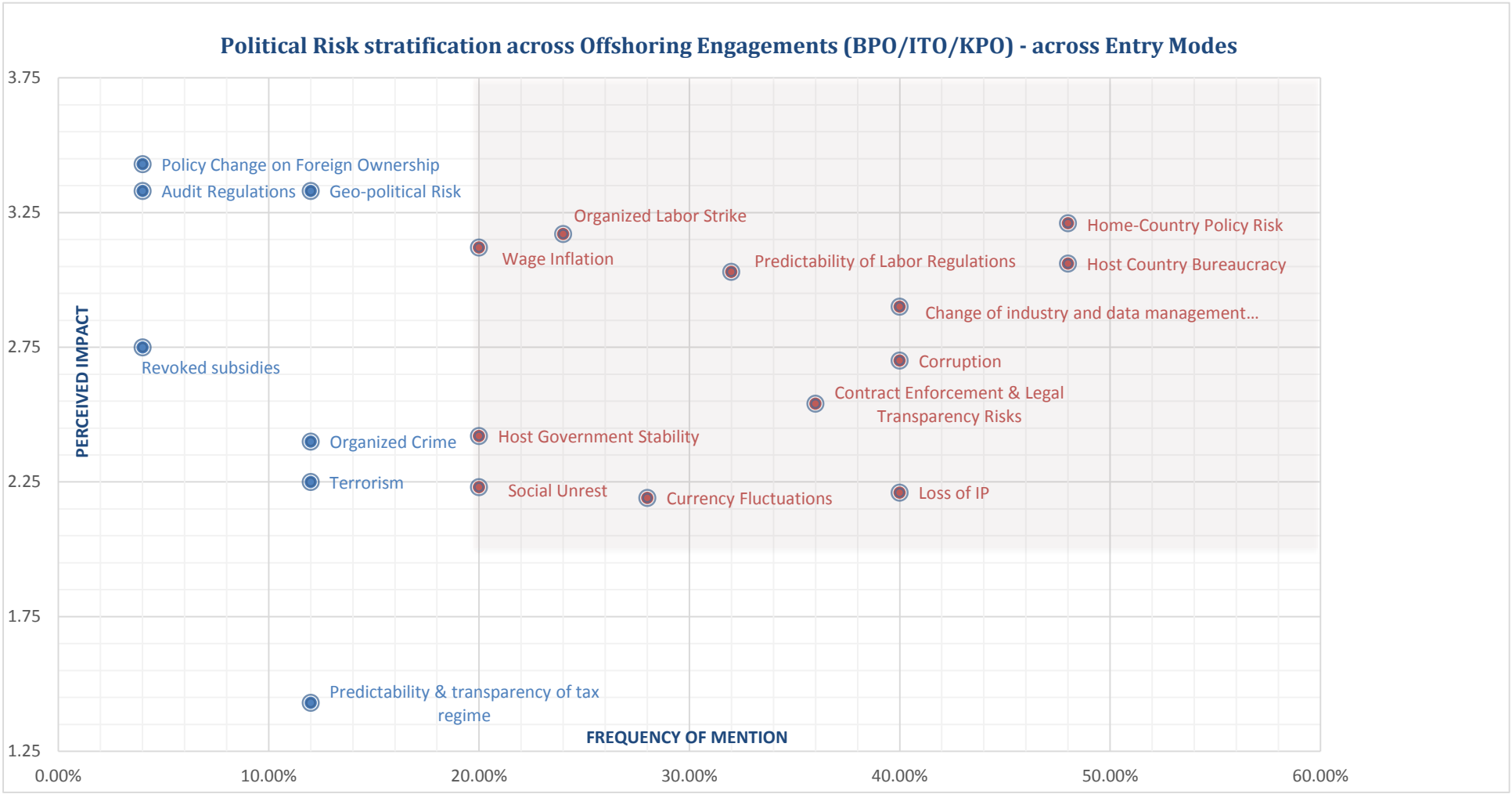
Table 30: Distribution of events across typology dimensions

Risk category family	*Freq. of Mention*	*(%)*
Policy predictability	25*	21.6
Institutional capacity limitations	22	19.0
Legal unpredictability	19	16.4
Political instability	16	13.8
Instability of socio-economic environment	15	13.0
Macro-economic instability	7	6.0
Total	116 Mentions	100%

*(Excl. 12 Home country Risk)

The frequency and impact perceptions are captured in Figure 7, as a matrix illustrating the combined frequency and impact scoring for the key identified political risk constructs across BPO/ITO/KPO interventions.

Figure 7: Distribution of political risk stratification across key categories



3.3.3.2 The offshore typology specific political risks

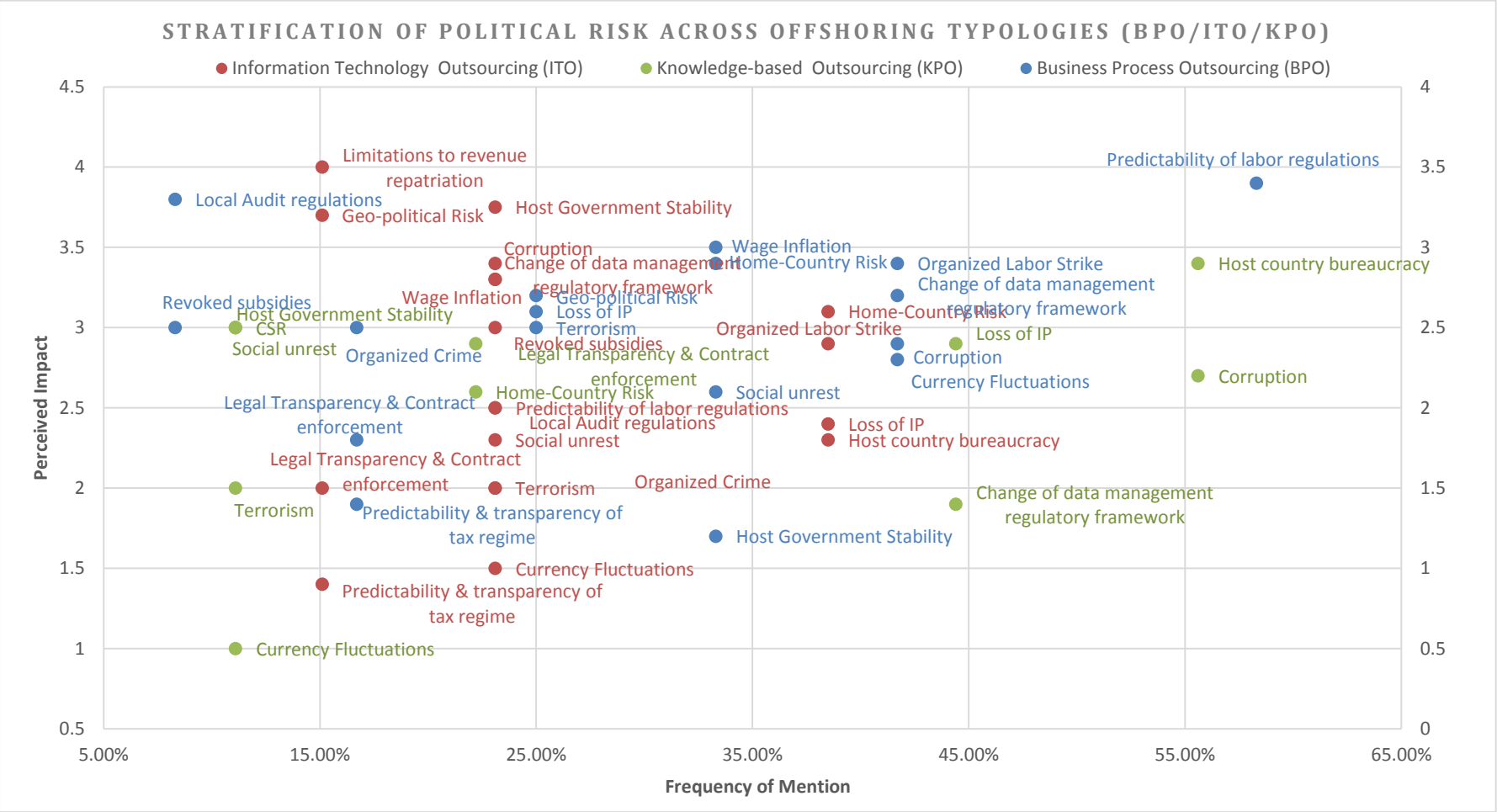
The following section further stratifies the findings across the three offshoring activity types i.e. IPO, BPO and KPO, with the intention of highlighting the typology specific risk categories with high frequency and high perceived impact on business operations. As the 91 sample offshoring engagements are stratified across the sectors, the sample distribution is comprised of 33 ITO related offshoring engagements, 32 offshoring cases and 26 KPO cases representing a fairly equal distribution across the spectrum. The distribution of political risk stratified across the offshoring activities are captured compiled in (Figure 8).

The first observation is that the frequency scores are relatively similar between BPO and ITO engagements. Both BPO and ITO have high frequency and impact ratings on risk relating to labour force liabilities including Predictability of labour regulations, Wage inflation and Organized Labour strike. Similar, Home Country Risk appears more prevalent for both typologies. Furthermore, ITO engagements appears slightly more concerned with Loss of IP and Bureaucracy. Based on the sample size of 32 BPO and 33 ITO engagement cases the findings do not suggest major discrepancies between BPO and ITO engagements in terms of frequency ratings.

In terms of comparing the ITO and BPO findings on perceived impact of political risk the findings indicate a higher level of discrepancy. While both categories rate Organized Labour Strike as the main impact category, BPO is perceived to generally be more impacted by Predictability of labour regulations, Legal Transparency and Local Audit regulations, while ITO is perceived to be impacted more strongly by Geo-political Risk, Home-Country Risk, Host Government Stability and Wage Inflation.

The second observation is that KPO engagements are more associated with host country bureaucracy, IP Loss, change of data management frameworks and corruption. This observation confirms the findings of the Principal Components Analysis (PCA) in (Figure 6) highlighting a stronger association with IP loss and legal transparency and contract enforcement concerns. The findings suggest that political risk exposure is closely linked with the business activity and the associated exposure to specific risk manifestations.

Figure 8: Distribution of Political Risk stratification across offshoring types



3.3.4 Political risk manifestations across entry mode constellations

In order to address the second research question on varied political rise exposure subject to entry mode constellation, a comparison was generated between the frequency and perceived impact of the various political risk categories across captive and contract-based offshore activities (Figure 9).

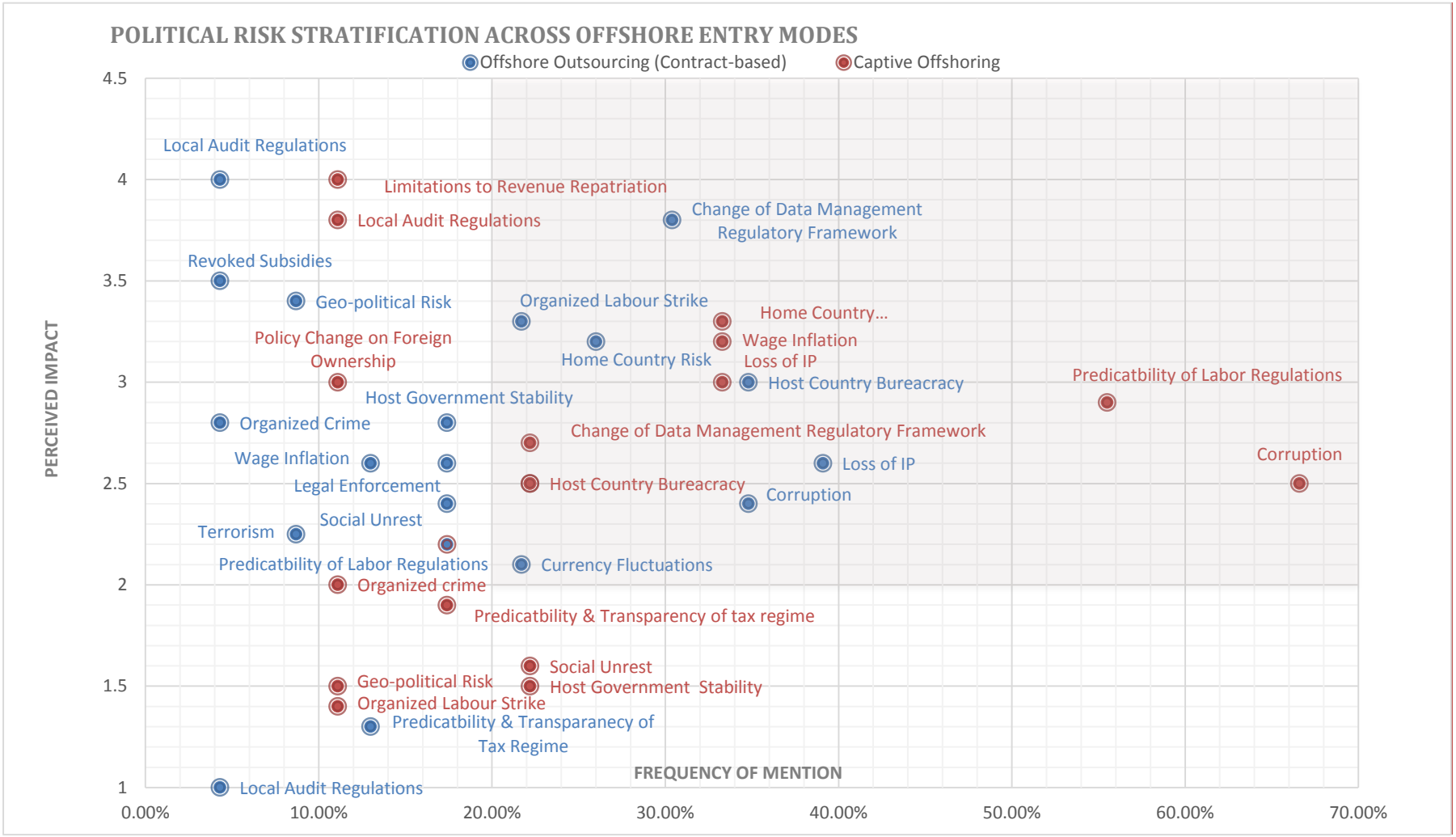
The key political risk typologies (Frequency >20%, Impact >2) across entry mode forms are further summarised as follows, indicating a high level of similarity of exposure and perceived impact across the entry modes. The findings confirm the result of the Principal Components Analysis (PCA) in section 3.3.2.1., highlighting that the variability between the two groups were too insignificant to generate a PCA plot.

Offshore Outsourcing (Contract-based)	*Captive Offshoring*
Corruption	Corruption
Home country risk	Home country risk
Loss of IP	Loss if IP
Host country bureaucracy	Host country bureaucracy
Data management regulatory framework	Data management regulatory framework
Organized labour strike	*Predictability of labor regulations*
Currency fluctuations	*Wage inflation*

The first observation is that the key risks evolving from corruption, home-country risk, loss of IP, host country bureaucracy and changing data management regulatory framework are considered key risk typologies across the entry modes. The risks emanating from currency fluctuations, predictability of labour regulations are furthermore borderline. The only significant difference across the entry modes is the impact of organized labour strike, which seems to impact substantially higher on contract-based engagements and with a perceived higher impact on operations.

The second observation is that within the identified constraints category, the captive offshoring seem more exposed to concerns with corruption and predictability of labour regulations, which could be associated with the local level management requirements in the host country.

Figure 9: Distribution of Political Risk stratification across Entry Modes



3.4 Interpretation of Findings

The purpose of this empirical study was to establish an evidence-based understanding of the meaning of political risk within the offshore service industry and elicit the main risk factors and relative perceived impact on operations. The research was guided by the following research questions.

- What are the key contingent political risk types impacting on offshore outsourcing activities?
- How do these key political risk types differ in importance depending on entry mode?

3.4.1 The diversification of political risk factors

The first research question was addressed through a RGT analysis of 91 offshoring engagements, eliciting 21 industry specific political risk constructs of which 12 risk constructs are considered key categories (high ANV and >20% frequency).

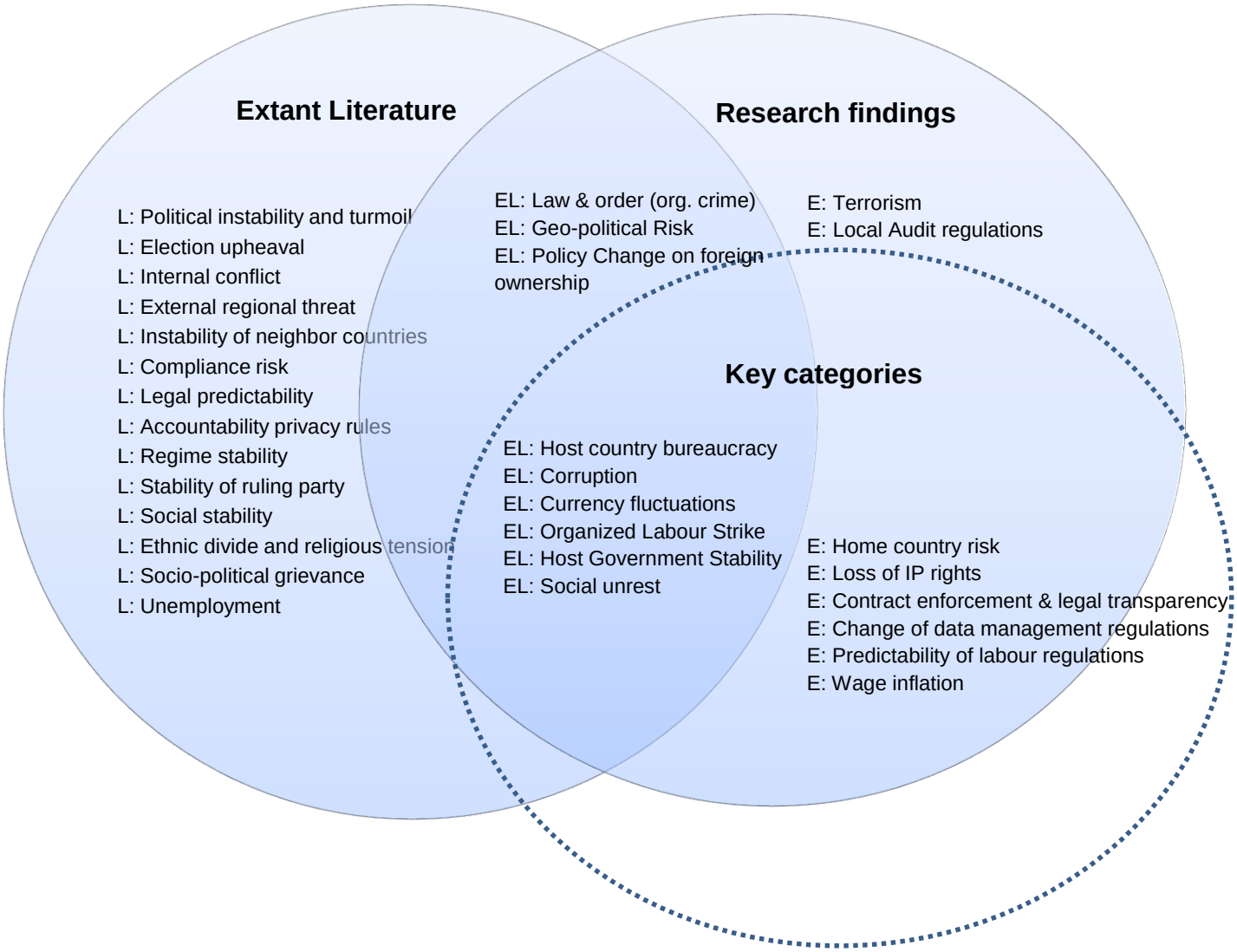
The Venn diagram in Figure 10, captures the new political risk factors identified by the empirical work, the political risks from the extant literature which are not verified by the empirical findings, and the risks common for both the literature review and the research findings. The risks identified in the overall literature review only, are classified as (L), and the findings on specific political risk constructs within the offshore service industry that are new, are classified as (E). The common and overlapping risk categories are labelled (EL). The 12 key risk categories are furthermore circled, highlighting that 6 of the risk findings from the exploratory research are confirmed within the extant literature and 6 risk categories are new constructs.

As per the descriptive analysis, the key addition to the existing risk typologies is the concept of *home country risk* and a series of risks relates to regulatory predictability, like change *of data management regulations* and *predictability of labour regulations,* both at the home country level and at the host location. The findings further highlight key risks associated with institutional capacity of host

countries, including Contract enforcement & legal transparency, IP protection, bureaucracy and corruption.

The findings suggest that discussions on external uncertainty based on a narrow concept of political risk is insufficient to capture the perceived exposure of the offshore service industry and need to be extended with more granularity on the types and nature of risk exposure.

Figure 10: **Comparison of findings with the extant literature**



3.4.2 The impact of industry type on political risk perceptions

In regards to risk types and perceived impact on offshore outsourcing activities it was surprising to note that the political risk concerns most mentioned related to home/client-country political fall-out or change of regulatory frameworks with implications for the outsourcing business model. This observation highlights that political risk exposure has a dual nature with potential impact on both the location decisions and the manner in which the outsourcing activity is executed.

The impact of the home political risk was further determined to be sector specific i.e. the highly regularized utility industry would be more exposed to policy changes pertaining to data access and security profiling. Similarly, offshoring from highly unionised regions like Europe appear to have much greater potential impact than from the US, due to more defined legislation. The significance of the featured risks pertaining to home country repercussions or change of regulatory requirements, and the strong emphasis on labour related vulnerabilities highlight that a broader conceptualization of political risk considerations is valid and not currently defined in a manner that allows for unambiguous classification of relevant political risk events allow for an understanding of which risks are of concern for the offshoring service industry. A changing regulatory regime has the potential to significantly alter the costing model underlying the offshoring activities, posing a substantial risk for companies' committing into contracts with external service suppliers or establishing extensive captive capacities abroad.

The risk of changes in data management regulatory frameworks, closely followed by loss of intellectual property (IP) and corruption, were also among the top risk considerations suggesting that the nature of offshore outsourcing political risk exposure revolves more around the key categories of policy and legal predictability and institutional capacity, confirming the relevance of integrating mechanisms to capture institutional differentiations as a means of expanded conceptualization of external uncertainty beyond the reliance on composite political risk indicators as suggested in Slangen and Tulder (2009) and Busse and Hefecker (2006). The findings support the critic contending that external

uncertainty needs to be conceptualized more broadly and proposes the concept of governance infrastructure of host countries covering *"public institutions and policies created by governments as a framework for economic, legal and social relations"* (Slangen and Tulder, 2009, p. 279). The research therefore highlights the need to expand the conceptualization and operationalization of formal external uncertainty, and encourage entry modes research to measure external uncertainty by other political dimensions such as government effectiveness, regulatory quality, control of corruption (Slangen and Tulder, 2009) and corruption and bureaucracy (Busse and Hefecker, 2006). On a similar note the findings support the possible integration of constructs from institutional economics (North, 1990) to better ascertain risk exposure pertaining from both host and home institutions.

Surprisingly, the notion of political instability relating to government stability and social unrest, featured less frequently despite traditional focus within the literature. One explanation is that due to the evidence-based methodology looking at actual exposure in existing cases, the study only captures post-contract political risk incidents. As highlighted by one interviewee "*we would not locate to Syria under the current circumstances, even if labour cost is substantially cheaper (Interviewee 16)",* the industry is not keen on exposing service chains to predictably unstable countries, especially with the availability of more stable alternative candidate locations for outsourcing. The findings are therefore a reflection of the inherent bias in the focus of the research, as most companies have already integrated these risk considerations into their initial location decisions. However, the findings also suggest that even in the event that political instability or social unrest occurs, the inherent risk management mechanisms such as diversification of the suppliers and ability to scale-up operations in alternative locations, support companies in minimizing impact substantially. The real concern appears to be felt when the political risk impacts on costing and business competitiveness, like through organized labour strikes or policy changes with implications for the underlying costing model.

As highlighted the findings also suggest that there are limited discrepancies on political risk experiences in terms of frequency ratings between BPO and ITO engagements, both highlighting organized labour strike as one of the main impacts categories. Even though more discrepancy emerged through the impact perceptions there is limited evidence that ITO and BPO engagements are detrimentally different in terms of political risk exposure. However, compared with the KPO findings it was possible to observe a scope shift towards concerns relating to regulatory frameworks and contract enforcement, and more impacted by potential IP loss, contract enforcement limitations and legal predictability. The association of Knowledge-based Outsourcing (KPO) with loss of IP, policy change on foreign ownership and contract enforcement risks, suggests that institutional capacity i.e. legal enforcement of IP rights and contracts becomes increasingly important as the value of product or service is enhanced. As stated, *"most of the high-end R&D or IP type development or intellectual property type development happens at in-house locations. So most of the high-end work is done internally with their own employees their own buildings – everything is their own – only thing is that it may happen to be in an offshore location". The reason they do that is they don't trust others to do it, I don't think it is a scare issue, it is about whether they can expose that and still have the right control (Interviewee #17)*.

Hence the findings suggest that for purely transactional work most firms are comfortable outsourcing to third-party companies, while for high-end activities they prefer to keep the process internal, supporting the TCE premise of internalization to avoid supplier opportunistic behaviour and minimization of associated transaction costs. Overall, the findings suggest that political risk exposure is specific to the nature of the offshored business activity and what risk management steps have already been taken to address the exposure. The findings further suggest that these specific risk exposures be considered in the context of low versus high value service delivery as a key distinction for political risk exposure.

3.4.3 The impact of entry mode on risk perceptions and vulnerability

In terms of addressing the second research question relating to political risk perceptions and adoption of either captive or contract-based entry mode, the study compared 19 captive cases and 72 contract-based cases to review any significant differences in actual risk manifestations or perceived impact.

The first observation is that the key risks evolving from corruption, home-country risk, loss of IP, host country bureaucracy and changing data management regulatory framework are considered key risk typologies across both the entry modes and the remaining risks closely similar. The only significant difference across the entry modes is the impact of organized labour strike, which seems to impact substantially higher on contract-based engagements and with a perceived higher impact on operations. The captive offshoring engagement in turn seem relatively more exposed to concerns with corruption and predictability of labour regulations, which could be associated with the local level management requirements in the host country. The latter confirms that exposure to on-the-ground realities has implications, once a captive engagement form is undertaken.

Previous work has established that uncertainty in the international environment effect the choice of the international entry mode (Miller, 1992; Brouthers, 1995; Demirbag and McGuinness, 2010; Werner, Brouthers and Brouthers, 1996). This research has suggested that international risk plays a critical role in entry strategy formation, emphasizing an increased importance of control for higher value productions. On one side it can therefore be expected that when the formal sources of external uncertainty increase, firms prefer investing through entry modes which guarantee a higher level of control i.e. through captives. However, on review of the findings there is surprisingly little difference, for example in the perceived impact of IP loss between the entry modes. While the absence of a marked difference between risks perceptions vis-à-vis captive versus contract-based engagements can be explained by the inherent bias of the limited number of a qualitative interview process, it is noteworthy in its absence and warrants further research in Chapter 3.

3.4.4 The impact of risk management experience

On a final note, the qualitative components of the study highlight an apparent contradiction in the sense that political risk within the offshore outsourcing industry remains a relevant concern and is perceived as something that should and can be managed, while there is limited evidence of actual proactive risk management taking place.

For the industry the concept of political risk and the implications for operations appear to remain elusive and difficult to narrow down. As expressed by one interviewee, the implications of political risk *"could be a protest, or not being able to go to work for a time, or basically not be able to operate locally. It could also be power outages which is not necessarily political, but could be politically motivated. Like hostilities between different groups suddenly impacting power supply or telephone networks and therefore services not being provided to clients" (Interviewee #16)*. From these various perceptions the concept of political risk and the associated operational implications are difficult to ring fence. The main focus seems to be on the monitoring of potential risk, mostly political stability and social unrest indicators, rather than factors like home-country risk pertaining to policy changes, institutional capacity assessments of host government bureaucracies and integrity of legal frameworks.

In terms of active risk management consideration to political exposure the interview portfolio yielded a high level of variability in the degree that political risk was considered in the offshoring process. Some companies are rather disengaged, as stated: "*…once the relationship is established we don't monitor. Unless there is something in the press, like some major uprising, otherwise we won't notice (Interviewee #16)*. On the other hand, some companies stated that *"…it is actually a big piece of our activities in terms of monitoring these things and developing the risk management plans and implementing those plans. It's very high on the operational and executives oversight" (Interviewee#11).* And finally, as stated by an experienced outsourcing advisor, *"Ultimately my sense is that politics does matter and it is something they are cognizant of, something they*

work on and actively try to manage. However, I have rarely seen any decision ultimately reversed due to political risk – they slow down but they don't get reversed (Interviewee#19). This notion is supported by, "*I think it is something that people are looking to manage, I don't think it will fundamentally alter what people are doing because the economics of this change is very powerful (Strategic Outsourcing Advisor) (Interviewee #17)*. Some of the most informing insights on the industry's perception and understanding of the political risk concept is captured in in Table 31.

Table 31: Industry responds to political risk exposure.

"An awful lot of decisions are being taken with no understanding of the political risk including where to outsource" (Interviewee#15).
"There is no follow-up on monitoring on original location indicators through focused measurement and evaluation" (Interviewee #11).
Companies think they can contract risk to nothing, however this is only to make them feel better (Interviewee #15).
Companies need to be prepared to operate with higher risk and live with the ambiguity of less transparency (Interviewee#15).
Companies routinely underestimate the time needed to make offshore outsourcing successful in terms of people-time the more so if to Bangladesh than the country next door. (Interviewee#15).
No I don't think [political risk] is taken seriously. I don't think it was taken seriously before it became an issue – it wasn't planned for. The Executives did not plan for it and take preventive measures – they reacted when it occurred (Interviewee #11).
Companies are not making informed decisions about destinations – unable to monitor rapid economic and political developments in the host countries and the implications. (Interviewee#15).
The cost of contract management so much more than anticipated – an awful lot of costs which were not included in the business case (Interviewee#15).
Another challenge is ignorance on how political issues or social issues or bad press – ignorance of how these issues affect the outsourcing deal and result. People simply don't take the time to take the advice and understand it. (Interviewee #10).
Success is almost accidental – and dependent on an individual/organic way sparked by individuals – not institutionalized. (Interviewee #15).

The discrepancy in application of risk management approaches could be attributed to firm specific moderators that determine the risk management capacity and risk appetite of the individual firm. The risk appetite, or rather the perceived ability to manage the associated risks, appears to be linked to the experience of the given firm. As stated, the understanding of risk management varies *"by and large the large the clients that already have done outsourcing and have been exposed 5-10 years, they have a sense of maturity on this. For a new client it is an uphill task and a new thing – and marked by lack of rigor and clarity of how to deal with this (Interviewee#17)*. The qualitative findings suggest that previous experience and exposure to political risk has a significant impact on the risk appetite of the executives and the firm's capacity to manage risks. This supports the notion presented by Johansson and Valne's theory of internationalization that firms are predicted to move sequentially through different stages as they develop their international experience and learn to deal with *uncertainty* by developing firm specific skills.

3.5 Concluding Comments

The exploratory empirical research offers several contributions to both theoretical and practical knowledge. First, it supports the call for re-conceptualizing the political risk definition in the context of entry mode theory application to include a broader operationalization of government characteristics, like institutional capacity, policy predictability and legal enforcement capacities, rather than maintaining a narrow focus on political stability indexes. From a practical perspective a re-conceptualization of political risk will require a broader scope of monitoring in order to remain relevant for the industry, including an engagement with potential homeland specific political fall-out or policy changes. From a theoretical perspective the re-operationalization of the external environmental risks, from being limited to political risk indexes, will allow a more diversified analysis of firm's entry mode choice. As indicated, the research highlights the need to expand the conceptualization and operationalization of formal external uncertainty, and encourage entry modes research to measure external uncertainty by other political dimensions such as government effectiveness,

regulatory quality and control of corruption in line with (Slangen and Tulder, 2009).

A second contribution concerns the highlighting of the moderating effect of specific outsourcing activity i.e. BPO/ITO or KPO, noting that firms tend to ensure more internal control for high value processing through captive engagement modes, rather than outsourcing to a third party supplier. These findings support the TCE notion that cases where the market is imperfect due to bounded rationality and opportunism leading to increased transaction costs, an internal governance structure will be considered more attractive (Anderson and Gatignon, 1986). For example, in host countries with limited governance infrastructure or institutional capacity local suppliers may use loopholes in the legal system or bureaucracy to act opportunistically (Slangen and Tulder, 2009), hence constituting a risk of opportunistic behavior. The findings seem to suggest that companies will seek to leverage labor arbitrage through outsourcing but choose an entry mode that ensures higher control when engaged in high-value services, in an exposed external environment with for example potential for IP loss, contractual liabilities and Policy Change on Foreign ownership.

Finally, the findings suggest that the offshoring industry generally adopts an avoidance strategy in regards to traditional political risk pertaining to political instability and social unrest, while expecting to manage other non-traditional risks. The notion that political risk can be managed suggests that the firm's risk adaptive behaviour, through active risk management should be explored, as the firms perception of its ability to manage certain risk, will impact on the perception of overall uncertainty related to the given engagement.

The following Chapter will leverage the findings from the literature review and the exploratory research component to further explore political risk implications on offshore service industry location decisions. The Chapter will formulate a series of hypothesises based on the theoretical review and exploratory research findings, and conduct hypothesis testing by means of a broader quantitative survey methodology.

4 (Project 3) – A Comparative Analysis of Political Risk and Offshoring Flows

Based on the literature review and the findings of the exploratory study on post-contract political risk exposure among offshoring practitioners, a series of suggested correlations between offshore outsourcing flows and contract-based relationships are hypothesized.

4.1 Hypothesis Formulation

As a main premise of the research, it is acknowledged that business cost and efficiency fundamentals are the driving factors for firms to seek offshore outsourcing solutions. In this context it is further proposed that country political risk exposure influences the location choices and the entry mode designs used for engaging in the offshoring activity.

A comprehensive review of the literature suggested that previous research have generally delimited political risk research to ownership-based entry modes, or captive offshoring, on the notion that this entry mode represent a more complex investment form than contract-based entry modes like offshore outsourcing. The perception has been that since non-equity offshoring modalities have less capital at stake and no physical facilities at risk on the ground, political risk consideration should be a less significant concern (see section 2.4.2 in the literature review).

According to the exploratory research findings the distribution and attributes of political risk in the context of contract-based offshoring engagements, or offshore outsourcing, were however very similar to those of captive engagements. As the exploratory research identified a series of new risk typologies impacting the industry, the research further explores the relationship between offshore outsourcing and political risk factors with a higher level of granularity in the analysis.

On this basis the research will firstly explore the impact of political risk characteristics on offshore outsourcing activities, and analyse the effect of political risk on predicting offshore outsourcing flows. Secondly, the research will

compare the extent to which offshore outsourcing and captive offshoring differ in sensitivity to political risk in their offshore engagements. The research will be guided by the following hypothesis:

Hypothesis 1: Offshore outsourcing activities, as a non-equity and contract-based modality, are less sensitive to political risk considerations than general inward Foreign Direct Investment (FDI) in the choice of offshore locations.

Secondly, the findings of the exploratory research suggest that the nature of offshore political risk exposure revolves increasingly around policy and legal predictability, including institutional capacity, confirming the relevance of incorporating institutional factors in the determination of external uncertainty. The findings supplement emerging research suggesting that determinants of foreign investment flows should be extended beyond the traditional factors like government stability, internal/external conflict and ethnic tensions, to also include aspects of local corruption, quality of bureaucracy and law and order (Busse and Hefeker, 2008). Other research as similarly argued that using a narrow political risk definition in exploring uncertainty in the formal external environment is suboptimal, contending that government quality is a better proxy for determining external uncertainty (Slangen and Tulder, 2009).

This research has extended the political risk definition, and through the exploratory research defined the 12 key political risk determinants proposed to affect the offshore service industry, allowing for a high level of granularity in the analysis of formal external uncertainty in the context of TCE theory. On this basis it is anticipated that the stronger the institutional and regulatory factors in the host country is perceived to be, the higher the inflow of contract-based offshore outsourcing.

Hypothesis 2: When the institutional and regulatory factors in the host country are strengthened, the volume of overall (ITO/BPO/KPO) contract-based offshore outsourcing will increase.

Thirdly, the exploratory research further highlighted a direct association of Knowledge-based Outsourcing (KPO) with loss of IP, policy change on foreign ownership and contract enforcement risks. The findings suggests that institutional capacity i.e. legal enforcement of IP rights and contracts becomes increasingly important as the knowledge content and value of services are enhanced.

On this basis it is hypothesized that specific risk exposure is subject to the level of service value or knowledge level involved in the offshoring engagement, and that risk should be considered in the context of the knowledge content as a determination of exposure. As stated *"most of the high-end R&D or IP type development or intellectual property type development happens in in-house locations. So most of the high-end work is done internally with their own employees their own buildings – everything is their own – only thing is that it may happen to be in an offshore location" (Interviewee #17)*. Hence for low-end work most firms appear comfortable outsourcing to third-party, while for high-end activities companies prefer to keep the process internal through a captive entry mode or under strong IP regulation regime. This notion highlights the moderating effect of the specific outsourcing activity i.e. BPO/ITO or KPO, noting that firms tend to ensure more internal control for high value processing through captive engagement modes, rather than exposure to a third party supplier through outsourcing.

These findings support the TCE notion that cases where the market is imperfect due to bounded rationality and opportunistic behavior leading to increased transaction costs due to uncertainty, an internal governance structure will be considered more attractive (Anderson and Gatignon, 1986). For example, in host countries with limited governance infrastructure or institutional capacity local suppliers may use loopholes in the legal system or bureaucracy to act in self-interest, hence constituting a risk of opportunistic behavior. Similarly, the findings touch upon the notion of asset specificity, which is another principle factor by which TCE explain vertical integration (Williamson, 1985). TCE has distinguished asset specificity as either site specificity, physical asset specificity, human asset specificity and dedicated specificity with the main premise suggesting that when

asset specificity increases, the "*balance shifts in the favor of internal organization"* (Williamson, 1985, p.90). In the context of offshoring of services, the research proposes to introduce the additional concept of *knowledge specificity* to be considered as a determining aspect of vertical integration decision.

Consistent with the TCE perspective, the research suggests that companies engaging in offshoring will ensure higher control or avoid locations, when engaged in service offshoring of a high-knowledge-content in environment of high institutional and legal uncertainty. Therefore as the institutional and legal uncertainty decreases at an offshoring location the level of offshoring activity with a higher knowledge-content is likely to increase.

Hypothesis 3: When the institutional and regulatory factors in the host country are strengthened, the offshore outsourcing volumes of business activities with a higher knowledge content (KPO) is likely to increase.

4.2 Research Methodology

4.2.1 Selection of the multivariate technique

As the proposed research is focused on analysing dependence relationships between the dependent variable(s) i.e. contract-based outsourcing or captive (FDI) flows and the identified independent political risk variables, the research will apply a dependence technique. The dependence techniques are *"based on the use of independent variables to predict and explain one or more dependent variables"* (Hair, Black, Babin and Anderson, 2011, p.12). The appropriate Multivariate Analysis dependence techniques considered for this research includes:

Option 1 - Multiple Regression: As the analysis involves a single metric dependent variable, the first option is to apply a multiple regression analysis technique. Multiple Regression can be appropriate for conducting two rounds of analysis i) Multiple regression with Contract-based outsourcing flows as the first dependent variable, ii) Multiple regression with captive (FDI) flows as second

dependent variable. With the overall objective of comparing findings between the two separate rounds of analysis.

Option 2 - Canonical correlation: When the research problem involves several metric-based dependent variables (Contract-based outsourcing flows + FDI flows), it is also possible to use a canonical correlation. With canonical analysis the objective is to correlate simultaneously several metric dependent variables and several metric independent variables. The result would be "*a set of weights for the dependent and independent variables that provides the maximum simple correlation between the set of dependent and independent variables"* (Hair, Black, Babin and Anderson, 2011, p. 17). This result will however not serve the purpose of this research, as the objective is to ascertain the difference in correlation between contract-based flows (Dependent variable 1) and the identified political risk indicators (independent variables), versus the degree of correlation between captive (FDI) based flows (Dependent variable 2) against the same set of independent variables.

As the choice of technique depends on the classification of variables, the number of dependent variables and how they are measured, the research proposes to use a multiple regression analysis for the purpose of exploring the dependencies between the offshore outsourcing flows and the pre-identified political risk indicators. The selection of the multiple regression technique was determined by the classification of multivariate methods technique (Hair, Black, Babin and Anderson, 2011).

Table 32: Classification of multivariate methods

Can the Variables be divided into independent/dependent classifications based on theory?	Yes
How many variables are treated as dependent in a single analysis?	One
How are the variables, both dependent and independent measured?	Metric
Multivariate Technique options	Multiple regression (or Conjoint Analysis)

4.2.2 A six-stage model for multiple regression analysis

The following research protocol will use the six-stage model building process introduced by (Hair, Black, Babin and Anderson, 2011), as the framework for addressing the components that constitute the regression analysis process. The framework provides a logical and structured approach to regression model building, including specifying the objectives of the regression analysis, selection of variables, addressing research design issues and testing of assumptions, before interpreting and validating the results.

Table 33: A six-stage model building process

Stage 1: Confirming that Multiple Regression is appropriate for the Research Problem
Stage 2: Addressing Research Design Issues
Stage 3: Testing Assumptions in Multiple Regression
Stage 4: Selection of Estimation Technique
Stage 5: Interpreting the Regression Variate
Stage 6: Validating the Results

4.2.2.1 Aligning multiple regression with the research problem

As indicated multiple regression provides a means for objectively assessing the degree and character of the relationship between dependent and independent variables and can be interpreted from three main perspectives (Hair, Black, Babin and Anderson, 2011, p. 170):

- As a determination of the relative importance of each independent variable in the prediction of the dependent variable measure.
- As a means of assessing the relationship between the independent and dependent variables

- And lastly, multiple regression can assess the internal relationship between the independent variables in the prediction of the dependent variable measure.

For the purpose of this research the main application of the regression variate will be to interpret the relative importance of the pre-identified political risk indicators on the offshore outsourcing flows across locations. The objective(s) of conducting the regression analysis is therefore to:

- Determine the relative importance of each of the identified political risk indicators in offshore outsourcing location choices, if any, and compare relative importance of each of the political risk indicators for offshore outsourcing inflows.
- Provide insight into the relationship among the political risk indicators in their prediction of offshore outsourcing location flows with the objective of developing a specific weighted index for political risk rating of contract-based offshore outsourcing activities.

The selection of the political risk variables is based on the empirical findings of the qualitative research conducted under P2, covering 25 interviews and analysing political risk exposure experienced during 91 outsourcing engagements. The exploratory empirical research mapped political risk types in accordance with frequency and perceived impact on offshore outsourcing engagements. The identified political risks were further mapped against political risk indicators identified in the systematic literature review, suggesting that the political risk exposure and concerns within the offshore outsourcing industry was *different* than the exposure of traditional Foreign Direct Investment (FDI).

The findings further suggested that the choice of entry mode, contract-based versus captive engagements, affect the political risk exposure of the offshore engagement. The choice of variables is therefore firmly based on previous research within the field and the exploratory research project identifying the most relevant political risk manifestations within the offshore outsourcing industry.

The application of quantitative methods and regression analysis to political risk research is a common approach within the FDI research domain. The attached review of methodology and data sources applied in comparable political risk research, provides an overview of 23 previous studies applying a form of quantitative analysis by use of country risk indicators (See Annex C.2). For example, Jun and Singh (1996), in identifying determinants of foreign direct investment in developing countries, regressed an aggregated indicator for political risk based on a number of sub-components and several control variables on the value of foreign direct investment flows, (Jun and Singh, 1996). In another study, (Fatehi-Sedeh, Safizadeh 1989), applied regression analysis to explore the potential impact of socio-political instability on the US manufacturing FDI. Using multiple regression analysis, the US FDI data served as the dependent variable and the frequencies of socio-political instability as independent variables.

4.2.2.2 Selection of independent variables

In the following sections the 12 political risk categories identified in the exploratory research component will be applied as independent variables with the objective of developing political risk profile for offshoring outsourcing locations. The analysis includes all political risk indicators identified by the empirical research with a frequency score >10% only.

4.2.2.3 Sources and scope of data for independent variables

For the purpose of identifying appropriate data sources to compile the independent variable datasets, a comprehensive review of existing governance and country indicators was conducted (See Annex C.1). The review findings are compiled in matrix form and provide an overview of data sources, methodology, measures and scope of coverage. Based on the analysis of available data (See Annex C.3) the independent variables are drawn from a combination of data from the Global Competitiveness Index (GCI) developed by the Global Economic Forum (WEF, 2014), combined with data purchased from the PRS Group Political Risk Index (PRSG 2014). Ratings on political risk factors and institutions are

extracted from the International Country Risk Guide (ICRG) provided by the Political Risk Services (PRS) Group.

4.2.2.4 Overview of independent variables

The following matrix provides an overview of the political risk indicators applied, plus the time series available, data source and description of measure:

Table 34: Description of independent variables

No.	Independent Variables			
	Risk Indicator Categories	Time Series	Sample Data Source	Definition
1	Host country bureaucracy A	*2006-2014*	*PRS Group*	Quality of Bureaucracy
2	Host country bureaucracy B	*2006-2014*	*World Economic Forum (GCI)*	Burden of customs procedures
3	Loss of IP	*2006-2014*	*World Economic Forum (GCI)*	Level of IP protection
4	Corruption	*2006-2014*	*World Economic Forum (GCI)*	Corruption levels at host location
5	Contract enforcement	*2006-2014*	*World Economic Forum (GCI)*	Local legal systems ability to enforce legal contracts
6	Currency Fluctuations	*2006-2014*	*PRS Group*	Stability of local currency
7	Organized Labour Strike	*2006-2014*	*World Economic Forum (GCI)*	Disruption through local strikes (internal or external)
8	Host Government Stability	*2006-2014*	*PRS Group*	Changes in Government policies
9	Social unrest	*2006-2014*	*World Economic Forum (GCI)*	Local instability that may affect business continuity
10	Internal Conflict	*2006-2014*	*PRS Group*	Risk of internal conflict and violence
11	Geo-political Risk	*2006-2014*	*PRS Group*	Regional instability that may affect business continuity
12	Human Security	*2006-2014*	*World Economic Forum (GCI)*	Perceived risk and costs in securing staff security

4.2.2.4.1 Use of Summated Scales

For the purpose of the research the concept of *Bureaucracy* has been divided into two distinct variables, one representing the overall perception of institutional bureaucracy and the second representing the specific challenges with navigating customs procedures in the host country. The challenge of customs procedures was mentioned specifically during the exploratory interviews in relation to sending prototypes and supporting materials to suppliers, including survey samples in medical R&D. The intention is to make a differentiation between bureaucracy indicators in the initial regression analysis and determine which is most relevant for inclusion in the final model.

In turn, for the purpose of limiting the number of independent variables to ensure statistical cohesion and power, the research design has applied a summated scale for the two indicators on terrorism and organized crime, and consolidated them under the notion of human security. The human security indicator encompasses i) business costs of terrorism, ii) business costs of crime and violence, III) levels of organized crime and Iv) reliability of police services. The use of a summated scale is applied as indicators are considered uni-dimensional around the same concept, and through the empirical research findings understood as the security concerns with sending staff from the buying company to perform monitoring activities or knowledge transfer, hence limiting access to the offshoring partner.

4.2.2.5 Normalization of independent variable scales

As the research will be using independent variables with varying scales (See Annex C.3), the data will be normalized for statistical comparability. The common approach to normalization includes either generating z-values using the formula (z = (x-mean)/std. dev.) or rescaling. For the purpose of this research the data scales will be normalized using z-values as this feature can be processed in the SPSS application with limited risk of error. As the PRSG indicator is assessed on a scale from 0 to 12 (with higher values indicating less risk) and the GCI

indictors are assess on a scale from 1-7 (with higher values indicating less risk) no inverse normalization is required.

4.2.3 Selection of dependent variables

The research will focus on the effect of the external uncertainties (independent variables) on the location decisions within the service offshoring industry. For this purpose the research will apply contract-based outsourcing and captive offshoring flows as the dependent variable.

Unlike previous studies on political risk and Foreign Direct Investment (FDI), one of the challenges with researching political risk in the context of the outsourcing service industry is the general absence of available economic data sets that matches the applied definition of offshore outsourcing. According to the WTO (2005), the existing sources on trade statistics are not targeted to record the phenomenon of offshore outsourcing and hence most data has been based on private sector surveys like McKinsey or Gartner reports (WTO, 2005, p.274).

4.2.4 Developing a measure for offshore outsourcing activities

While several approaches have been used to gauge the size of the offshore services activities, the WTO (2005), used the International Monetary Fund (IMF) developed Balance of Payment (BoP) statistics as a means to gauge overall offshore services trade in an attempt to discuss the potential employment impact in offshoring economies. The BoP is *"a statement that summarizes economic transactions between residents and non-residents during a specific time period"*, and *"the international accounts provide an integrated framework for the analysis of an economy's international relationships."* (IMF, 2007, p.9). The BoP statement thereby provides a net position of any national economy in terms of trade with the external world, allowing for a determination of a country's contribution to the trade in services. The BoP records the net position of the economy in terms of debits and credits of individual transactions, reflecting the inflow and outflow element to each exchange. Each transaction is recorded as either Credit (CR) – exports of goods and services, income receivable, reduction in assets, or increase in

liabilities; or Debit (DR) – imports of goods and services, income payable, increase in assets, or reduction in liabilities. (IMF, 2007, p. 10).

The BoP statistics further reflect inflow and outflow of transactions in an economy consisting of "*the institutional units that are resident in the economic territory of that economy"* and *"has the dimension of legal jurisdiction as well as physical location*" (IMF, p 50). The BoP of Goods and Services account shows transactions in items that are outcomes of production activities, defining services as *"the result of a production activity that changes the conditions of the consuming units, or facilitates the exchange of products or financial assets"* (IMF, 2007, p.149). On this basis the research will apply the BoP Services account data, exports of services (CR), as the determinant of the volume of offshore outsourcing activities being exported from the top offshore locations.

4.2.4.1 Contract-based offshoring data

In order to identify the segments of service's trade that traditionally constitute the offshore outsourcing industry, the WTO (2005) focused on the trade in firstly; Computer and Information Services (CIS) and secondly; Other Professional Services (OBS), as a proxy for the offshore outsourcing trade (WTO, 2005, p. 276).

4.2.4.2 Computer and information services (CIS)

The CIS data is included within the BoP6 (IMF, 2007) component of Telecommunications, Computer, and Information services, but can be isolated from the other components through a filtering mechanism in the IMF data base. The (CIS) segment of the BoP6 includes computer services consisting of hardware-and software related services and data-processing services, including typical offshore outsourcing services (IMF, 2007, p. 176) such as:

- The development, production, supply and documentation of customized software, including operating systems, made to order for specific users;
- Hardware and software consultancy and implementation services, including the management of subcontracted computer services;

- Data recovery services, including provision of advice and assistance;
- Analysis, design and programming of systems ready to use (including webpage development and design), and technical consultancy related software;
- Data processing and hosting services, such as data entry, tabulation and processing;
- Web-page hosting services and;
- Provision of applications, hosting client's applications and computer facilities management.

The Information Services component includes news agency services, like the provision of news, photographs, and feature articles to the media, while Other Information Provision include database services like database conception, data storage, and the dissemination of data and databases. As both are not considered common candidates for offshore service outsourcing, the CIS data segment is limited to Computer Services only (IMF, 2007, p. 176). The CIS data will therefore be applied for the purpose of this research as a proxy for Information Technology Outsourcing (ITO).

4.2.4.3 Other business services (OBS)

The OBS account includes Research and Development services associated with basic research, applied research and experimental development of new products and processes. The section further includes "*service merchanting*", which includes services not classified to specific service classifications, such as for example transport, construction, or computing above. This section, in accordance with the WTO (2005), is suggested to provide the best available proxy for business process outsourcing flows. However, it should be noted that the Other Business Services (OBS) also include services which are not generally associated with offshore outsourcing including Waste Treatment and depollution, agricultural and mining services. Also the segment includes Operating Leasing activities, and Trade-related services covering commissions on goods and services transactions.

Through the IMF database filtering mechanism in BoP6, it is possible to break down the OBS data into the two following categories relevant for offshore outsourcing research:

4.2.4.4 Research and development (R&D)

The Research and Development services data component consist of services that are associated with basic research, applied research, and experimental development of new products and processes. In principle, such activities in the physical sciences, social sciences, and humanities are covered, including the development of operating systems that represent technological advances. Also included is commercial research related to electronics, pharmaceuticals, and biotechnology (IMF, 2007, p. 177). The data component will for the purpose of this research be applied as a proxy for Knowledge-based Outsourcing (KPO), as it captures well the component of offshore outsourcing that is considered "high-value" with a substantial knowledge content.

4.2.4.5 Other business services (OBS)

The Other Business Services (OBS) component is nested within the overall category also called Other Business Services (OBS), the BoP6 states that "*Business and other services, such as transport, construction, and computing, may be subcontracted. This arrangement may also be called "outsourcing." For example, a specialist service arranger may be paid to provide back-office functions for a customer, which the service arranger subcontracts to another contractor. These services are classified to the appropriate specific service classification, such as transport, construction, computing, or other business services*" (IMF, 2007, p. 177).

As the transport and construction services can then be excluded, and the computer and R&D services are included in above segments, the residual flows in the OBS segment can be considered similar to the Business Process Outsourcing (BPO) which is otherwise not classified as ITO or KPO above. The following research will therefore use Computer Information Services (CIS) as a proxy for Information Technology Outsourcing (ITO), the R&D component of

Other Business Services (OBS) as a proxy for Knowledge-based Outsourcing (KPO) and the Other Business Services (OBS) component of Other Business Services (OBS) as a proxy for Business Process Outsourcing (BPO).

4.2.5 Aggregate offshore outsourcing of services flows

With the absence of tailor-made and industry specific data on offshore outsourcing activities the use of proxy data from the BoP database, and the related concerns with accuracy of reporting at national level, the research is cognizant of the potential for measurement error. To overcome the potential weakness of reporting accuracy against either CIS or OBS portfolios, the research will also apply a summated scale consisting of an aggregated sum of the identified CIS and OBS services. According to WTO (2005) it is suggested to use aggregate data sets of the two service classifications provides the most reliable indicator for service outsourcing flows. For the purpose of this research an aggregate sum of the three BoP segments will be applied as the consolidated service offshoring export (credit) of the individual country.

4.2.5.1 Validation of ITO/KPO and BPO data assumptions

While the use of BoP data has been established as a valid method for determining offshore outsourcing flows by (WTO, 2005) it is acknowledged to be an estimate with potential inconsistencies due to national level reporting and classification variance. As research within the area of offshore outsourcing services has generally been hampered by lack of access to agreed datasets and inconsistencies (Bardhan, Jaffe and Kroll, 2013), a process of pre-validation is required.

For the purpose of validating the data proxy sets for this research a descriptive analysis of consolidated offshore outsourcing flows has been conducted across the BoP generated datasets for ITO, BPO, KPO and aggregate values for 2010 (See Annex C.4 7). It should be noted that 2010 provides complete data for all sample countries however some of the main outsourcing destinations are not included in the dataset due to absence of data components, either among the independent variables or from the BoP data, including Mexico, Indonesia and

Malaysia. To confirm validity of the data the BoP data sets were compared to the A.T. Kearney Global Services Location Index 2014 (Kearney, 2014), providing a ranking of the 50 most attractive offshore outsourcing locations in the world (See Annex C.8). While the ranking does not indicate the actual volumes for comparison, it confirms mainstream offshore outsourcing locations. The direct comparison of the low cost destinations is provided in the table below, indicating a convincing match between the A.T. Kearney industry data on most attractive locations and the BOP6 generated data.

The descriptive data across the BoP generated datasets for ITO, BPO, KPO and aggregate values for 2010 in (See Annex C.4 - C.7) validates the BoP data by confirming the industry position of India as the lead location on ITO and China/Brazil/Philippines as the main host locations for BPO. In (Annex C.8) a further comparison between the A.T. Kearny rankings of the Top 50 offshore outsourcing locations, with the ranking of country service export based on the BoP data is provided, further validating the use of BoP data as measure of offshore outsourcing activities.

Table 35: Balance of Payment (BoP) data comparison

BoP data comparison with A.T. Kearney Global Services Location Index 2014		
BoP data ranking	Country name	Included in A.T. Kearny Index 2014
1.	India	Yes
2.	China	Yes
3.	Brazil	Yes
4.	Philippines	Yes
5.	Russia	Yes
6.	Thailand	Yes
7.	Hungary	Yes
8.	Argentina	Yes
9.	Ukraine	Yes
10.	Romania	Yes
11.	Morocco	Yes
12.	Costa Rica	Yes
13.	South Africa	Yes
14.	Serbia *	No
15.	Bulgaria	Yes
16.	Pakistan	Yes
17.	Egypt	Yes
18.	Bangladesh	Yes
19.	Jordan	Yes
20.	Sri Lanka	Yes
21.	Colombia	Yes
22.	Uruguay	Yes
23.	Latvia	Yes
24.	Oman**	No
25.	Azerbaijan*	No
*These two locations are considered outliers as not confirmed as mainstream outsourcing locations. **Location not confirmed in A.T. Kearney Index, but a sample location identified through the practitioner interviews (Outsourcing of BPO within Telecommunications Industry).		

4.2.6 Identifying proxy data for captive outsourcing

According to WTO (2005), few national statistics allow for identification of cross-border transactions between affiliate and non-affiliate firms. However, for the case of US BoP statistics this data is available and can also be viewed *"as a proxy for captive offshoring for companies resident in the USA"* (WTO, 2005, p. 277). However, on review it appears that the data is not location-specific and there are a series of limitations to the use of affiliated trade as a proxy for captive offshoring activities, including:

- The data does not provide a distinction between goods and services, and while international trade among affiliates firms include offshoring activities, some of the imported goods may not have been produced internally in the first place and hence not indicative of offshoring activities.
- The affiliate trade data will also include mergers and acquisitions, and hence the BOP data on affiliate trade may be overstated in terms of offshoring activities.
- Finally, the trade with affiliates also poses a sectoral classification problem, as the transactions will be classified in accordance with the primary industry classification of the affiliate i.e. "*an IT offshore activity for an insurance company would be classified as an insurance service flow and not as a supply of IT service"* (WTO, 2005, p. 277).

Table 36: Description of dependent variables

No.	Dependent Variable(s)		
	Variable Name	Time Series	Definition of Data Source
1.	Aggregated Service Offshore Outsourcing per national economy	*2006-2013*	*Export (Credit) of* Aggregate BoP Services Credit; Computer and Information Services (CIS), Research & Development Services and Other Business Services *as per annual BOP6*
2.	BPO export per national economy	*2006-2013*	*Export (Credit) of Services, Other Business Services, Technical, trade-related, and other business services as per annual BOP6*
3.	ITO export per national economy	*2006-2013*	*Export (Credit) of Services, Computer and Information Services (CIS)as per annual BOP6*
4.	KPO (R&D) export per national economy	*2006-2013*	*Export (Credit) of Services, Other Business Services, Research and Development Services) as per annual BOP6*
5.	Foreign Direct Investment (FDI) inflow per national economy	*2006-2013*	*UNCTAD FDI database (2014) - Net FDI inflows*

On this background it was decided not to use the BoP datasets for developing a proxy dataset for captive outsourcing and instead use overall Foreign Direct

Investment (FDI) inflow per national economy as a comparison. On this basis the data for the dependent variable for captive outsourcing will be substituted with overall FDI inflows drawn from the UNCTAD FDI statistics database (UNCTAD, 2014) in line with traditional political risk research (Busse and Hefeker, 2007).

4.2.7 Non-political location variables

The findings of the exploratory research also suggested a series of factors that can moderate the location choice or alter entry mode choice in addition to external uncertainty variables. The moderators include considerations to available support infrastructure, educated workforce and research talent for upstream knowledge-based outsourcing and are incorporated into the analysis as non-political indicator variables accordingly.

Table 37: Description of external business variables

No.	External Business Variables		
	Variable Name	Time Series	Data Source – Global Competiveness Index (GCI) 2005- 2014, 1-7 (best)
1.	*Pillar 2 - Electricity and telephony infrastructure*	*2006-2013*	*2nd pillar 2.B.: Electricity and telephony infrastructure, 2.07*
2.	*Pillar 3 - Macro Environment*	*2006-2013*	*3rd pillar: Macroeconomic environment*
3.	*Pillar 4 - Primary Education*	*2006-2013*	*4th pillar 4..B.: Primary education, 4.09-10, 1-7*
4.	*Pillar 5 - Higher education and training*	*2006-2013*	*5th pillar: Higher education and training, 1-7*
5.	*Pillar 7 - Labour market efficiency*	*2006-2013*	*7th pillar: Labour market efficiency, 1-7*
6.	*Pillar 9 - Technological readiness*	*2006-2013*	*9th pillar: Technological readiness*
7.	*Pillar 10 - Domestic Market Size*	*2006-2013*	*10th pillar - Domestic Market Size, 10.01*
8.	*Pillar 12 - Innovation*	*2006-2013*	*12th pillar: Innovation*
9.	*GDP per Capita*	*2006-2013*	*GDP per capita (US$), 0.03*

It should be noted that the literature review and exploratory research also highlighted firm specific moderators potentially impacting on location choices, including offshoring experience levels, firm origin, the business activity (high or low-end value), the level of industry regulation and the volumes of the engagement. However, as firm level data is unavailable these moderators will not be included in this stage of the research.

4.2.8 Country samples

The Global Competitiveness Report 2013–2014 (WEF, 2014) covers 148 economies, containing a detailed profile section with data tables covering over 100 indicators. The main limitation with using the Global Competitiveness Report data is that most data is only available since 2005, meaning that timesheet analysis will be limited to a duration of 2006-2013 only. Similarly, the PRS Group Political Risk Index (PRSG, 2014) covers political, economic, financial, and social data for 140 countries, in most cases back to 1984, however several offshore location destinations are missing from the index like Mauritius for example. Hence generating a complete dataset for the Independent Variables was partly limited to availability of country specific data.

Similarly, the varied methods of collecting BOP data across national economies does not yield a comprehensive set of country BOP data, with key offshoring destinations like Mexico, Indonesia and Malaysia missing. Similarly, some of the variables do not provide complete datasets for the time period 2006-2014. Overall, the research project has been able to compile complete datasets from 92 countries, including most of the main offshore outsourcing destinations as per the below matrix.

Table 38: Overview of country samples

BOP Classification	Outsourcing Type	N size	Country Samples
Aggregate BOP Services Credit; Computer and Information Services (CIS), Research & Development Services and Other Business Services	Offshore Outsourcing (Aggregate ITO, BPO and R&D)	92	Albania, Algeria, Argentina, Armenia, Australia, Austria, Azerbaijan, Bahrain, Bangladesh, Belgium, Bolivia, Botswana, Brazil, Bulgaria, Cameroon, Canada, China, Colombia, Costa Rica, Croatia, Cyprus, Czech Republic, Dominican Rep., Egypt, El Salvador, Estonia, Ethiopia, Finland, France, Germany, Ghana, Greece, Guatemala, Guyana, Honduras, Hungary, India, Ireland, Israel, Italy, Jamaica, Jordan, Kazakhstan, Korea, Republic, Latvia, Lithuania, Luxembourg, Malawi, Malta. Mongolia, Morocco, Mozambique, Namibia, Netherlands, New Zealand, Nicaragua, Nigeria, Norway, Oman, Pakistan, Panama, Paraguay, Peru, Philippines, Poland, Portugal, Romania, Russia, Saudi Arabia, Senegal, Singapore, Serbia, Republic, Slovakia, Slovenia, South Africa, Spain, Sri Lanka, Sweden, Switzerland, Tanzania, Thailand, Trinidad & Tobago, Tunisia, Turkey, Uganda, Ukraine, United Kingdom, United States, Uruguay, Venezuela, Yemen, Republic, Zambia[6].
Services, Other Business Services, Technical, trade-related, and other business services	BPO	92	(same as above)
Computer and Information Services (CIS)	ITO	61	Albania, Algeria, Argentina, Armenia, Australia, Austria, Azerbaijan, Bangladesh, Belgium, Bolivia, Botswana, Brazil, Bulgaria, Canada, Colombia, Costa Rica, Cyprus, Czech Republic, Dominican Rep., El Salvador, Estonia, Finland, Germany, Greece, Guatemala, Guyana, Hungary, India, Ireland, Israel, Italy, Jamaica, Kazakhstan, Korea (Republic), Latvia, Lithuania, Malta, Mongolia, Morocco, Mozambique, Namibia, Nicaragua, Norway, Pakistan, Panama, Philippines, Poland, Portugal, Romania, Russia, Serbia, Republic, Slovakia, Slovenia, Sri Lanka, Sweden, Tanzania, Tunisia, Uganda, Ukraine, United States, Uruguay.
Services, Other Business Services, Research and Development Services	KPO (R&D)	43	Albania, Argentina, Australia, Austria, Azerbaijan, Bangladesh, Belgium, Botswana, Brazil, Bulgaria, Canada, Costa Rica, Croatia, Cyprus, Czech Republic, Estonia, Ethiopia, Finland, Germany, Greece, Hungary, India, Ireland, Italy, Korea (Republic), Latvia, Lithuania, Malawi, Malta, New Zealand, Norway, Pakistan, Philippines, Poland, Portugal, Romania, Russia, Singapore, Serbia Republic, Slovenia, Spain, Ukraine, United States[7].

[6] Note that complete datasets were not available for typical offshore outsourcing destinations like Indonesia, Malaysia and Mexico hence not included in the analysis.

[7] Note that R&D data was not available for large economies like United Kingdom, France and Japan.

4.3 Addressing Research Design Issues

Multiple regression accommodates multiple metric independent variables and the research will use the pre-identified political risk indicators, including the additional business environment variables. The analysis will form a set of independent variables that forms the regression variate, a linear combination of the independent variables that best predicts the dependent variable. Based on the concept of minimizing the sum of squared errors of prediction, the analysis will be able to identify the "best" independent variables based on the correlation coefficient. The higher the correlation coefficient the greater the predictive accuracy. The amount of change in the dependent variable due to the independent variable is known as the *regression coefficient*. The regression coefficient will identify if the dependency for the various independent variables are statistically significant, which in turn will highlight which of the political risk indicators are most significant in predicting offshore outsourcing flows (Hair, Black, Babin and Anderson, 2011, p. 163).

In addition, the research will determine the prediction accuracy of the indicators on Offshore Outsourcing flows by using the coefficient of determination (R^2). The power of the multiple regression is referred to as the "*probability of detecting a statistically significant level of R^2 or a regression coefficient at a specified level for a specific sample size"* (Hair, Black, Babin and Anderson, 2011, p. 174). The R^2 represents the combined effects of the variate (all variables) ranging from 1.0 (perfect prediction) to 0.0 (no prediction). The R^2 measure will support the research in determining to what extent the individual identified Political Risk Indicators impact on the offshore outsourcing location decisions for contract-based outsourcing. Through the process of analysing the R^2 the research will further seek to develop the regression equation with the highest predictive capability by employing the number of independent variables that optimizes the predictive capability.

4.3.1 Testing assumptions in multiple regression

4.3.1.1 Missing data

As indicated in the section on Country Samples (see Section 4.2.8) there are some data completeness constraints with using the Global Competitiveness Report and the PRS Group Political Risk Index. Due to the data structure and scope not all countries are represented with complete data sets, and the scope for GCR limited to the period 2005-2014. Similarly, the varied methods of collecting BoP data across national economies does not yield a comprehensive set of country BoP data for all countries, with key offshoring destinations not having available data. Similarly, some of the variables do not provide complete datasets for the time period 2006-2014, with missing data mainly for the periods 2012-14 and/or 2006-2009. For the purpose of this research the missing data for specific years was inserted into SPSS and coded as system-missing data values (or blanks), allowing the research to run the regression analysis excluding data either list-wise or pair-wise.

As it is preferred to exclude incomplete data samples list-wise, the first round of analysis used the list-wise exclusion methodology, resulting in the availability of only 265 cases across the data sets. During the second round of analysis a pair-wise methodology was applied allowing a sample size ranging from 458 – 828 cases. As the missing data sets across specific years are considered non-substantive, it was decided to maintain the pair-wise exclusion approach for this research to benefit from the larger number of sample cases to be included in the analysis. As the literature highlights potential problems with using the pair-wise exclusion approach versus the list-wise exclusion on the basis that, at times, the correlations are difficult to compare (Schlomer, Bauman and Card, 2010) or yielding correlations outside the ranges of -1.0 to 1.0 (Pigott, 2001) a full comparison of the beta coefficients using both approaches was conducted. As per the comparison provided in (Annex C. 9 and10) a linear regression analysis was conducted for aggregated offshore outsourcing across the 12 political risk variables and the 9 external business variables using both the list-wise and pair-wise exclusion approach.

The comparison yielded no variance in the overall positive or negative relationships across the variables, except a marginal variance of for Exchange Rate Stability and GDP per Capita which are borderline and both considered insignificant in the later analysis. In terms of the impact on relative ranking, a second comparison of list-wise versus pair-wise exclusion of political risk variables confirmed that the 5 highest and 2 lowest (the most significant findings) yielded the same relative ranking outcome, and only marginal ranking differences across the four less significant variables. Similarly, the comparison of the external business variables confirmed that the two approaches yielded the same outcome across the two highest and two lowest ranked variables, while there were minor ranking variance across the less significant variables.

Table 39: Independent variable sample size

Variable description	N
External Conflict	828
Corruption	819
Government Stability	828
Internal Conflict	828
Staff Security	814
Quality of Bureaucracy	828
Cooperation in labor-employer relations	814
Intellectual property protection	723
Efficiency of legal framework in settling disputes	549
Burden of customs procedures	729
Judicial independence	814
Exchange Rate Stability	827
Pillar 2 - Electricity and telephony infrastructure	458
Pillar 3 - Macro Environment	814
Pillar 4 - Primary Education	814
Pillar 5 - Higher education and training	814
Pillar 7 - Labor market efficiency	814
Pillar 9 - Technological readiness	819
Pillar 10 - Domestic Market Size	814
Pillar 12 - Innovation	814
GDP per Capita	552

Overall the comparison provided confirmation that the use of list-wise versus pair-wise exclusion had no impact on the key outcome of the analysis with only minor

ranking variance across the less significant findings. In order to benefit from the larger sample size the research therefore is based on the pair-wise approach yielding a higher level of generalizability and statistical power through the higher sample size.

4.3.2 Sample size considerations

In order for the research to have appropriate statistical power at (0.80), the sample size would need to be approximately 100 to accommodate 10 independent variables (Field, 2009). The level of generalizability of the research results is also affected by the sample size. A general rule states that the ratio should never fall below 5:1, meaning five observations should be made for each independent variable applied in the variate, however with a stepwise approach this ratio is at times increased up to 50:1 (Hair, Black, Babin and Anderson, 2011, p. 175). As the number of observations available in the dependent variable is limited by the number of relevant outsourcing economies in the world and annual datasets, the research use summated scales for certain independent variables to reduce the number of independent variables. The research approach of using a backward stepwise method will further reduce the number of independent variables in the final model and hence enhance generalizability. With the overall sample sizes per independent variable indicated above, the research sample is in the range of 40:1 with only three variables in the range of 22:1 – 26:1. For the purpose of this research the sample size is considered sufficient as all variables represent a ratio > 10:1 to have appropriate statistical power at (0.80). In terms of generalizability the 17 out of 21 variables yields a ratio of 40:1 which is within range of the conservative target ratio of 50:1 set in the literature (Hair, Black, Babin and Anderson, 2011, p. 175).

4.3.3 Selection of estimation technique

In selecting the estimation technique, the research considered confirmatory specification and sequential specification. As confirmatory specification requires an exact set of independent variables to be included, the specification technique will not allow for individual assessment of explanatory power. The sequential

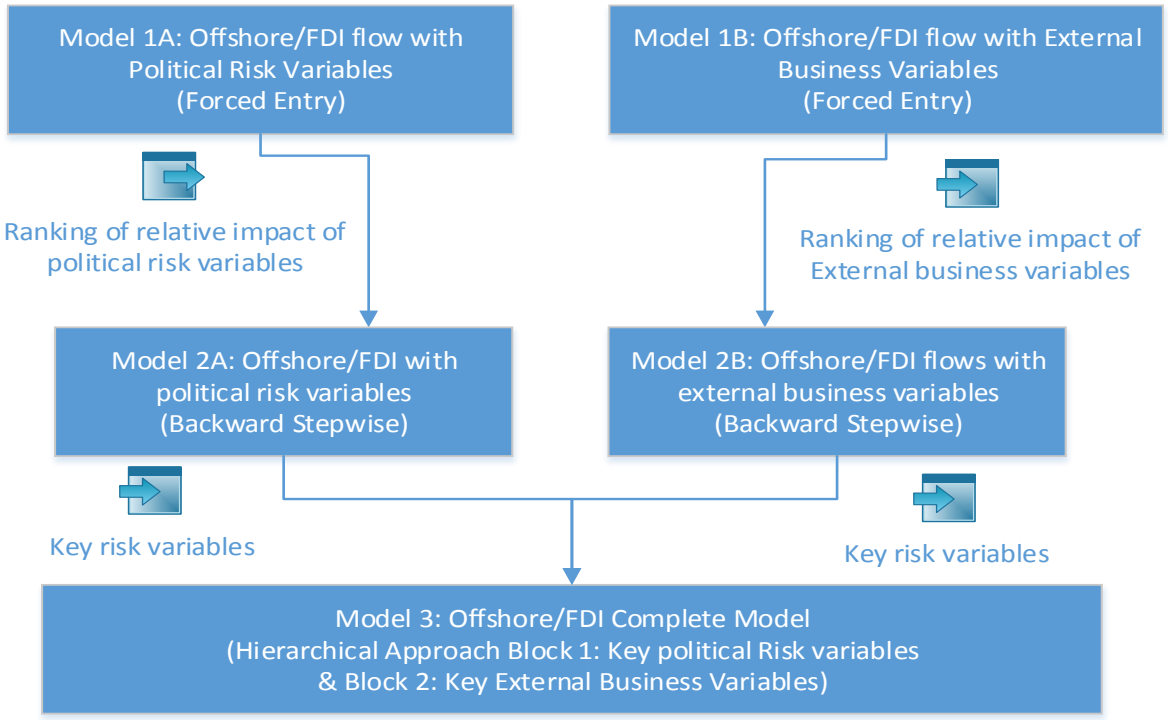
search methods are comparable in the sense that each variable is individually assessed for its contribution to prediction of the dependent variable and added to or deleted from the regression model based on relative contribution. The sequential methods include Stepwise Elimination; Forward addition and Back ward elimination (Hair, Black, Babin and Anderson, 2011, p. 186).

According to (Hair, Black, Babin and Anderson, 2011), *"the primary distinction of the stepwise approach from the forward addition and backward elimination procedures is its ability to add or delete variables at each stage. In the latter, once a variable is added or deleted the action cannot be reversed at a later stage"* (Hair, Black, Babin and Anderson, 2011, p. 189). The stepwise sequential technique will allow the research to identify the independent variables with the greatest incremental predictive power among the independent variables already in the regression model (Hair, Black, Babin and Anderson, 2011, p. 161), and provides the ability to delete and add variables during the process. For the stepwise regression conducted in this research the backward method was applied, as the forward method runs a higher risk of making Type II error (Hair, Black, Babin and Anderson, 2011) and thereby potentially missing important predictors that impact on offshore outsourcing decisions. The regression analysis is conducted in three stages, providing 3 regression models for each of the offshore outsourcing types/FDI flow addressed in the research and used as individual dependent variables, including:

- Consolidated Service Offshore Outsourcing per national economies
- Consolidated Service Offshore Outsourcing (non-high income countries)
- BPO export per national economy
- ITO export per national economy
- KPO (R&D) export per national economy

- Foreign Direct Investment (FDI) inflow per national economy

Figure 11: Multiple regression flow chart



In Model 1 the political risk and external business variables are inserted into the regression analysis in random order using a forced entry approach. The method allows for a classification of the individual risk indicators impact on the type of offshore outsourcing export flow, providing an indication of relative importance across the spectrum of political risks (independent variables). The outcome of Model 1 is further matrixed in order of highest to lowest level of impact (+/-) providing a clear overview of the relative political risk impacts.

In Model 2, the research applies a backward stepwise method, inserting the political risk indicators in the order of the Model 1 findings, with the highest impact risk inserted first, with the objective of isolating the key sets of political risks relevant for each segment of Offshore Outsourcing variables. The stage 2 analysis allows for a systematic reduction of variables using the backward stepwise method calculating and comparing the contribution of all the predictors using the significance value of the t-test.

The significance value is compared to the removal value, and each predictor that does not contribute significantly to the outcome is removed and the model recalculated accordingly. The Stage 2 regression analysis concludes various levels of removal stages for each outsourcing variable, identifying the primary set of political risks most relevant for each dependent variable.

In Model 3, the external business variables are inserted into the regression analysis together with the key political risks identified in Model 2 using a hierarchical approach. The key Political Risk identified in Model 2 are inserted as Block 1 and the external business variables inserted as Block 2. The findings of Model 3 consolidates the findings of Model 1 & 2 providing an overview of the key political risk indicators relevant for each type of offshore outsourcing activities (i.e. ITO, KPO, BPO or aggregate volume of services trade), combined with the key external non-political risk control variables relevant for offshore outsourcing variable.

4.4 Validating the Regression Results

4.4.1 Analysis of aggregate offshore outsourcing flows

The following section provides an overview of the key findings of Model 1-3 generated in accordance with the regression model design presented above for the aggregated offshore outsourcing service volumes as the Dependent Variable.

4.4.1.1 Model 1A: Aggregate offshore outsourcing with political risk variables

In Model 1A the political risk variables are inserted into the regression in random order using a forced entry approach, allowing for a classification of relative impact of the political risks indicators on aggregated offshore outsourcing flows (Independent variables). The N-sample size across the 12 indicators were between 458 - 828 cases using the pair-wise inclusion approach to manage missing data segments in the time sheet data.

Table 40: Model 1A - Descriptive statistics

	Mean	Std. Deviation	N
Services, Aggregate	7740957284.30	16089295639.18	725
External Conflict	.00	1.00	828
Corruption	.00	1.00	819
Government Stability	.00	1.00	828
Internal Conflict	.00	1.00	828
Staff Security	.00	1.00	814
Quality of Bureaucracy	.00	1.00	828
Cooperation in labor-employer relations	.00	1.00	814
Intellectual property protection	.00	1.00	723
Efficiency of legal framework	.00	1.00	549
Burden of customs procedures	.00	1.00	729
Judicial independence	.00	1.00	814
Exchange Rate Stability	.00	1.00	827

As captured in the 1A Model Summary matrix, the analysis yielded an R value of .616 indicating the values of the multiple correlation coefficient between the 12 Political Risk Indicators and the aggregated Offshore Outsourcing export flows (dependent variable). The value of the R^2, measuring how much of the variability in the offshoring outsourcing flows is accounted for by the 12 indicators, is stated as **.**380**.** This indicates that the 12 political risk indicators account for a total of 38.0% of the variation in offshore outsourcing flows. The adjusted R^2 provides an indication of the generalizability of the model and should ideally be very close to the R^2 value. In this model the difference is small at .38.0 -.36.3-= 0.017 (or 1.7%), indicating that if the model was derived from the full population rather than the given sample it would account for 1.7% less variance in the outcome.

Table 41: Model 1A - Summary matrix

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.616[a]	.380	.363	12844416079.70	.380	22.151	12

The F-ratio, measuring the overall significance of the regression model value of the model, is indicated at 22.151, which is considered significant at (p<.001). The significance level suggests that the regression equation does have validity in

fitting the offshore outsourcing data i.e. the independent variables are not purely random with respect offshore outsourcing exports.

The Durbin-Watson statistic indicates the degree to which the assumption of independent errors is tenable, or that there should be no autocorrelation between observations in the model (Field, 2009, p. 220), meaning relationships between values separated from each other by a given time lag in the residuals (prediction errors). The statistic indicator ranges in value from 0 to 4. A value near 2 indicates non-autocorrelation; a value toward 0 indicates positive autocorrelation; a value toward 4 indicates negative autocorrelation. A conservative rule indicates that the value should be between 1 and 3, and preferably as close to 2 as possible (Field, 2009). The Durbin-Watson value for model 1 is indicated at .411, suggesting a level of positive correlation between adjacent residuals in the model (Field, 2009).

The ANOVA provides an overview of the significance of Model 1 containing the 12 pre-identified political risk predictors of offshore outsourcing export flows of services.

Table 42: Model 1A - ANOVA

ANOVA Model 1A						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	438530870355311650000000.00	12	36544239196275970000000.00	22.151	.000[b]

Overall the current Model 1 containing the pre-identified Political Risk indicators can be considered able to explain 38.0% of the offshore outsourcing export flows of services, with a significant F-ratio suggesting that the regression equation has validity in fitting the offshore outsourcing data flows.

4.4.1.2 Model 1A: Parameters and coefficients

The next step of the analysis is to determine the relationship between the individual political risk indicators and the offshore outsourcing flows through a review of the Beta-values. The Beta values indicates to what degree each of the political risk indicators affects the offshoring outsourcing flows, if the effects of all other predictors are held constant. As captured in the 1A Coefficients Matrix the

beta coefficient can indicate a negative or positive relationship. The standardized beta values are measured in standard deviation units and are directly comparable, and provides an insight into the importance of the individual predictor.

In addition the matrix captures the t-test values, indicating to what extent the political risk indicator is making a significant contribution to the model. The larger the value of the t-value the greater the contribution of the political risk as a predictor of offshore outsourcing flows. The combined standardized beta value and t-test values will form the basis for comparison of the relative significance of the individual political risk indicators in the model.

Table 43: Model 1A - Coefficients matrix

Model 1A: Coefficients Matrix		Standardized Coefficients	t
		Beta	
1	(Constant)		12.742
	External Conflict	*-.094*	*-2.075*
	Corruption	.148	1.869
	Government Stability	*-.068*	*-1.567*
	Internal Conflict	*-.167*	*-3.158*
	Staff Security	*-.065*	*-1.102*
	Quality of Bureaucracy	.305	4.260
	Cooperation in labor-employer relations	.076	1.391
	Intellectual property protection	.692	5.789
	Efficiency of legal frameworks	*-.096*	*-.895*
	Burden of customs procedures	*-.379*	*-4.783*
	Judicial independence	*-.053*	*-.518*
	Exchange Rate Stability	.003	.085

4.4.1.3 Model A: Collinearity levels

The following section reviews the measures determining whether there is collinearity in the data set applied for Model 1. The main guidelines for detecting Collinearity includes (Field, 2009):

- VIF is greater than 10 then there is cause for concern
- VIF substantially greater than 1 then the regression may be biased

- Tolerance below 0.1 indicates a serious problem
- Tolerance below 0.2 indicates a potential problem

For the given model the VIF values are below 10 and all tolerance indicators are above 1, and most above 2, except Intellectual property protection, Efficiency of legal frameworks, Judicial Independence all ranging from 1-2 and hence indicating potential collinearity problem.

As the guidelines for detecting Collinearity indicate a potential problem the data sets were reviewed for consistency across Eigen values and any indication of Collinearity at the variance proportions. As per the Collinearity Diagnostics matrix the Eigen values in the table are much larger than others indicating a potential issue with the cross matrix. A further look at the variance proportions highlight that the indicators for i) efficiency of legal frameworks; ii) judicial independence and iii) irregular payments and bribes have high Variance Proportion values between 54 to 63 with small Eigen values. The result of this analysis indicates that there is potential Collinearity between the three indicators and this dependency results in some level of bias in the model.

Table 44: Model 1A - Collinearity statistics

Model		Correlations	Collinearity Statistics	
		Part	Tolerance	VIF
1	(Constant)			
	External Conflict	*-.078*	*.691*	*1.447*
	Corruption	.071	.229	4.361
	Government Stability	*-.059*	*.758*	*1.318*
	Internal Conflict	*-.119*	*.509*	*1.963*
	Staff Security	*-.042*	*.409*	*2.447*
	Quality of Bureaucracy	.161	.279	3.581
	Labor-employer relations	.053	.483	2.071
	Intellectual property protection	.219	.100	9.988
	Efficiency of legal framework	*-.034*	*.125*	*8.008*
	Burden of customs procedures	*-.181*	*.228*	*4.390*
	Judicial independence	*-.020*	*.137*	*7.280*
	Exchange Rate Stability	.003	.949	1.054

4.4.1.4 Model 1A: Summary

In Model 1A the political risk variables were inserted into the regression analysis in random order using a forced entry approach. The method allows for a classification of the individual risk indicators impact on the type of offshore outsourcing export flow, providing an indication of relative importance across the spectrum of political risks (independent variables).

Table 45: Model 1A - Ranking of political risk indicators

Ranking of Political Risk Indictors in terms of impact on Offshore Outsourcing Flows		
Indicator Description	*Beta*	*T-value*
Intellectual property protection	0.692	5.789
Burden of customs procedures	*-0.379*	*-4.783*
Quality of Bureaucracy	0.305	4.26
Internal Conflict	*-0.167*	*-3.158*
Corruption	0.148	1.869
Efficiency of legal frameworks	*-0.096*	*-0.895*
External Conflict	*-0.094*	*-2.075*
Cooperation in labor-employer relations	0.076	1.391
Government Stability	*-0.068*	*-1.567*
Staff Security	*-0.065*	*-1.102*
Judicial independence	*-0.053*	*-0.518*
Exchange Rate Stability	0.003	0.085

The research methodology has provided two main outcomes: Firstly, the methodology has allowed for a measure of variability in the offshoring outsourcing flows is accounted for by the 12 pre-identified political risk indicators. The findings suggest that the 12 political risk indicators combined account for a total of 38.0% of the variation in offshore outsourcing flows. With a small difference between R^2 and adjusted R^2 value at 1.7% the findings have a high generalizability level and an F-ratio of 22.151 suggesting that the regression equation has significant validity. Secondly, the methodology has allowed for a measure of the impact of each individual Political Risk Indicator as a predictor of offshore outsourcing flows allowing for a classification of relative impact. The 12 Political Risk Indicators are ranked below in accordance with the standardized Beta coefficients which allows for direct comparison. The Beta ranking is further supported by the significance value expressed by the corresponding t-values and significance values.

Finally, the Durbin-Watson value for model was further reviewed and the analysis suggested a positive correlation between adjacent residuals in the model or positive autocorrelation, possibly instigated by the use of timesheet data. A systematic Collinearity analysis further indicated that there is likely collinearity between three indicators namely for i) efficiency of legal frameworks; ii) judicial independence and iii) irregular payments and bribes and this dependency results in some level of bias in the model. As the next step will include the systematic reduction of variables the issue of collinearity will seek to be addressed in the later stage of model development.

4.4.1.5 Model 1B: Aggregate offshore outsourcing with external business variables

Following the same methodology as in Model 1A, the external business variables are inserted into the regression in random order using a forced entry approach, allowing for a classification of relative impact of the external business variables on aggregated offshore outsourcing flows (dependent variable). The N-sample size across the 9 external business variables were between 458 - 819 cases using the pair-wise inclusion approach to manage missing data segments in the time sheet data.

Table 46: Model 1B - Descriptive statistics for external business variables

Non-Political location indicators	Mean	Std. Deviation	N
Services, Aggregate	7740957284.31	16089295639.19	725
Pillar 2 - Electricity and telephony infrastructure	.00	1.00	458
Pillar 3 - Macro Environment	.00	1.00	814
Pillar 4 - Primary Education	.00	1.00	814
Pillar 5 - Higher education and training	.00	1.00	814
Pillar 7 - Labor market efficiency	.00	1.00	814
Pillar 9 - Technological readiness	.00	1.00	819
Pillar 10 - Domestic Market Size	.00	1.00	814
Pillar 12 - Innovation	.00	1.00	814
GDP per Capita	.00	1.00	552

As captured in the 1B summary matrix the analysis yielded an R value of .740 indicating the values of the multiple correlation coefficient between the 9 external business variables and the aggregated Offshore Outsourcing export flows (dependent variable). The value of the R^2, measuring how much of the variability in the offshoring outsourcing flows is accounted for by the 10 indicators, is stated as **.**548. This indicates that the 10 external business variables account for a total of 54.8% of the variation in offshore outsourcing flows. The adjusted the R^2 provides an indication of the generalizability of the model and should ideally be very close to the R^2 value. In this model the difference is small at .548 -.536-= 0.012 (or 1.2%), indicating that if the model was derived from the full population rather than the given sample it would account for 1.2% less variance in the outcome.

Table 47: Model 1B - Summary statistics for external business variables

Model	R	R Square	Adjusted R Square	Change Statistics					Durbin-Watson
				R Square Change	F Change	df1	df2	Sig. F Change	
1	.740[a]	.548	.536	.548	46.558	9	346	.000	.486

The F-ratio, measuring the overall significance of the regression model value is indicated at 46.558, which is considered significant ($p<.001$). The significance level suggests that the regression equation does have validity in fitting the offshore outsourcing data i.e. the independent variables are not random with respect offshore outsourcing exports.

The Durbin-Watson statistic indicates the degree to which the assumption of independent errors is tenable, or that there should be no autocorrelation between observations in the model (Field 2009, p. 220), meaning relationships between values separated from each other by a given time lag in the residuals (prediction errors). The statistic indicator ranges in value from 0 to 4. A value near 2 indicates non-autocorrelation; a value toward 0 indicates positive autocorrelation; a value toward 4 indicates negative autocorrelation. A conservative rule indicates that the value should be between 1 and 3, and preferably as close to 2 as possible (Field,

2009). The Durbin-Watson value for model 1 is indicated at .486, suggesting a level of positive correlation between adjacent residuals in the model (Field, 2009).

The ANOVA provides an overview of the significance of Model 1B containing the 10 pre-identified external business variables of offshore outsourcing export flows of services.

Table 48: Model 1B - ANOVA for external business variables

ANOVA Model 1B		F	Sig.
1	Regression	46.558	.000[b]

4.4.1.6 Model 1B: Parameters and coefficients

As captured in the 1B Coefficients matrix the beta coefficient can indicate a negative or positive relationship. The standardized beta values are measured in standard deviation units and are directly comparable, and provides an insight into the importance of the individual predictor.

Table 49: Model 1B - Coefficient matrix for external business variables

1B Coefficients matrix		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		Beta			Tolerance	VIF
1	(Constant)		13.326	.000		
	Pillar 2 - Electricity and telephony infrastructure	.073	.674	.501	.111	8.972
	Pillar 3 - Macro Environment	*-.221*	*-5.062*	*.000*	*.688*	*1.453*
	Pillar 4 - Primary Education	.009	.129	.897	.289	3.457
	Pillar 5 - Higher education and training	*-.244*	*-2.083*	*.038*	*.096*	*10.466*
	Pillar 7 - Labor market efficiency	.156	3.094	.002	.511	1.957
	Pillar 9 - Technological readiness	.131	.955	.340	.069	14.431
	Pillar 10 - Domestic Market Size	.491	10.983	.000	.654	1.528
	Pillar 12 - Innovation	.312	3.589	.000	.173	5.775
	GDP per Capita	.099	1.361	.174	.246	4.069

In addition the matrix captures the t-test values, indicating to what extent the political risk indicator is making a significant contribution to the model. The larger the value of the t-value the greater the contribution of the political risk as a predictor of offshore outsourcing flows. The combined standardized beta value and t-test values will form the basis for comparison of the relative significance of the individual political risk indicators in the model.

4.4.1.7 Model 1B: Collinearity levels

For the given model the VIF values are below 10, except for Pillar 5 - Higher education and training and Pillar 9 - Technological readiness, which also has tolerance values < .1 indicating potential problem with Collinearity between the two indicators.

In Model 1B the external business variables were inserted into the regression analysis in random order using a forced entry approach. The method allows for a classification of the individual indicators impact on the aggregated offshore outsourcing export flow, providing an indication of relative importance across the spectrum of external business variables independent variables. The research methodology has provided two main outcomes:

Firstly, the methodology has allowed for a measure of variability in the offshoring outsourcing flows as accounted for by the 9 variables. The findings suggest that the external business variables combined account for a total of 54.8% of the variation in offshore outsourcing flows. With a small difference between R^2 and adjusted R^2 value at 1.2% the findings have a high generalizability level and an F-ratio of 46.558 suggesting that the regression equation has significant validity.

Secondly, the methodology has allowed for a measure of the impact of each individual external business variable as a predictor of offshore outsourcing flows allowing for a classification of relative impact. The 9 variables are ranked below in accordance with the standardized Beta coefficients which allows for direct comparison. The Beta ranking is further supported by the significance value expressed by the corresponding t-values and significance values.

Table 50: Model 1B - Ranking of external business variables

Ranking of external business variables in terms of impact on Offshore Outsourcing Flows			
Indicator Description	*Beta*	*T-value*	*Sig.*
Pillar 10 - Domestic Market Size	0.491	10.983	0
Pillar 12 - Innovation	0.312	3.589	0
Pillar 5 - Higher education and training	*-0.244*	*-2.083*	*0.038*
Pillar 3 - Macro Environment	*-0.221*	*-5.062*	*0*
Pillar 7 - Labor market efficiency	0.156	3.094	0.002
Pillar 9 - Technological readiness	0.131	0.955	0.340
GDP per Capita	0.099	1.361	0.174
Pillar 2 - Electricity and telephony infrastructure	0.073	0.674	0.501
Pillar 4 - Primary Education	0.009	0.129	0.897

Finally, the Durbin-Watson value for model was further reviewed and the analysis suggested a positive correlation between adjacent residuals in the model or positive autocorrelation, possibly instigated by the use of timesheet data. A systematic Collinearity analysis further indicated that there is likely Collinearity between Pillar 5 - Higher education and training and Pillar 9 - Technological readiness.

4.4.1.8 Model 2A: Variables backward stepwise

In Model 2A, the research applied a backward stepwise method, inserting the political risk indicators in the order of the Model 1A findings above, with the highest scoring Beta indicator inserted first, with the objective of isolating the key sets of political risks relevant for each segment of Offshore Outsourcing types. The stage 2 analysis allowed for a systematic reduction of variables using the backward stepwise method calculating and comparing the contribution of all the predictors using the significance value of the t-test. The Stage 2 regression analysis concluded various levels (7 models) of removal stages, identifying the primary set of political risk indictors most predictive for the aggregated offshore outsourcing data set.

As captured in the model 2A summary matrix the analysis yielded an R value of .609 indicating that values of the multiple correlation coefficient between the now

6 key Political Risk Indicators and the aggregated Offshore Outsourcing export flows (dependent variable). The value of the R^2, measuring how much of the variability in the offshoring outsourcing flows is accounted for by the 6 indicators, is stated as .370, which is only 0.01 less than for Model 1 with all the 12 indicators. This indicates that the key political risk indicators account for a total of 37.0 % of the variation in offshore outsourcing flows. The difference between the R^2 and adjusted R^2 is small at .370-.36.2-= 0.008 (or 0.8%), indicating that if the model was derived from the full population rather than the given sample it would account for less than 1% variance in the outcome.

Table 51: Model 2A - Summary matrix

Model 2A Summary matrix – Political Risk in Aggregate Services							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.616[a]	.380	.363	12844416079.70	.380	22.151	12
2	.616[b]	.380	.364	12829751012.74	.000	.007	1
3	.616[c]	.379	.365	12819096151.85	.000	.276	1
4	.614[d]	.377	.365	12825497250.84	-.002	1.437	1
5	.612[e]	.375	.364	12834728951.11	-.002	1.631	1
6	.611[f]	.374	.364	12833234514.51	-.001	.898	1
7	.609[g]	.370	.362	12853580269.78	-.003	2.396	1

The F-ratio, measuring the overall significance of the regression model value of the model, is indicated at 22.151, which is considered significant ($p<.001$). The significance level suggests that the regression equation does have validity in fitting the offshore outsourcing data i.e. the independent variables are not random with respect to offshore outsourcing exports.

The Durbin-Watson statistic has been reduced from at .411 in Model 1 to .363 in Model 2A indicating a positive auto correlation has been increased with the reduction of predictors.

Table 52: Model 2A - Change statistics

Model	Change Statistics		
	df2	Sig. F Change	Durbin-Watson
1	434	.000	
2	434	.932	
3	435	.600	
4	436	.231	
5	437	.202	
6	438	.344	
7	439	.122	.363

4.4.1.9 Model 2A: Parameters and coefficients

A review of the Model 2A Beta-values indicates to what degree each of the political risk indicators affects the offshoring outsourcing flows, if the effects of all other predictors are held constant. As captured in the matrix below the beta coefficient can indicate a negative or positive relationship. The standardized beta values are measured in standard deviation units and are directly comparable, and provides an insight into the importance of the individual predictor.

In addition the matrix captures the t-test values, indicating to what extent the political risk indicator is making a significant contribution to the model. The larger the value of the t-value the greater the contribution of the political risk as a predictor of offshore outsourcing flows. The combined standardized beta value and t-test values will form the basis for comparison of the relative significance of the individual political risk indicators in the model.

As captured in the model the beta coefficient indicates a very significant positive relationship between locations with strong Intellectual Property Protection regulations and high Quality of Bureaucracy, and that of offshore outsourcing exports of services. Similarly, there is a significant negative relationship between the Burden of Customs Procedures and offshore outsourcing exports of services.

Table 53: Model 2A - Coefficients and collinearity statistics

Model		Std Coeff.	t	Sig.	Correlations			Collinearity Statistics	
		Beta			Zero-order	Partial	Part	Tolerance	VIF
7	(Constant)		12.733	.000					
	Intellectual property protection	.618	7.352	.000	.477	.331	.278	.202	4.942
	Burden of customs procedures	*-.352*	*-4.841*	*.000*	*.297*	*-.225*	*-.183*	*.270*	*3.700*
	Quality of Bureaucracy	.353	5.885	.000	.503	.270	.223	.397	2.519
	Internal Conflict	*-.153*	*-3.145*	*.002*	*.051*	*-.148*	*-.119*	*.604*	*1.654*
	External Conflict	*-.100*	*-2.246*	*.025*	*-.012*	*-.106*	*-.085*	*.716*	*1.397*
	Government Stability	*-.078*	*-1.950*	*.052*	*-.111*	*-.093*	*-.074*	*.892*	*1.121*

In addition there is indication of a negative relationship between Internal and External Conflict, plus Government stability and that of offshore outsourcing exports of services. However it should be noted that the Sig. value for specifically External Conflict and Government Stability becomes relatively high indicating a lesser impact on the predictive ability of the indicator in the model.

4.4.1.10 Model 2A: Collinearity levels

- As Model 1A indicated potential concerns with Collinearity a similar review of Model 2A is required to measure the impact of reducing the number of independent variables in the analysis, as per the guidelines for detecting Collinearity including (Field 2009):
- If the largest VIF is greater than 10 then there is cause for concern
- If the average VIF is substantially greater than 1 then the regression may be biased
- Tolerance below 0.1 indicates a serious problem
- Tolerance below 0.2 indicates a potential problem

On review of Model 2A values it is clear that the potential for Collinearity has been substantially reduced as all VIF numbers are <10 and all tolerance levels now >0.2. While the average VIF remains greater than 1, it has been substantially

reduced from Model 1 and hence lowered the likelihood that the regression may be biased.

4.4.1.11 Model 2B: External business variables backward stepwise

In Model 2B, the research applied a backward stepwise method, inserting the external business variables similarly as in 2A, with the highest scoring Beta indicator inserted first, with the objective of isolating the key sets of external business variables relevant for the aggregate offshore outsourcing volumes. The analysis allowed for a systematic identification of the primary set of non-political risk indictors most predictive for the aggregated offshore outsourcing data set.

As captured in the Model 2B summary matrix, the analysis yielded an R value of .738 indicating that values of the multiple correlation coefficient between the 9 key external business variables and the aggregated Offshore Outsourcing export flows (dependent variable). The value of the R^2, measuring how much of the variability in the offshoring outsourcing flows is accounted for by the reduced variables, is stated as .544, which is only 0.004 less than for Model 1B. This indicates that the 6 key external business variables account for a total of 53.6 % of the variation in offshore outsourcing flows. The difference between the R^2 and adjusted R^2 is small at .544 -.536-= 0.008 (or 0.8%), indicating that if the model was derived from the full population rather than the given sample it would account for less than 1% variance in the outcome.

Table 54: Model 2B - Summary matrix for external business variables

Model 2B summary matrix									
				Change Statistics					
Model	R	R Square	Adjusted R Square	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.740[a]	.548	.536	.548	46.558	9	346	.000	
2	.740[b]	.548	.537	.000	.017	1	346	.897	
3	.740[c]	.547	.538	-.001	.579	1	347	.447	
4	.738[d]	.544	.536	-.003	2.072	1	348	.151	.334

The F-ratio, measuring the overall significance of the regression model value of the model, is indicated at 46.558, which is considered significant (p<.001) with a Durbin-Watson statistic at .334 indicating a positive auto correlation among some of the variables.

Table 55: Model 2B - Coefficients and collinearity statistics

Model		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		Beta			Tolerance	VIF
	(Constant)		13.333	.000		
	Pillar 3 - Macro Environment	*-.203*	*-4.902*	*.000*	*.764*	*1.310*
	Pillar 5 - Higher education and training	*-.224*	*-2.521*	*.012*	*.165*	*6.065*
	Pillar 7 - Labour market efficiency	.147	2.952	.003	.528	1.895
	Pillar 9 - Technological readiness	.256	2.668	.008	.142	7.059
	Pillar 10 - Domestic Market Size	.485	11.019	.000	.675	1.481
	Pillar 12 - Innovation	.327	4.020	.000	.197	5.067

4.4.1.12 Model 2B: Collinearity levels

On review of Model 2B all VIF numbers are <10 and most tolerance levels now >0.2, except Pillar 5 - Higher education and training, Pillar 9 - Technological readiness and Pillar 12 – Innovation. It is noted that the average VIF remains greater than 1 indicating that the regression may be slightly internally biased.

4.4.1.13 Model 3*:* Aggregate offshore outsourcing complete model

In Model 3, the six external business variables identified in Model 2B (Macro Environment, Higher education and training, Labour market efficiency, Technological readiness, Domestic Market Size and Innovation levels, are added into the regression analysis together with the key risks identified in Model 2A (Intellectual property protection, Burden of customs procedures, Quality of Bureaucracy, Internal Conflict, External Conflict and Government Stability) using a hierarchical approach. The findings of Model 3 consolidates the findings of

Model 1 & 2 providing an overview of the key political risk indicators relevant for offshore outsourcing activities combined with the key external business variables.

4.4.1.14 Model 3: Descriptive statistics

As captured in the Model 3 Summary matrix, the analysis yielded an R value of .749 indicating that values of the multiple correlation coefficient between the combined 5 Political Risk Indicators and 6 external business variables, and the aggregated Offshore Outsourcing export flows (dependent variable). The value of the R^2, measuring how much of the variability in the offshoring outsourcing flows is accounted for by the 11 indicators, is stated as .561 This indicates that the combined 5 Political Risk Indicators and 6 external business variables account for a total of 56.1% of the variation in offshore outsourcing flows. The adjusted the R^2 provides an indication of the generalizability of the model and should ideally be very close to the R^2 value. In this model the difference is small at .561-.553 = 0.008 (or 0.8%), indicating that if the model was derived from the full population rather than the given sample it would account for 0.8% less variance in the outcome.

The model further indicates that the identified key political risk account independently for 33.7% of the variation of offshore outsourcing flows, however with the added external business variables the model account for an additional 22.4% of the variation, totally at a predicative power of 55.3%.

Table 56: Model 3 - Summary matrix

Model 3 Summary matrix									
				Change Statistics					
Model	R	R Square	Adjusted R Square	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.580[a]	.337	.331	.337	62.878	5	619	.000	
2	.749[b]	.561	.553	.224	52.257	6	613	.000	.398

The change in F-ratio, measuring the overall significance of the regression model value of the political risk model, was in Block 1 indicated at 62.878, which is considered significant (p<.001). The F-change value for the combined model indicates that with the added location variables in Block 2 the model has improved with an F-ratio of 52.257.

The Durbin-Watson statistic indicates the degree to which the assumption of independent errors is tenable, meaning that there should be no autocorrelation between observations in the model (Field 2009, p. 220), meaning relationships between values separated from each other by a given time lag in the residuals (prediction errors). The statistic indicator ranges in value from 0 to 4. A value near 2 indicates non-autocorrelation; a value toward 0 indicates positive autocorrelation; a value toward 4 indicates negative autocorrelation. A conservative rule indicates that the value should be between 1 and 3, and preferably as close to 2 as possible (Field 2009). The Durbin-Watson value for model 1 is indicated at .398, suggesting a positive correlation between adjacent residuals in the model (Field, 2009).

Table 57: Model 3 - ANOVA

ANOVA Model 3		df	F	Sig.
1	Regression	5	62.878	.000b
	Residual	619		
	Total	624		
2	Regression	11	71.285	.000c
	Residual	613		
	Total	624		

The ANOVA provides an overview of the significance of Model 3 containing the predictors of offshore outsourcing export flows of services. For the initial model the value of F is 62.878 which indicates that the correlation is unlikely to have happened by chance and also highly significant (p<0.01). For the second model the value of F is higher at 71.285, which can be interpreted as while the initial model significantly improved the ability to predict offshore outsourcing flows, the second model added some value as the F-ratio is more significant.

4.4.1.15 Model 3: Parameters and coefficients

A review of the Model 3 Beta-values indicates to what degree each of the political risk and external business variables affect the offshoring outsourcing flows, if the effects of all other predictors are held constant. The below matrix captures the positive and negative standardized beta coefficients for the key variables identified in the analysis, including the t-value and significance values indicating the predictability and strength of the individual indicators.

Table 58: Model 3 – Coefficients and collinearity statistics

Model		Std. Coeff.	t	Sig.	Collinearity Statistics	
		Beta			Tolerance	VIF
1	(Constant)		14.711	.000		
	External Conflict	*-.120*	*-3.108*	*.002*	*.722*	*1.385*
	Government Stability	*-.064*	*-1.859*	*.064*	*.897*	*1.115*
	Internal Conflict	*-.175*	*-4.180*	*.000*	*.610*	*1.640*
	Quality of Bureaucracy	.353	6.791	.000	.397	2.519
	Intellectual property protection	.334	6.411	.000	.394	2.540
2	(Constant)		17.998	.000		
	External Conflict	.013	.373	.709	.634	1.577
	Government Stability	*-.045*	*-1.434*	*.152*	*.723*	*1.382*
	Internal Conflict	.025	.638	.524	.454	2.204
	Quality of Bureaucracy	.199	4.135	.000	.309	3.237
	Intellectual property protection	.022	.347	.729	.182	5.487
	Pillar 3 - Macro Environment	*-.170*	*-5.222*	*.000*	*.676*	*1.480*
	Pillar 5 - Higher education and training	*-.332*	*-4.569*	*.000*	*.136*	*7.371*
	Pillar 7 - Labor market efficiency	.152	4.055	.000	.512	1.953
	Pillar 9 - Technological readiness	.212	2.813	.005	.126	7.917
	Pillar 10 - Domestic Market Size	.516	13.862	.000	.516	1.939
	Pillar 12 - Innovation	.239	3.193	.001	.128	7.818

4.4.1.16 Model 3: Collinearity levels

While the initial models with the full scope of variables had issues with Collinearity the final Model 3 presents VIF values well below 10, and all tolerance indicators

are above 1, and most above 2, except Intellectual property protection, ICT use, Higher Education and training, Technological readiness and Innovation. For the political risk indicators alone the VIF values well below 10, and all tolerance indicators are above 1, and an average not substantially higher than 1 (at 1.84 only), indicating that Collinearity across the political risk indicators has been addressed, while some bias may persist among the external business variables.

4.4.1.17 Model 3: Summary of offshore outsourcing political risk and external business variables

Through the process of linear regression analysis the research has firstly ranked the 12 key political risk variables identified in the P2 exploratory research in accordance with their ability to predict offshore outsourcing flows across approximately 100 sample countries over the time period from 2006-2013. Secondly, the research applied backward step-wise linear regression to identify the key most predictive political risk variables, limiting the variable set to five variables including Quality of Bureaucracy; Intellectual Property Protection; Internal Conflict, External Conflict and Government Stability with a combined R^2 value of .331, meaning with a predicative ability of 33.1%.

As indicated in the matrix and in isolation from the external business variables (Model 1), the model indicates a positive correlation between offshore outsourcing flows and improved Quality of Bureaucracy (highest t-value and significant at <.001) and improved Intellectual Property Protection (Second highest t-value and significant at <.001). In turn the model indicates a negative correlation between improved conditions of Internal Conflict (third highest t-value and significant at <.001), and also External Conflict and level of Government Stability (with less significant Beta values, and low T-value and non-significant at >.001.

For the external business variables the model beta coefficients indicates a significant positive relationship between locations with high levels of Labour market efficiency, capacity for Innovation and presenting a larger Domestic Market Size (all with high t-values and significant at <.001). In addition

Technological Readiness scores a high Beta and t-value, however the significance level is slightly lower at <.005. There also appears to be a negative correlation between offshore outsourcing flows and improved levels of higher education and more stable macro environment variables (both with high t-values and significant at <.001).

4.4.2 Part 1B: Political risk variables in low cost countries

As further to the analysis provided on the overall sample of countries with outsourcing activities, the research also explored the particular political risk dynamics around offshore outsourcing to low-cost countries. For the purpose of making a distinction among the labour cost implications of offshore outsourcing location decisions, a set of dummy variables for classification of cost drivers was inserted into the data sample. The dummy variable allowed the classification of high income countries (High Income OECD and non-OECD countries) and a non-high income sample including Low, Lower Middle and upper middle income country samples.

Table 59: Selection criteria for low-cost country sample

No.	Distribution of income-based sample		
	Dummy Variable Name	Time Series	Definition of Data Source
1.	Low Income	*2006-2013*	*As per GCI classification 2013-14*
2.	Lower Middle Income	*2006-2013*	*As per GCI classification 2013-14*
3.	Upper middle income	*2006-2013*	*As per GCI classification 2013-14*
4.	High Income	*2006-2013*	*As per GCI classification 2013-14*

For the purpose of comparing risk dynamics across the overall offshore outsourcing sample with the non-high income sample, the same methodology was applied for the new adjusted sample data.

4.4.2.1 Model 1A: Aggregate offshore outsourcing with political risk variables in low cost countries

In Model 1A the political risk variables are again inserted into the regression in random order using a forced entry approach, allowing for a reclassification of relative impact of the political risks indicators on aggregated offshore outsourcing flows for non-high income countries. To reduce the level of collinearity across the variables experienced in the previous model, the independent variable for Judicial Independence and Burden of Customs were removed from the analysis as they appeared too similar to the variables on Efficiency of contract enforcement and Bureaucracy respectively. The N-sample size across the now 10 indicators were between 314-476 cases using the pair-wise inclusion approach to manage missing data segments in the time sheet data.

4.4.2.2 Model 1A: Descriptive statistics

The following section reviews the descriptive statistics for political risk in low-cost offshore outsourcing.

Table 60: Model 1A - Descriptive statistics (low-cost)

	Mean	Std. Deviation	N
Services, Aggregate	2572815539.80	9326034959.99	415
External Conflict	-.1685923	.99369878	476
Corruption	-.5543222	.46234565	476
Government Stability	.0209986	1.02664828	476
Internal Conflict	-.3787688	.98500161	476
Staff Security	-.5511801	.81249117	464
Quality of Bureaucracy	-.6059237	.62287107	476
Labor-employer relations	-.2585089	.77458706	464
Intellectual property protection	-.5885314	.58841941	412
Efficiency of legal framework	-.3494706	.68824467	314
Exchange Rate Stability	-.0490567	1.11487117	475

4.4.2.3 Model 1A: Summary matrix

As captured in the 1A Model Summary matrix, the analysis yielded an R value of .440 indicating the values of the multiple correlation coefficient between the 10

Political Risk Indicators and the low-cost country Offshore Outsourcing export flows (dependent variable). The value of the R^2, measuring how much of the variability in the offshoring outsourcing flows is accounted for by the 10 indicators, is stated as **.**193, indicates that the 10 political risk indicators account for a total of 19.3%, less than the 38.0% for the full sample size. The adjusted the R^2 provides an indication of the generalizability of the model and should ideally be very close to the R^2 value. In this model the generalizability is stated at .193-.160= .0033 or 3.3%, which is less than for the full sample model small at .38.0 -.36.3-= 0.017 (or 1.7%).

Table 61: Model 1A - Summary matrix (Low-cost)

R	R Square	Adjusted R Square	Change Statistics					Durbin-Watson
			R Square Change	F Change	df1	df2	Sig. F Change	
.440	.193	.160	.193	5.830	10	243	.000	.545

The F-ratio, measuring the overall significance of the regression model value of the model, is indicated at 5.830 compared the 22.151 for the previous model, while still considered significant (p<.001). The significance level suggests that the regression equation does have validity in fitting the offshore outsourcing data i.e. the independent variables are not purely random with respect offshore outsourcing exports. The Durbin-Watson value for model 1 is indicated at .545, suggesting a level of positive correlation between adjacent residuals in the model (Field 2009).

The ANOVA provides an overview of the significance of Model 1 containing the 10 pre-identified political risk predictors of offshore outsourcing export flows of services.

Table 62: Model 1A - ANOVA (low cost)

Model ANOVA		Df	F	Sig.
1	Regression	10	5.830	.000b
	Residual	243		
	Total	253		

Overall the current Model 1 containing the pre-identified Political Risk indicators can be considered able to explain 19.3% of the offshore outsourcing export flows of services to non-high income countries, with a significant F-ratio suggesting that the regression equation has validity in fitting the offshore outsourcing data flows.

4.4.2.4 Model 1A: Parameters and coefficients

The next step of the analysis is to determine the relationship between the individual political risk indicators and the offshore outsourcing flows to low-income countries through a review of the Beta-values. In addition the matrix captures the t-test values, indicating to what extent the political risk indicator is making a significant contribution to the model. The larger the value of the t-value the greater the contribution of the political risk as a predictor of offshore outsourcing flows. The combined standardized beta value and t-test values will form the basis for comparison of the relative significance of the individual political risk indicators in the model.

Table 63: Model 1A - Coefficients and collinearity statistics (Low cost)

Model	Standardized Coefficients			Collinearity Statistics	
	Beta	t	Sig.	Tolerance	VIF
(Constant)		6.348	.000		
External Conflict	.046	.657	.512	.679	1.472
Corruption	.023	.356	.722	.766	1.306
Government Stability	*-.029*	*-.466*	*.641*	*.831*	*1.204*
Internal Conflict	*-.284*	*-3.985*	*.000*	*.654*	*1.528*
Staff Security	.162	2.464	.014	.766	1.306
Quality of Bureaucracy	.283	4.456	.000	.820	1.219
Labor-employer relations	.124	2.049	.042	.904	1.106
Intellectual property protection	.207	1.941	.053	.291	3.434
Efficiency of legal frameworks	*-.194*	*-1.701*	*.090*	*.254*	*3.933*
Exchange Rate Stability	*-.009*	*-.156*	*.877*	*.951*	*1.051*

4.4.2.5 Model 1A: Collinearity levels

For the given model the VIF values are now well below 10 and all tolerance indicators are above 2 indicating that the potential collinearity problem across the variables experienced in the full sample model in previous section, has been addressed in the revised model.

4.4.2.6 Model 1A: Summary

In Model 1A the political risk variables were inserted into the regression analysis in random order using a forced entry approach, allowing for classification of the individual risk indicators impact across the spectrum of political risks (independent variables). The findings suggest a strong and significant relationship (positive) with Quality of Bureaucracy and strong and significant relationship (negative) with the presence of internal conflict risks in the context of non-high income countries.

Table 64: Model 1A - Ranking of political risk (low cost)

Ranking of Political Risk impact on Offshore Outsourcing Flows – Low Cost Countries					
Indicator Description	Beta	T-value	Sig.	Tolerance	VIF
Internal Conflict	*-0.284*	*-3.985*	*0*	*0.654*	*1.528*
Quality of Bureaucracy	0.283	4.456	0	0.82	1.219
Intellectual property protection	0.207	1.941	0.053	0.291	3.434
Efficiency of legal frameworks	*-0.194*	*-1.701*	*0.09*	*0.254*	*3.933*
Staff Security	0.162	2.464	0.014	0.766	1.306
Cooperation in labor-employer relations	0.124	2.049	0.042	0.904	1.106
External Conflict	0.046	0.657	0.512	0.679	1.472
Government Stability	*-0.029*	*-0.466*	*0.641*	*0.831*	*1.204*
Corruption	0.023	0.356	0.722	0.766	1.306
Exchange Rate Stability	*-0.009*	*-0.156*	*0.877*	*0.951*	*1.051*

4.4.2.7 Model 1B: Aggregate offshore outsourcing with external business variables in low cost countries

Following the same methodology as in Model 1A, the external business variables were inserted into the regression in random order using a forced entry approach, allowing for a classification of relative impact of the external business variables on aggregated offshore outsourcing flows in low cost countries (dependent variable). The N-sample size across the 9 non-political indicators were between 262 - 464 cases using the pair-wise inclusion approach to manage missing data segments in the time sheet data.

Table 65: Model 1B - Descriptive statistics for business variables (low cost)

	Mean	Std. Deviation	N
Services, Aggregate	2572815539.79	9326034959.99	415
Pillar 2 - Electricity and telephony infrastructure	-.6768870	.74782762	262
Pillar 3 - Macro Environment	-.3392918	.94890551	464
Pillar 4 - Primary Education	-.5623528	.85836653	464
Pillar 5 - Higher education and training	-.6615247	.68909872	464
Pillar 7 - Labour market efficiency	-.3883300	.80902884	464
Pillar 9 - Technological readiness	-.6658857	.54972926	468
Pillar 10 - Domestic Market Size	-.2008328	.93309187	464
Pillar 12 - Innovation	-.5702882	.45796385	464
GDP per Capita	-.6247402	.15680077	317

4.4.2.8 Model 1B: Summary matrix

As captured in the 1B summary matrix the analysis yielded an R value of .650 indicating the values of the multiple correlation coefficient between the 9 external business variables and the aggregated Offshore Outsourcing export flows (dependent variable). The value of the R^2, is stated as .423, indicating that the 9 external business variables account for a total of 42.3% of the variation in offshore outsourcing flows for low cost countries. The adjusted the R^2 provides an indication of the generalizability of the model and is stated at .423-.395= 0.027 (or 2.7%), indicating that if the model was derived from the full population rather than the given sample it would account for 2.7% less variance in the outcome.

Table 66: Model 1B - Summary Statistics for business variables (low cost)

R	R Square	Adjusted R Square	Change Statistics					Durbin-Watson
			R Square Change	F Change	df1	df2	Sig. F Change	
.650[a]	.423	.395	.423	15.608	9	192	.000	.454

The F-ratio, measuring the overall significance of the regression model value of the model, is indicated at 15.608 and considered significant (.000). The Durbin-Watson statistic value for model 1 is indicated at .454, suggesting a level of positive correlation between adjacent residuals in the model (Field, 2009).

The ANOVA provides an overview of the significance of Model 1B containing the 9 pre-identified external business variables of offshore outsourcing export flows of services.

Table 67: Model 1B - ANOVA for external business variables (low cost)

Model		df	F	Sig.
1	Regression	9	15.608	.000
	Residual	192		
	Total	201		

4.4.2.9 Model 1B: Parameters and coefficients

As captured in 1B Coefficients matrix the beta coefficient can indicate a negative or positive relationship. The standardized beta values are measured in standard deviation units and are directly comparable, and provides an insight into the importance of the individual predictor. In addition the matrix captures the t-test values, indicating to what extent the political risk indicator is making a significant contribution to the model.

The larger the t-value the greater the contribution of the political risk as a predictor of offshore outsourcing flows. The combined standardized beta value and t-test values will form the basis for comparison of the relative significance of the individual political risk indicators in the model.

Table 68: Model 1B - Coefficients and collinearity statistics

Model	Std. Coeff. Beta	t	Sig.	Collinearity Statistics Tolerance	VIF
(Constant)		-2.627	.009		
Pillar 2 - Electricity and telephony infrastructure	*-.486*	*-3.790*	*.000*	*.183*	*5.471*
Pillar 3 - Macro Environment	.036	.522	.602	.616	1.622
Pillar 4 - Primary Education	.132	1.760	.080	.534	1.872
Pillar 5 - Higher education and training	.280	2.353	.020	.212	4.708
Pillar 7 - Labor market efficiency	.076	1.175	.241	.715	1.399
Pillar 9 - Technological readiness	.413	3.259	.001	.187	5.345
Pillar 10 - Domestic Market Size	.536	7.646	.000	.612	1.634
Pillar 12 - Innovation	-.016	-.199	.842	.443	2.258
GDP per Capita	-.417	-4.546	.000	.358	2.793

4.4.2.10 Model 1B: Collinearity levels

For the given model the VIF values are below 10 and tolerance levels above 0.2, except for Pillar 2 - Electricity and telephony infrastructure and Pillar 9 - Technological readiness the tolerance levels are slightly lower than 0.2 indicating a potential problem with Collinearity between the two indicators.

4.4.2.10.1 Model 1B: Summary

Secondly, the methodology has allowed for a measure of the impact of each individual external business variable as a predictor of offshore outsourcing flows allowing for a classification of relative impact. The 9 variables are ranked below in accordance with the standardized Beta coefficients which allows for direct comparison.

The Beta ranking is further supported by the significance value expressed by the corresponding t-values and significance values. The ranking suggests a high (positive) and significant relationship with Domestic Market size and Technological Readiness, plus a significant relationship (negative) with Electricity and telephony infrastructure and GDP levels.

Table 69: Model 1B - Ranking of business variables (low cost)

Indicator Description	Beta	T-value	Sig.	Tolerance	VIF
Pillar 10 - Domestic Market Size	0.536	7.646	0	0.612	1.634
Pillar 2 - Electricity and telephony	*-0.486*	*-3.79*	*0*	*0.183*	*5.471*
GDP per Capita	*-0.417*	*-4.546*	*0*	*0.358*	*2.793*
Pillar 9 - Technological readiness	0.413	3.259	0.001	0.187	5.345
Pillar 5 - Higher education and training	0.280	2.353	0.02	0.212	4.708
Pillar 4 - Primary Education	0.132	1.76	0.08	0.534	1.872
Pillar 7 - Labor market efficiency	0.076	1.175	0.241	0.715	1.399
Pillar 3 - Macro Environment	0.036	0.522	0.602	0.616	1.622
Pillar 12 - Innovation	*-0.016*	*-0.199*	*0.842*	*0.443*	*2.258*

4.4.2.11 Model 2A: Variables backward stepwise (low cost)

In Model 2A, the research applied a backward stepwise method, inserting the political risk indicators in the order of the Model 1A findings above, with the highest scoring Beta indicator inserted first, with the objective of isolating the key sets of political risks relevant for each segment of Offshore Outsourcing types. The stage 2 analysis allowed for a systematic reduction of variables using the backward stepwise method calculating and comparing the contribution of all the predictors using the significance value of the t-test.

As captured in the model 2A summary matrix the analysis yielded a final R value of .437 indicating that values of the multiple correlation coefficient between the now 6 key Political Risk Indicators and the aggregated Offshore Outsourcing export flows (dependent variable). The value of the R^2, measuring how much of the variability in the offshoring outsourcing flows is accounted for by the remaining 6 indicators, is stated as .191, which is only 0.02 less than for Model 1 with all the initial 10 indicators. This indicates that the key political risk indicators account for a total of 19.1% of the variation in offshore outsourcing flows. The difference between the R^2 and adjusted R^2 is .191-.171= 0.020 (or 2.0%), indicating that if

the model was derived from the full population rather than the given sample it would account for less than 2% variance in the outcome.

Table 70: Model 2A - Summary statistics (low cost)

Model	R	R Square	Adjusted R Square	Change Statistics					Durbin-Watson
				R Square Change	F Change	df1	df2	Sig. F Change	
1	.440	.193	.160	.193	5.830	10	243	.000	
2	.440	.193	.164	.000	.024	1	243	.877	
3	.439	.193	.167	.000	.134	1	244	.715	
4	.438	.192	.169	-.001	.220	1	245	.639	
5	.437	.191	.171	-.001	.454	1	246	.501	.539

The Durbin-Watson statistic is stated at .539 indicating a positive auto correlation has been increased with the reduction of predictors.

4.4.2.12 Model 2A: Parameters and coefficients

A review of the Model 2A Beta-values indicates to what degree each of the political risk indicators affects the offshoring outsourcing flows in the context of low-cost countries, if the effects of all other predictors are held constant.

As captured in the model the beta coefficient indicates a very significant positive relationship between locations with high Quality of Bureaucracy and a significant negative relationship between Internal Conflict and non-high-cost locations for offshore outsourcing exports of services.

Table 71: Model 2A - Coefficients & Collinearity statistics (low cost)

Model	Std. Coeff. Beta	t	Sig.	Collinearity Statistics	
				Tolerance	VIF
(Constant)		7.112	.000		
Internal Conflict	-.264	-4.386	.000	.904	1.106
Quality of Bureaucracy	.302	5.084	.000	.926	1.080
Intellectual property protection	.211	2.017	.045	.299	3.341
Efficiency of legal frameworks	-.189	-1.795	.074	.296	3.383
Staff Security	.162	2.541	.012	.808	1.237
Labour-employer relations	.119	1.998	.047	.930	1.076

4.4.2.13 Model 2A: Collinearity levels

On review of Model 2A values it is clear that the potential for Collinearity has been substantially reduced as all VIF numbers are <10 and all tolerance levels now >0.2. While the average VIF remains greater than 1, it has been substantially reduced from Model 1 and hence lowered the likelihood that the regression may be biased.

4.4.2.14 Model 2B: Aggregate offshore outsourcing with external business variables backward stepwise in low cost countries

In Model 2B, the research applied the similar backward stepwise method, for external business variables similarly as in 2A, with the highest scoring Beta indicator inserted first, with the objective of isolating the key sets of external business variables relevant for the non-high income offshore outsourcing volumes.

As captured in the Model 2B summary matrix, the analysis yielded an R value of .644 indicating that values of the multiple correlation coefficient between the 9 key external business variables and the aggregated Offshore Outsourcing export flows (dependent variable). The final value of the R^2 is stated as .415, which is only 0.009 less than for Model 1. This indicates that the 6 key external business variables account for a total of 41.5 % of the variation in offshore outsourcing flows in low cost contexts.

Table 72: Model 2B - Summary statistics for business variables (low cost)

Model	R	R Square	Adjusted R Square	Change Statistics					Durbin-Watson
				R Square Change	F Change	df1	df2	Sig. F Change	
1	.650a	.423	.395	.423	15.608	9	192	.000	
2	.650b	.422	.398	.000	.040	1	192	.842	
3	.649c	.422	.401	-.001	.261	1	193	.610	
4	.644d	.415	.397	-.006	2.164	1	194	.143	.460

The difference between the R^2 and adjusted R^2 is small at .415 -.397-= 0.018 (or 1.8%), indicating that if the model was derived from the full population rather than the given sample it would account for less than 1.8% variance in the outcome.

Table 73: Model 2B – Coefficient and collinearity statistics

Model	Std. Coeff.	t	Sig.	Collinearity Statistics	
	Beta			Tolerance	VIF
(Constant)		-3.042	.003		
Pillar 10 - Domestic Market Size	.524	8.727	.000	.831	1.204
Pillar 2 - Electricity and telephony	-.460	-4.190	.000	.248	4.027
GDP per Capita	-.420	-4.932	.000	.413	2.419
Pillar 9 - Technological readiness	.413	3.824	.000	.257	3.890
Pillar 5 - Higher education and training	.279	2.477	.014	.236	4.231
Pillar 4 - Primary Education	.124	1.702	.090	.565	1.771

4.4.2.15 Model 2B: Collinearity levels

On review of Model 2B all VIF numbers are <10 and tolerance levels now >0.2 suggesting that the initial collinearity concerns have been addressed in the model for external business variables.

4.4.2.16 Model 3: Aggregate offshore outsourcing complete model in low cost countries

In Model 3, the six external business variables identified in Model 2B were added into the regression analysis together with the key risks identified in Model 2A using a hierarchical approach. The key Political Risk identified in Model 2A are inserted as Block 1 and the key external business variables inserted as Block 2. The findings of Model 3 consolidates the findings of Model 1 & 2 providing an overview of the key political risk indicators relevant for offshore outsourcing activities, combined with the most key relevant external business variables in the context of non-high income countries.

4.4.2.17 Model 3: Overview

As captured in the Model 3 Summary matrix, the analysis yielded an R value of .734 indicating that values of the multiple correlation coefficient between the combined 6 Political Risk Indicators and 6 external business variables, and the aggregated Offshore Outsourcing export flows (dependent variable) in non-income countries. The value of the R^2, measuring how much of the variability in

the offshoring outsourcing flows is accounted for by the 12 indicators, is stated as .539 indicating that the combined 6 Political Risk Indicators and 6 external business variables account for a total of 53.9% of the variation in offshore outsourcing flows in this context. The adjusted the R^2 provides an indication of the generalizability of the model and should ideally be very close to the R^2 value. In this model the difference is small at .539-.509 = 0.030 (or 3.0%), indicating that if the model was derived from the full population rather than the given sample it would account for 3.0% less variance in the outcome. The model further indicates that the identified key political risk account independently for 19.1% of the variation of offshore outsourcing flows, however with the added external business variables the model account for an additional 34.3% of the variation, totally at a predicative power of 50.9%.

Table 74: Model 3 - Summary statistics (Low cost)

Model	R	R Square	Adjusted R Square	Change Statistics					Durbin-Watson
				R Square Change	F Change	df1	df2	Sig. F Change	
1	.437	.191	.166	.191	7.660	6	195	.000	
2	.734	.539	.509	.348	23.747	6	189	.000	.727

The change in F-ratio, measuring the overall significance of the regression model value of the political risk model, was in Block 1 indicated at 7.660, which is considered significant ($p<.001$). The F-change value for the combined model indicates that with the added location variables in Block 2 the model has improved with an F-ratio of 23.747. The Durbin-Watson value for model 1 is indicated at .727, suggesting a positive correlation between adjacent residuals in the model (Field 2009).

Table 75: Model 3 - ANOVA (low cost)

	Model - ANOVA	df	F	Sig.
1	Regression	6	7.660	.000[b]
	Residual	195		
	Total	201		
2	Regression	12	18.384	.000[c]
	Residual	189		
	Total	201		

4.4.2.18 Model 3: Parameters and coefficients

A review of the Model 3 Beta-values indicates to what degree each of the political risk and external business variables affect the offshoring outsourcing flows, if the effects of all other predictors are held constant. The below matrix captures the positive and negative standardized beta coefficients for the key variables identified in the analysis, including the t-value and significance values indicating the predictability and strength of the individual indicators.

Table 76: Model 3 – Coefficient and collinearity statistics

Model	Std. Coeff. Beta	t	Sig.	Collinearity Statistics	
				Tolerance	VIF
Internal Conflict	-.264	-3.897	.000	.904	1.106
Quality of Bureaucracy	.302	4.518	.000	.926	1.080
Intellectual property protection	.211	1.792	.075	.299	3.341
Efficiency of legal	-.189	-1.595	.112	.296	3.383
Staff Security	.162	2.258	.025	.808	1.237
Labor-employer relations	.119	1.775	.077	.930	1.076
Internal Conflict	.268	3.784	.000	.486	2.060
Quality of Bureaucracy	.325	5.702	.000	.750	1.334
Intellectual property protection	-.137	-1.130	.260	.167	6.000
Efficiency of legal framework	-.051	-.454	.650	.194	5.153
Staff Security	.184	3.212	.002	.742	1.348
Labor-employer relations	.093	1.679	.095	.801	1.249
Pillar 10 - Domestic Market Size	.684	10.371	.000	.562	1.780
Pillar 2 - Electricity and telephony	-.562	-5.381	.000	.224	4.460
GDP per Capita	-.516	-5.581	.000	.286	3.495
Pillar 9 - Technological readiness	.603	5.284	.000	.187	5.343
Pillar 5 - Higher education and training	.114	1.013	.312	.192	5.207
Pillar 4 - Primary Education	.021	.303	.763	.506	1.977
Pillar 12 - Innovation	.239	3.193	.001	.128	7.818

4.4.2.19 Model 3: Collinearity levels

While the initial models with the full scope of variables had issues with Collinearity the final Model 3 presents VIF values well below 10, and all tolerance indicators are above 1, and most above 2, except Intellectual property protection, ICT use, Higher Education and training, Technological readiness and Innovation. For the political risk indicators alone the VIF values well below 10, and all tolerance indicators are above 2, and the average VIF value not substantially higher than 1 (at 1.87 only), indicating that Collinearity across the political risk indicators has been addressed, while some bias may persist among the external business variables.

4.4.2.20 Model 3: Summary of offshore outsourcing political risk and external business variables

Through the process of linear regression analysis the research has firstly ranked the 12 key political risk variables identified in the P2 exploratory research in accordance with their ability to predict offshore outsourcing flows across approximately 100 sample countries over the time period from 2006-2013. Secondly, the research applied backward step-wise linear regression to identify the key most predictive political risk variables, limiting the variable set to five variables including Quality of Bureaucracy; Intellectual Property Protection; Internal Conflict, External Conflict and Government Stability with a combined R^2 value of .331, meaning with a predicative ability of 33.1%.

As indicated in the matrix and in isolation from the external business variables (Model 1), the model indicates a positive correlation between offshore outsourcing flows and improved Quality of Bureaucracy (highest t-value and significant at <.001) and improved Intellectual Property Protection (Second highest t-value and significant at <.001). In turn the model indicates a negative correlation between improved conditions of Internal Conflict (third highest t-value and significant at <.001), and also External Conflict and level of Government Stability (with less significant Beta values, and low T-value and non-significant at >.001.

For the external business variables the model beta coefficients indicates a significant positive relationship between locations with high levels of Labour market efficiency, capacity for Innovation and presenting a larger Domestic Market Size (all with high t-values and significant at <.001). In addition Technological Readiness scores a high Beta and t-value, however the significance level is slightly lower at <.005. There also appears to be a negative correlation between offshore outsourcing flows and improved levels of higher education and more stable macro environment variables (both with high t-values and significant at <.001).

4.4.2.21 Model 3: Summary of offshore outsourcing political risk and external business variables

Through the process of linear regression analysis the research has firstly ranked the 10 key political risk variables identified in the exploratory research, in accordance with their ability to predict offshore outsourcing flows in the context of non-high income countries over the time period from 2006-2013. The research applied backward step-wise linear regression to identify the key most predictive political risk variables, limiting the variable set to six key variables including Internal Conflict; Quality of Bureaucracy; Intellectual Property Protection; Efficiency of legal frameworks, Staff Security and Cooperation in labour-employee relations with a combined R^2 value of .191, meaning with a predicative ability of 19.1%.

On review of the findings in isolation from the external business variables (Model 1A/2a only), the model indicates a positive correlation between non-high income countries offshore outsourcing flows and improved Quality of Bureaucracy (highest t-value and significant at <.001) confirming the finding from the all-inclusive sample. However, notably the Intellectual Property Protection variable which was the highest in the all-inclusive sample is non-significant at >.001 in the context of non-high-income countries. Secondly, the model further confirms the finding of a negative correlation between improved conditions of Internal Conflict (second highest t-value and significant at <.001) confirming that offshore

outsourcing in non-high-income countries is operating in potential unstable and vulnerable contexts.

For the external business variables the model beta coefficients indicates a significant positive relationship between locations with larger Domestic Market Size (highest t-values and significant at <.001) and Technological Readiness (high t-values and significant at <.001). There also appears to be a negative correlation between offshore outsourcing flows and variables for Electricity and telephony infrastructure and GDP per Capita (both with high t-values and significant at <.001). The negative correlation confirms that offshore outsourcing takes place to developing and low income economies with infrastructure gaps, despite the potential operational challenges.

Overall, the findings for non-high income countries confirm the importance of institutional capacity through the positive relationship with the variable on quality of bureaucracy in the host location for both high and non-high income countries and reconfirms that the bulk of offshore outsourcing takes place in locations with a potential instability reflected in the negative relationship with Internal Conflict variables. However, that the capacity for Innovation as a predictor for offshore outsourcing flows is predominant in the all-inclusive sample, but not significant in the context of non-high income countries. This suggests that while companies use offshore outsourcing as a means to access talent and innovation, this outreach is mainly targeting high-income locations. This similarly, explains the non-significant relationship with intellectual property protection legislation in the context of non-high-income countries, as less high-end KPO activities will be directed to these locations as captured in Annex C.7.

4.4.3 Political risk across offshore outsourcing typologies

Following the same methodology of determining the ranking of political risk and external business variables as with the aggregated Offshore Outsourcing data in the previous chapter, the political and external business variables were inserted into the regression analysis in random order using a forced entry approach. The methodology was applied to each of the offshore outsourcing typology specific

datasets i.e. ITO, KPO and BPO. As captured in the descriptive overview below the N-sample size varies across the offshore outsourcing typologies due to availability of data ranging from N=333 for KPO, N=484 for ITO to N=722 for BPO.

4.4.3.1 Model 1A: Cross-industry offshore outsourcing with political risk variables

The following section presents the cross offshore outsourcing analysis of activity specific political risk exposure i.e. across ITO, BPO and KPO engagements.

Table 77: Model 1A - Descriptive statistics (cross industry)

Variable Description	Mean	Std. Deviation	N
KPO	1374136198.19	4062126854.24	333
ITO	2476603803.55	7988717458.36	484
BPO	5479340785.34	11901448748.88	722
External Conflict	.00	1.00	828
Corruption	.00	1.00	819
Government Stability	.00	1.00	828
Internal Conflict	.00	1.00	828
Staff Security	.00	1.00	814
Quality of Bureaucracy	.00	1.00	828
Labor-employer relations	.00	1.00	814
Intellectual property protection	.00	1.00	723
Efficiency of legal framework	.00	1.00	549
Burden of customs procedures	.00	1.00	729
Judicial independence	.00	1.00	814
Exchange Rate Stability	.00	1.00	827

As captured in the Model Summary matrixes, the analysis yielded R values between 0.517 up to 0.606 indicating the values of the multiple correlation coefficient between the 12 Political Risk Indicators and the offshore outsourcing flows for ITO/KPO/BPO (dependent variables). The value of the R2, measuring how much of the variability in the offshore outsourcing flows is accounted for by the 12 indicators, is stated as (ITO - 0.267, KPO - 0.277 and BPO - 0.368). This indicates that the 12 political risk indicators account for a total of 26.7 to 27.7% of the variation in offshore outsourcing flows for ITO and KPO segments, and 36.8% of the BPO segment. The adjusted R^2 provides an indication of the

generalizability of the model and should ideally be very close to the R^2 value. From the summary below it is clear that the difference is small for BPO at .368-.350 = 0.018 (or 1.8%), indicating that if the model was derived from the full population of BPO engagements rather than the given sample it would account for 1.8% less variance in the outcome. However, for ITO and KPO, the generalizability seems less, at 3.0% for ITO and 4.3% for KPO, which is likely linked to the reduced N-sample size.

4.4.3.2 Model 1A: Political risk variables - summary

Table 78: Model 1A - Summary for political risk (cross industry)

Model Summary matrixes							
Model 1A	R	R Square	Adjusted R Square	Change Statistics			Durbin Watson
				R Square Change	F Change	df1	
ITO	.517	.267	.237	.267	8.782	12	.401
Model 1A	R	R Square	Adjusted R Square	Change Statistics			Durbin Watson
				R Square Change	F Change	df1	
KPO	.527	.277	.234	.277	6.429	12	.293
Model 1A	R	R Square	Adjusted R Square	Change Statistics			Durbin Watson
				R Square Change	F Change	df1	
BPO	.606	.368	.350	.368	20.980	12	.501

The F-ratio, measuring the overall significance of the regression model value, is indicated at 8.782 for ITO and 6.429 for the KPO segment, which is considered significant ($p<.001$). However, the F-ratio for the BPO segment is stated at 20.980, suggesting a stronger explanatory power for the BPO dataset with a higher N-sample size. The Durbin-Watson statistic indicates the degree to which the assumption of independent errors is tenable and, as mentioned in previous sections, should ideally indicate a value between 1 and 3, and preferably as close to 2 as possible (Field 2009). The Durbin-Watson value for these models are again below 1, with BPO indicating the highest value if .501, ITO at .401 and KPO as low as .293, suggesting a level of positive correlation between adjacent residuals in the models (Field 2009).

4.4.3.3 Model 1A: Collinearity levels

For the given models the VIF values are all below 10 and all tolerance indicators are above 1. However, there remains a number of variables with high VIF values and tolerance levels below 2, including Intellectual property protection, Efficiency of legal frameworks, Judicial Independence all ranging amongst 1-2 and hence indicating potential bias problem of Collinearity between these variables. As the models will be further refined and several variables excluded through stage 2 and 3, this problem will be addressed in the final model.

4.4.3.4 Model 1A: Parameters and coefficients

A review of the Beta-values indicates to what degree each of the political risk indicators affects the offshoring outsourcing flows, if the effects of all other predictors are held constant. As captured in the matrix below the beta coefficient can indicate a negative or positive relationship. The standardized beta values are measured in standard deviation units and are directly comparable, and provides an insight into the importance of the individual predictor in the context of each offshore outsourcing activity. In addition the matrix captures the t-test values and significance levels, indicating to what extent the political risk indicator is making a significant contribution to the model. The larger the value of the t-value the greater the contribution of the political risk as a predictor of offshore outsourcing flows, while a significance value of 0.00 indicates highest level of significance of the model. The combined standardized beta value, t-test values and significance levels will form the basis for comparison of the relative significance of the individual political risk indicators.

Table 79: Model 1A - Ranking of political risk (cross industry)

Ranking of political risk in terms of impact on offshore outsourcing flows – ITO					
Indicator Description	Beta	T-value	Sig.	Tolerance	VIF
Internal Conflict	*-0.416*	*-5.890*	*.000*	*.509*	*1.963*
Judicial independence	0.292	2.152	.032	.137	7.280
Intellectual property protection	0.291	1.828	.069	.100	9.988
Quality of Bureaucracy	0.265	2.782	.006	.279	3.581
Burden of customs procedures	*-0.260*	*-2.462*	*.014*	*.228*	*4.390*
Efficiency of legal framework	*-0.183*	*-1.284*	*.200*	*.125*	*8.008*
Cooperation in labor-employer relations	0.177	2.448	.015	.483	2.071
Corruption	*-0.150*	*-1.425*	*.155*	*.229*	*4.361*
Staff Security	0.133	1.693	.091	.409	2.447
External Conflict	0.108	1.780	.076	.691	1.447
Government Stability	*-0.047*	*-0.807*	*.421*	*.758*	*1.318*
Exchange Rate Stability	*-0.022*	*-0.435*	*.664*	*.949*	*1.054*

Ranking of political risk in terms of impact on offshore outsourcing flows – BPO					
Indicator Description	Beta	T-value	Sig.	Tolerance	VIF
Intellectual property protection	0.744	6.157	.000	.100	9.988
Burden of customs procedures	*-0.329*	*-4.103*	*.000*	*.228*	*4.390*
Judicial independence	*-0.245*	*-2.377*	*.018*	*.137*	*7.280*
Quality of Bureaucracy	0.241	3.336	.001	.279	3.581
Corruption	0.200	2.500	.013	.229	4.361
External Conflict	*-0.154*	*-3.361*	*.001*	*.691*	*1.447*
Staff Security	*-0.116*	*-1.947*	*.052*	*.409*	*2.447*
Government Stability	*-0.084*	*-1.910*	*.057*	*.758*	*1.318*
Internal Conflict	*-0.070*	*-1.299*	*.195*	*.509*	*1.963*
Efficiency of legal framework	0.063	0.585	.559	.125	8.008
Cooperation in labor-employer relations	0.013	0.237	.813	.483	2.071
Exchange Rate Stability	0.008	0.211	.833	.949	1.054

Ranking of political risk in terms of impact on offshore outsourcing flows – KPO					
Indicator Description	Beta	T-value	Sig.	Tolerance	VIF
Intellectual property protection	0.935	4.936	.000	.100	9.988
Burden of customs procedures	*-0.505*	*-4.017*	*.000*	*.228*	*4.390*
Staff Security	*-0.265*	*-2.823*	*.005*	*.409*	*2.447*
Quality of Bureaucracy	0.206	1.816	.071	.279	3.581
Efficiency of legal framework	*-0.196*	*-1.157*	*.249*	*.125*	*8.008*
Corruption	0.195	1.559	.120	.229	4.361
Judicial independence	*-0.180*	*-1.112*	*.267*	*.137*	*7.280*
Government Stability	0.105	1.528	.128	.758	1.318
Cooperation in labor-employer relations	0.078	0.909	.364	.483	2.071
External Conflict	*-0.052*	*-0.717*	*.474*	*.691*	*1.447*
Exchange Rate Stability	0.048	0.782	.435	.949	1.054
Internal Conflict	*-0.014*	*-0.164*	*.870*	*.509*	*1.963*

As captured in the model the beta coefficient indicates a significant positive relationship between locations with strong Intellectual Property Protection regulations and high Quality of Bureaucracy across all the offshore outsourcing typologies. Similarly, there is a negative relationship between the Burden of Customs Procedures and internal conflict and the offshore outsourcing flows across the board.

There are also some obvious inconsistencies as with Corruption, which appears as a positive relationship for KPO and BPO, while for ITO has a negative relationship to the offshore outsourcing flows. Similarly, the significance of Judicial Independence indicated in ITO flows, is not comparable to the negative relations indicated in the KPO and BPO segments.

The following section will seek to rank and compare the external business variables that may further influence the flow of offshore outsourcing across the three typologies and seek to integrate the key drivers into the final model.

4.4.3.5 Model 1B: Cross-industry offshore outsourcing with external business risk variables

Following the same methodology as for Model 1A the external business variables were inserted into the regression analysis in random order using a forced entry approach. The methodology was applied each of the offshore outsourcing typology specific datasets i.e. ITO, KPO and BPO. As captured in the descriptive overview below the N-sample size varies across the offshore outsourcing typologies due to availability of data ranging from N=333 for KPO up to N=722 for BPO.

The lowest N-value for the independent variables were for Pillar 2 - Electricity and telephony infrastructure at 458 and GDP per Capita at 552, however using pair-wise exclusion the model seeks to maximize sample size across the variables.

Table 80: Model 1B - Descriptive statistics for business variables (cross industry)

Variable Description	Mean	Std. Deviation	N
KPO	1374136198.19	4062126854.24	333
ITO	2476603803.55	7988717458.36	484
BPO	5479340785.34	11901448748.88	722
External Conflict	.00	1.00	828
Corruption	.00	1.00	819
Government Stability	.00	1.00	828
Internal Conflict	.00	1.00	828
Staff Security	.00	1.00	814
Quality of Bureaucracy	.00	1.00	828
Labor-employer relations	.00	1.00	814
Intellectual property protection	.00	1.00	723
Efficiency of legal framework	.00	1.00	549
Burden of customs procedures	.00	1.00	729
Judicial independence	.00	1.00	814
Exchange Rate Stability	.00	1.00	827

As captured in the model summary matrix, the analysis yielded an R values between .556 up to .774 indicating the values of the multiple correlation coefficient between the 9 external business variables and the offshore outsourcing flows for ITO/KPO/BPO (dependent variables). The value of the R^2, measuring how much of the variability in the offshore outsourcing flows is

accounted for by the 9 indicators, is stated as (ITO - .309, KPO - .599 and BPO - .513)**.** This indicates that the 9 political risk indicators account for a total of 51.3 – 59.9% of the variation in offshore outsourcing flows for KPO and BPO segments, and 30.9% of the ITO segment only. As experienced in the analysis in Model 1A, there appears to be more consistency between the KPO and BPO datasets and that of the ITO segment. The adjusted R^2 provides an indication of the generalizability of the model and should ideally be very close to the R^2 value. From the summary below it is clear that the difference is small for BPO at .513 - .501= 0.012 (or 1.2%), indicating that if the model was derived from the full population of BPO engagements rather than the given sample it would account for 1.2% less variance in the outcome. For ITO and KPO, the generalizability is slightly less at 2.7% for ITO and 2.2% for KPO, which is likely again linked to the reduced N-sample size.

Table 81: Model 1B - Summary statistics for business variables (cross industry)

Model Summary matrixes							
Model IB	R	R Square	Adjusted R Square	Change Statistics			Durbin Watson
				R Square Change	F Change	df1	
ITO	.556[a]	.309	.282	.309	11.401	9	.354
Model IB	R	R Square	Adjusted R Square	Change Statistics			Durbin Watson
				R Square Change	F Change	df1	
KPO	.774[a]	.599	.577	.599	26.737	9	.545
Model IB	R	R Square	Adjusted R Square	Change Statistics			Durbin Watson
				R Square Change	F Change	df1	
BPO	.717[a]	.513	.501	.513	40.456	9	.632

The F-ratio, measuring the overall significance of the regression model value, is indicated at 11.401 for ITO and 26.737 for the KPO segment and considered significant ($p<.001$). However, the F-ratio for the BPO segment is stated higher at 40.456, suggesting a stronger explanatory power for the BPO dataset with a higher N-sample size.

The Durbin-Watson statistic indicates the degree to which the assumption of independent errors is tenable, and as mentioned in previous chapters should ideally indicate a value between 1 and 3, and preferably as close to 2 as possible (Field 2009). The Durbin-Watson value for these models are again below 1, with BPO indicating the highest value if .632, ITO at .354 and KPO as low as .545, suggesting a level of positive correlation between adjacent residuals in the models (Field 2009).

4.4.3.6 Model 1B: Collinearity levels

For the given models the VIF values are high for Pillar 2 - Electricity and telephony infrastructure and above 10 for Pillar 9 - Technological readiness and Pillar 5 - Higher education and training. The tolerance indicators for these pillars, plus for Pillar 12 - Innovation are below <1 or 2, hence indicating potential problem of Collinearity between these variables. As the models will be further refined and several variables excluded through stage 2 and 3, this problem will be addressed in the final model.

4.4.3.7 Model 1B: Parameters and coefficients

As in the previous model the combined standardized beta value, t-test values and significance levels have been captured in the matrix below and will form the basis for comparison of the relative significance of the individual political risk indicators. The larger the value of the t-value the greater the contribution of the political risk as a predictor of offshore outsourcing flows, while a significance value of 0.00 indicates highest level of significance of the model. As noted below the beta coefficient can indicate a negative or positive relationship. The standardized beta values are measured in standard deviation units and are directly comparable, and provides an insight into the importance of the individual predictor in the context of each offshore outsourcing activity.

Table 82: Model 1B - Ranking of business variables (cross industry)

Ranking of external business variables in terms of impact on Offshore Outsourcing Flows – ITO				
Indicator Description	*Beta*	*T-value*	*Tolerance*	*VIF*
Pillar 2 - Electricity and telephony infrastructure	*-0.891*	*-5.416*	*.111*	*8.972*
Pillar 9 - Technological readiness	0.410	1.966	.069	14.431
Pillar 10 - Domestic Market Size	0.292	4.3	.654	1.528
Pillar 12 - Innovation	0.253	1.916	.173	5.775
Pillar 5 - Higher education and training	0.199	1.12	.096	10.466
Pillar 4 - Primary Education	0.153	1.503	.289	3.457
Pillar 7 - Labor market efficiency	*-0.049*	*-0.64*	*.511*	*1.957*
Pillar 3 - Macro Environment	*-0.032*	*-0.481*	*.688*	*1.453*
GDP per Capita	0.029	0.261	.246	4.069

Ranking of external business variables in terms of impact on Offshore Outsourcing Flows – KPO				
Indicator Description	*Beta*	*T-value*	*Tolerance*	*VIF*
Pillar 9 - Technological readiness	*-0.801*	*-4.225*	*.069*	*14.431*
Pillar 2 - Electricity and telephony infrastructure	0.750	5.019	.111	8.972
Pillar 12 - Innovation	0.744	6.202	.173	5.775
Pillar 4 - Primary Education	*-0.391*	*-4.216*	*.289*	*3.457*
Pillar 3 - Macro Environment	*-0.389*	*-6.461*	*.688*	*1.453*
Pillar 10 - Domestic Market Size	0.381	6.183	.654	1.528
GDP per Capita	0.246	2.442	.246	4.069
Pillar 7 - Labor market efficiency	0.211	3.03	.511	1.957
Pillar 5 - Higher education and training	*-0.196*	*-1.215*	*.096*	*10.466*

Ranking of external business variables in terms of impact on Offshore Outsourcing Flows – BPO				
Indicator Description	*Beta*	*T-value*	*Tolerance*	*VIF*
Pillar 10 - Domestic Market Size	0.474	10.202	.654	1.528
Pillar 5 - Higher education and training	*-0.452*	*-3.721*	*.096*	*10.466*
Pillar 2 - Electricity and telephony infrastructure	0.394	3.506	.111	8.972
Pillar 3 - Macro Environment	*-0.220*	*-4.855*	*.111*	*8.972*
Pillar 7 - Labor market efficiency	0.206	3.919	.511	1.957
Pillar 12 - Innovation	0.189	2.094	.173	5.775
GDP per Capita	0.139	1.829	.246	4.069
Pillar 9 - Technological readiness	0.120	0.838	.069	14.431
Pillar 4 - Primary Education	*-0.008*	*-0.108*	*.289*	*3.457*

As captured in the model the beta coefficient indicates a significant positive relationship between locations with strong capacity for Innovation, especially for the KPO segment, plus Domestic Market Size and GDP per Capita. Similarly, there is a consistent negative relationship between Pillar 3 - Macro Environment and the offshore outsourcing flows across the board. There are also some obvious inconsistencies as with Pillar 9 - Technological readiness, which appears as a positive relationship for ITO and BPO, while for KPO has a negative relationship to the offshore outsourcing flows. Similarly, the negative relationship for Pillar 2 - Electricity and telephony infrastructure in ITO flows is not intuitive.

4.4.3.8 Model 2: Cross-industry offshore outsourcing with external business risk variables backward

Following the methodology of previous sections, the ranked political risk variables and external business variables will be inserted into the regression model in order of highest Beta value accordingly. The objective is to identify the key political risk variables most predictive for each offshore outsourcing activity, and the

corresponding external business variable, to be inserted together into the final model for each typology for overall comparison.

4.4.3.9 Model 2A: Key political risk variables - ITO

As per the methodology in previous sections, the ranked political risk variables Model 1A were inserted into the backward step-wise regression.

Table 83: Model 2A - Statistics summary (ITO)

Model	R	R Square	Adjusted R Square	Change Statistics			
				R Square Change	F Change	df1	
1	.506[a]	.256	.217	.256	6.493	12	
2	.506[b]	.256	.220	.000	.043	1	
3	.504[c]	.254	.221	-.002	.684	1	
4	.501[d]	.251	.221	-.003	1.059	1	
5	.498[e]	.248	.222	-.003	.873	1	
6	.489[f]	.239	.216	-.008	2.587	1	
7	.482[g]	.232	.212	-.007	2.120	1	
8	.476[h]	.227	.210	-.005	1.583	1	
9	.469[i]	.220	.206	-.007	2.206	1	
10	.459[j]	.211	.201	-.009	2.663	1	.267

As per below the backward step-wise regression yielded 3 key political risk variables for ITO including a negative relationship with Internal Conflict (Beta: -.336, high T-value and significant <.001); Judicial Independence (Beta: .226, high T-value and significant <.002); and Quality of Bureaucracy (Beta: .212, high T-value and non-significant >.001). The findings confirm that much of the ITO offshore outsourcing takes place to locations with significant internal conflict issues, likely due to cost considerations. The identification of judicial independence and bureaucracy levels further confirm the importance of institutional capacity at offshore outsourcing locations.

Table 84: Model 2A - Coefficients and collinearity statistics

ITO - Coefficients									
Model		Std. Co.	t	Sig.	Correlations			Collinearity Statistics	
		Beta			Zero-order	Partial	Part	Tol.	VIF
	(Constant)		5.947	.000					
	Internal Conflict	*-.336*	*-5.436*	*.000*	*-.185*	*-.334*	*-.315*	*.881*	*1.135*
	Judicial independence	.268	3.118	.002	.307	.199	.181	.454	2.203
	Quality of Bureaucracy	.212	2.521	.012	.313	.162	.146	.474	2.111

As per the methodology in previous sections, the ranked external business variables Model 1B were inserted into the backward step-wise regression with offshore outsourcing flows for ITO as dependent variable.

Table 85: Model 2A - Change statistics (ITO)

Model	R	R Square	Adjusted R Square	Change Statistics			
				R Square Change	F Change	df1	Durbin-Watson
1	.537[a]	.288	.260	.288	10.271	9	
2	.537[b]	.288	.263	.000	.061	1	
3	.536[c]	.288	.266	-.001	.194	1	
4	.536[d]	.287	.268	-.001	.274	1	
5	.533[e]	.285	.269	-.002	.738	1	
6	.526[f]	.277	.265	-.007	2.395	1	.363
7	.519[g]	.269	.260	-.008	2.603	1	

As per below the backward step-wise regression yielded 3 key external business variables with a combined R^2 of 26.9%, highlighting Domestic Market size and capacity for Innovation as key driving forces, while indicating a negative relationship with Electricity and telephony infrastructure confirming that much offshore outsourcing takes place to developing economies.

Table 86: Model 2A - Coefficients and collinearity statistics

Model		Std. Coef.			Correlations			Collinearity Statistics	
		Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
	(Constant)		6.105	.000					
	Pillar 2 - Electricity and telephony infrastructure	*-.333*	*-4.416*	*.000*	*.029*	*-.277*	*-.247*	*.549*	*1.822*
	Pillar 10 - Domestic Market Size	.372	5.873	.000	.439	.358	.328	.779	1.284
	Pillar 12 - Innovation	.365	4.502	.000	.317	.282	.252	.475	2.107

4.4.3.10 Model 2B: Key political risk variables - KPO

As per the methodology in previous sections, the ranked political risk variables Model 1A were inserted into the backward step-wise regression with offshore outsourcing flows for KPO as dependent variable.

Table 87: Model 2B - Summary statistics (KPO)

Model	R	R Square	Adjusted R Square	Change Statistics			Durbin-Watson
				R Square Change	F Change	df1	
1	.527[a]	.277	.234	.277	6.429	12	
2	.527[b]	.277	.238	.000	.027	1	
3	.524[c]	.275	.239	-.002	.642	1	
4	.522[d]	.272	.240	-.003	.808	1	
5	.519[e]	.269	.240	-.003	.905	1	
6	.516[f]	.267	.242	-.002	.638	1	
7	.510[g]	.261	.239	-.006	1.684	1	
8	.504[h]	.254	.236	-.007	1.848	1	.245

As per below the backward step-wise regression yielded 5 key political risk variables for KPO including a significant positive relationship with higher capacity for Intellectual property protection (Beta: .921, high T-value and significant <.001) and Quality of Bureaucracy (Beta: .260, high T-value but non- significant >.001). In addition there is a significant negative relationship with Burden of customs procedures (Beta: -.477, high T-value but non- significant >.001), and non-

significant relationship with Judicial independence (Beta: 1.235, high T-value but non- significant >.001) and Staff Security (Beta: -.228, high T-value but non-significant >.001). The findings further highlighting the importance of institutional capacity at offshore outsourcing locations.

Table 88: Model 2B - Coefficients and collinearity statistics

Model		Standardized Coefficients			Collinearity Statistics	
		Beta	t	Sig.	Tolerance	VIF
	(Constant)		5.662	.000		
	Intellectual property protection	.921	5.544	.000	.130	7.690
	Burden of customs procedures	*-.477*	*-4.078*	*.000*	*.262*	*3.814*
	Staff Security	*-.228*	*-2.621*	*.009*	*.473*	*2.116*
	Quality of Bureaucracy	.260	2.761	.006	.406	2.464
	Judicial independence	*-.235*	*-1.761*	*.080*	*.201*	*4.969*

As per the methodology in previous sections, the ranked external business variables Model 1B were inserted into the backward step-wise regression with offshore outsourcing flows for KPO as dependent variable.

Table 89: Model 2B - Summary statistics for business variables (KPO)

Model	R	R Square	Adjusted R Square	Change Statistics			Durbin-Watson
				R Square Change	F Change	df1	
1	.774[a]	.599	.577	.599	26.737	9	
2	.772[b]	.595	.575	-.004	1.476	1	.563

As per below the backward step-wise regression yielded 8 key external business variables with a combined R^2 of .595 (or 59.5%), highlighting Capacity for Innovation, Market Size, and Electricity and telephony infrastructure on as significant and key driving forces, while GDP levels and Labour Market efficiency featured with moderate Beta values but non-significant. The model also indicated a negative relationship with Technological readiness, Primary Education and

Macro Environment confirming that even large elements of KPO offshore outsourcing takes place to developing economies.

Table 90: Model 2B - Coefficients and collinearity

Model		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		Beta			Tolerance	VIF
	(Constant)		6.789	.000		
	Pillar 9 - Technological readiness	-.889	-5.069	.000	.081	12.316
	Pillar 2 - Electricity and telephony infrastructure	.700	4.866	.000	.121	8.284
	Pillar 12 - Innovation	.714	6.073	.000	.181	5.530
	Pillar 4 - Primary Education	-.441	-5.281	.000	.359	2.789
	Pillar 3 - Macro Environment	-.394	-6.549	.000	.692	1.446
	Pillar 10 - Domestic Market Size	.364	6.059	.000	.693	1.444
	GDP per Capita	.278	2.860	.005	.264	3.786
	Pillar 7 - Labor market efficiency	.206	2.957	.004	.513	1.950

4.4.3.11 Model 2C: Key political risk variables – BPO

As per the methodology in previous sections, the ranked political risk variables Model 1A were inserted into the backward step-wise regression with offshore outsourcing flows for BPO as dependent variable.

Table 91: Model 2C - Summary statistics for political risk (BPO)

Model	R	R Square	Adjusted R Square	Change Statistics					Durbin-Watson
				R Square Change	F Change	df1	df2	Sig. F Change	
1	.606[a]	.368	.350	.368	20.980	12	433	.000	
2	.606[b]	.368	.352	.000	.045	1	433	.833	
3	.606[c]	.368	.353	.000	.060	1	434	.806	
4	.606[d]	.367	.354	-.001	.598	1	435	.440	
5	.603[e]	.364	.352	-.003	2.009	1	436	.157	.457

As per below the backward step-wise regression yielded 9 key political risk variables for BPO including a positive and significant relationship with Intellectual property protection (Beta: .752, high T-value and significant <.001) and Quality of Bureaucracy (Beta: .216, high T-value and significant <.001). In addition, the model yields a significant negative relationship with External Conflict (Beta: -.182, high T-value and significant <.001) and Burden of Customs (Beta: -.316, high T-value and significant <.001). The remaining variables include Judicial Independence, Corruption, Staff Security and Government Stability, however all are non-significant at >.001).

Table 92: Model 2C - Coefficients and collinearity statistics

Model		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		Beta			Tolerance	VIF
	(Constant)		12.079	.000		
	Intellectual property protection	.752	6.873	.000	.122	8.225
	Burden of customs procedures	*-.316*	*-4.179*	*.000*	*.255*	*3.924*
	Judicial independence	*-.183*	*-2.133*	*.033*	*.197*	*5.065*
	Quality of Bureaucracy	.216	3.213	.001	.321	3.113
	Corruption	.203	2.618	.009	.242	4.124
	External Conflict	*-.182*	*-4.474*	*.000*	*.876*	*1.142*
	Staff Security	*-.146*	*-2.567*	*.011*	*.451*	*2.217*
	Government Stability	*-.081*	*-2.010*	*.045*	*.902*	*1.108*

As per the methodology in previous sections, the ranked external business variables Model 1B were inserted into the backward step-wise regression with offshore outsourcing flows for BPO as dependent variable.

Table 93: Model 2C - Summary statistics for business variables (BPO)

Model	R	R Square	Adjusted R Square	Change Statistics					Durbin-Watson
				R Square Change	F Change	df1	df2	Sig. F Change	
1	.717[a]	.513	.501	.513	40.456	9	345	.000	
2	.717[b]	.513	.502	.000	.012	1	345	.914	
3	.716[c]	.512	.502	-.001	.873	1	346	.351	.641

The back-ward step-wise regression yielded 9 key external business variables with a combined R^2 of .512 (or 51.2%), highlighting a positive relationship with Domestic Market Size, Electricity and telephony infrastructure, Labour market efficiency, Innovation and GDP per Capita. In addition, the model yielded a negative relationship with the Macro Environment and Higher education and training again confirming the developing economy context of a majority of offshore outsourcing activities.

Table 94: Model 2C - Coefficients and collinearity statistics

Model		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		Beta			Tolerance	VIF
	(Constant)		12.297	.000		
	Pillar 10 - Domestic Market Size	.469	10.325	.000	.681	1.468
	Pillar 5 - Higher education and training	*-.430*	*-4.104*	*.000*	*.128*	*7.810*
	Pillar 2 - Electricity and telephony	.439	4.773	.000	.166	6.027
	Pillar 3 - Macro Environment	*-.227*	*-5.150*	*.000*	*.724*	*1.381*
	Pillar 7 - Labor market efficiency	.211	4.048	.000	.517	1.934
	Pillar 12 - Innovation	.214	2.513	.012	.193	5.181
	GDP per Capita	.167	2.539	.012	.324	3.082

4.4.3.12 Model 2ABC: Summary across offshore outsourcing typologies

Through the process of linear regression analysis the research has firstly ranked the 12 key political risk variables identified in the exploratory research in accordance with their ability to predict activity specific offshore outsourcing flows to various country locations. Secondly, the research applied backward step-wise linear regression to identify the key most predictive political risk variables, limiting the variable sets to the key variables for each activity.

For the political risk variables the positive relationship between Quality of Bureaucracy and flows across all offshore outsourcing activities is a consistent

trend with Beta values around .216-.268, however significant at <.001 for KPO and BPO only, while non-significant for ITO at >.001. For ITO the primary, and only significant variable at <.001 was Internal Conflict suggesting that ITO is more often outsourced to more unstable locations. For BPO the primary risk variable was Intellectual Property Right protection with the by-far highest Beta and T-value and significant at < .001. For BPO there are similar, less high Beta values, indicating negative relationships with BPO outsourcing and external conflict and Burden of customs procedures both significant at < .001. For KPO the two primary variables were intellectual property protection with the highest Beta value (across all activities) and Burden of Customs procedures both significant at .001.

For the external business variables the model the primary external variables for ITO was a positive relationship with Domestic Market size and Innovation both significant at .001, and a negative relationship with Electricity and telephony infrastructure. For KPO Innovation and Electricity and telephony infrastructure were both the primary and significant positive drivers, followed by Domestic Market size and Macroeconomic environment. Ironically Technical readiness featured as the highest negative variable followed by primary education, both significant at .001. Finally for BPO the main positive drivers were Electricity and telephony infrastructure and Domestic market, followed by Labour Market Efficiency. Contrary to ITO and KPO, Innovation was non-significant at > .001.

4.4.4 Political Risk and Foreign Direct Investment (FDI) flows

Following the same methodology as with the aggregated Offshore Outsourcing data in the previous chapter, the political and external business variables were inserted into the regression analysis in random order with the Foreign Direct Investment (FDI) data using a forced entry approach. The method allows for a classification of the individual risk indicators impact on FDI flows and the predicative strength of the external business variables in the context of FDI.

4.4.4.1 Model 1A: (FDI) with political risk variables

Table 95: Model 1A - Descriptive statistics (FDI)

	Mean	Std. Deviation	N
Inward foreign direct investment flows	179996.36	434677.38	734
External Conflict	.00	1.00	828
Corruption	.00	1.00	819
Government Stability	.00	1.00	828
Internal Conflict	.00	1.00	828
Staff Security	.00	1.00	814
Quality of Bureaucracy	.00	1.00	828
Cooperation in labor-employer relations	.00	1.00	814
Intellectual property protection	.00	1.00	723
Efficiency of legal framework	.00	1.00	549
Burden of customs procedures	.00	1.00	729
Judicial independence	.00	1.00	814
Exchange Rate Stability	.00	1.00	827

As captured in the model summary matrix the analysis yielded an R value of .539 indicating the values of the multiple correlation coefficient between the 12 Political Risk Indicators and the Inward foreign direct investment flows (dependent variable). The value of the R^2, measuring how much of the variability in the Inward foreign direct investment flows is accounted for by the 12 indicators, is stated as .291**.** This indicates that the 12 political risk indicators account for a total of 29.1% of the variation in offshore outsourcing flows. The adjusted the R^2 provides an indication of the generalizability of the model and should ideally be very close to the R^2 value. In this model the difference is small at .291-.272-= 0.018 (or 1.8%), indicating that if the model was derived from the full population rather than the given sample it would account for 1.8% less variance in the outcome.

Table 96: Model 1A - Summary statistics for political risk in FDI

Model Summary matrix							
					Change Statistics		
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.539[a]	.291	.272	370924.63	.291	15.185	12

Table 97: Model 1A - Change statistics for political risk in FDI

Model Summary			
	Change Statistics		
Model	df2	Sig. F Change	Durbin-Watson
1	444	.000	.532

The F-ratio, measuring the overall significance of the regression model value of the model, is indicated at 15.185, which is considered significant (p<.001). The significance level suggests that the regression equation does have validity in fitting the FDI data i.e. the independent variables are not purely random with respect the Inward foreign direct investment flows.

The Durbin-Watson statistic indicates the degree to which the assumption of independent errors is tenable, or that there should be no autocorrelation between observations in the model (Field, 2009, p. 220), meaning relationships between values separated from each other by a given time lag in the residuals (prediction errors). The statistic indicator ranges in value from 0 to 4.

A value near 2 indicates non-autocorrelation; a value toward 0 indicates positive autocorrelation; a value toward 4 indicates negative autocorrelation. A conservative rule indicates that the value should be between 1 and 3, and preferably as close to 2 as possible (Field, 2009). The Durbin-Watson value for model 1 is indicated at .532, suggesting a level of positive correlation between adjacent residuals in the model (Field, 2009).

The ANOVA provides an overview of the significance of Model 1A containing the 12 pre-identified political risk predictors of Inward foreign direct investment flows.

Table 98: Model 1A - ANOVA for political risk in FDI

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25070880043254.42	12	2089240003604.53	15.185	.000[b]
	Residual	61087776777530.81	444	137585082832.28		
	Total	86158656820785.23	456			

4.4.4.2 Model 1A: Model parameters and coefficients

The Standardized Coefficients Beta values for FDI flows and the pre-identified political risk indicators suggest a positive correlation on Corruption, Quality of Bureaucracy and Intellectual Protection.

Table 99: Model 1A - Coefficients for political risk in FDI

Model 1 – FDI Political Risk Coefficients		Standardized Coefficients Beta	t	Sig.
1	(Constant)		10.374	.000
	External Conflict	*-.154*	*-3.201*	*.001*
	Corruption	.215	2.576	.010
	Government Stability	.003	.075	.940
	Internal Conflict	.001	.025	.980
	Staff Security	*-.184*	*-2.943*	*.003*
	Quality of Bureaucracy	.269	3.554	.000
	Labor-employer relations	*-.013*	*-.219*	*.827*
	Intellectual property protection	.733	5.806	.000
	Efficiency of legal frameworks	.059	.522	.602
	Burden of customs procedures	*-.312*	*-3.727*	*.000*
	Judicial independence	-.353	-3.272	.001
	Exchange Rate Stability	.015	.358	.721

The political risk indicators are further ranked in accordance with the positive or negative impact on offshore outsourcing flows as captured in below matrix.

Table 100: Model 1A - Ranking of political risk in FDI

Indicator Description	Beta	T-value	Sig.
Intellectual property protection	0.733	5.806	0
Judicial independence	*-0.353*	*-3.272*	*0.001*
Burden of customs procedures	*-0.312*	*-3.727*	*0*
Quality of Bureaucracy	0.269	3.554	0
Corruption	0.215	2.576	0.01
Staff Security	*-0.184*	*-2.943*	*0.003*
External Conflict	*-0.154*	*-3.201*	*0.001*
Efficiency of legal framework	0.059	0.522	0.602
Exchange Rate Stability	0.015	0.358	0.721
Labor-employer relations	*-0.013*	*-0.219*	*0.827*
Government Stability	0.003	0.075	0.94
Internal Conflict	0.001	0.025	0.98

4.4.4.3 Model 1A: Collinearity levels

For the given model the VIF values are below 10 and all tolerance indicators are above 1, and most above 2, except Intellectual property protection, Efficiency of legal frameworks, Judicial Independence all ranging from 1-2 and hence indicating potential problem.

Table 101: Model 1A - Collinearity statistics

Model 1 – FDI Coefficients			
Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	External Conflict	.691	1.447
	Corruption	.229	4.361
	Government Stability	.758	1.318
	Internal Conflict	.509	1.963
	Staff Security	.409	2.447
	Quality of Bureaucracy	.279	3.581
	Labor-employer relations	.483	2.071
	Intellectual property protection	.100	9.988
	Efficiency of legal framework	.125	8.008
	Burden of customs procedures	.228	4.390
	Judicial independence	.137	7.280
	Exchange Rate Stability	.949	1.054

4.4.4.4 Model 2A: Key political risk indicators for FDI

Similar to the methodology applied for the aggregate Offshore Outsourcing data a backward stepwise methodology was applied to the set of Political Risk Indicators in the connect of FDI flows. The approach included inserting the non-political risk indicators with the highest scoring Beta indicator inserted first, with the objective of isolating the key sets of non-political risks relevant for the FDI volumes.

As captured in the Model 2A summary matrix, the analysis yielded an R value of .539 indicating that values of the multiple correlation coefficient between the 12 political location indicators and the FDI inward flows (dependent variable). The

value of the R^2, measuring how much of the variability in the FDI inward flows is accounted for by the 12 indicators, is stated as .290, which is only 0.001 less than for Model 1 with all the indicators. This indicates that the 7 key political location indicators account for a total of 29.0 % of the variation in offshore outsourcing flows. The difference between the R^2 and adjusted R^2 is small at .290-.279 = 0.011 (or 1.1%), indicating that if the model was derived from the full population rather than the given sample it would account for less than 1, 1% variance in the outcome.

Table 102: Model 2A - Summary statistics for political risk in FDI

Model 2A summary matrix – FDI Key Political Risk Indicators									
Model	R	R Square	Adjusted R Square	Change Statistics					Durbin-Watson
				R Square Change	F Change	df1	df2	Sig. F Change	
1	.539[a]	.291	.272	.291	15.185	12	444	.000	
2	.539[b]	.291	.273	.000	.001	1	444	.980	
3	.539[c]	.291	.275	.000	.007	1	445	.935	
4	.539[d]	.291	.277	.000	.047	1	446	.829	
5	.539[e]	.291	.278	.000	.125	1	447	.724	
6	.539[f]	.290	.279	-.001	.320	1	448	.572	.491

The key political risk for inward FDI flows is captured as follows:

Table 103: Coefficients and collinearity statistics

Model 2A – FDI Key Political Risk Indicator Coefficients						
Model		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		Beta			Tolerance	VIF
	(Constant)		10.426	.000		
	Intellectual property protection	.761	6.708	.000	.123	8.148
	Judicial independence	*-.323*	*-3.623*	*.000*	*.199*	*5.018*
	Burden of customs procedures	*-.310*	*-3.939*	*.000*	*.256*	*3.906*
	Quality of Bureaucracy	.250	3.708	.000	.348	2.876
	Corruption	.222	2.749	.006	.243	4.124
	Staff Security	*-.190*	*-3.208*	*.001*	*.452*	*2.212*
	External Conflict	*-.153*	*-3.599*	*.000*	*.880*	*1.136*

4.4.4.5 Model 2B: (FDI) with external business risk variables

As captured in the Model 2B summary matrix, the analysis yielded an R value of.718 indicating that values of the multiple correlation coefficient between the 9 external business variables and the FDI inward flows (dependent variable). The value of the R^2, measuring how much of the variability in the FDI inward flows is accounted for by the 9 indicators, is stated as **.515,** which is only 0.005 less than for Model 1 with all the indicators. This indicates that the 4 key external business variables account for a total of 51.5 % of the variation in offshore outsourcing flows. The difference between the R^2 and adjusted R^2 is small at .515-.512-= 0.003 (or 0.3%), indicating that if the model was derived from the full population rather than the given sample it would account for less than 0.3% variance in the outcome.

Table 104: Model 2B - Descriptive statistics for business variables in FDI

	Mean	Std. Deviation	N
Inward foreign direct investment flows	179996.36	434677.38	734
Pillar 2 - Electricity and telephony	.00	1.00	458
Pillar 3 - Macro Environment	.00	1.00	814
Pillar 4 - Primary Education	.00	1.00	814
Pillar 5 - Higher education and training	.00	1.00	814
Pillar 7 - Labor market efficiency	.00	1.00	814
Pillar 9 - Technological readiness	.00	1.00	819
Pillar 10 - Domestic Market Size	.00	1.00	814
Pillar 12 - Innovation	.00	1.00	814
GDP per Capita	.00	1.00	552

Table 105: Model 2B - Summary statistics for business variables in FDI

Model 2B summary matrix – FDI Key external business variables										
					Change Statistics					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.721[a]	.520	.513	303320.56	.520	73.045	8	539	.000	
2	.721[b]	.520	.514	303078.32	.000	.138	1	539	.711	
3	.721[c]	.520	.515	302838.92	.000	.146	1	540	.703	
4	.720[d]	.518	.513	303248.45	-.002	2.467	1	541	.117	
5	.718[e]	.515	.512	303700.34	-.002	2.620	1	542	.106	.422

The key external business variables for inward FDI flows is captured as follows:

Table 106: Model 2B - Coefficients and collinearity statistics

Model		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		Beta			Tolerance	VIF
5	(Constant)		13.874	.000		
	Pillar 3 - Macro Environment	*-.251*	*-7.300*	*.000*	*.756*	*1.322*
	Pillar 7 - Labor market efficiency	.348	9.640	.000	.685	1.461
	Pillar 10 - Domestic Market Size	.534	17.100	.000	.914	1.094
	GDP per Capita	.200	5.372	.000	.643	1.555

4.4.4.6 Model 3: Foreign Direct Investment (FDI) complete model

As captured in the Model 3 Summary matrix, the analysis yielded an R value of 738 indicating that values of the multiple correlation coefficient between the combined 7 Political Risk Indicators and 4 external business variables, and the inward FDI flows (dependent variable). The value of the R^2, measuring how much of the variability in the inward FDI flows is accounted for by the 13 indicators, is stated as .544.

This indicates that the combined 7 Political Risk Indicators and 4 external business variables account for a total of 53.3% of the variation in offshore outsourcing flows. The adjusted the R^2 provides an indication of the generalizability of the model and should ideally be very close to the R^2 value. In this model the difference is small at .544-.533 = 0.01 (or 1%), indicating that if the model was derived from the full population rather than the given sample it would account for 1% less variance in the outcome.

The model further indicates that the identified key political risk account independently for 27.9% of the variation of inward FDI flows, however with the added external business variables the model account for an additional 25.4% of the variation, totally at a predicative power of 54.4%.

Table 107: Model 3 - Summary statistics for complete model for FDI

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.539[a]	.290	.279	369034.25	.290	26.458	7	453	.000	
2	.738[b]	.544	.533	297000.86	.254	62.596	4	449	.000	.527

Table 108: Model 3 - ANOVA for complete model for FDI

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25222050032256.74	7	3603150004608.11	26.458	.000[b]
	Residual	61692384479938.88	453	136186279205.16		
	Total	86914434512195.62	460			
2	Regression	47308365227524.87	11	4300760475229.53	48.756	.000[c]
	Residual	39606069284670.76	449	88209508429.11		
	Total	86914434512195.62	460			

The ANOVA provides an overview of the significance of Model 3 containing the predictors of inward FDI flows. For the initial model the value of F is 26.458which indicates that the correlation is unlikely to have happened by chance and also highly significant ($p<0.01$). For the second model the value of F is higher at 48.756, which can be interpreted as while the initial model significantly improved the ability to predict offshore outsourcing flows, the second model added some value as the F-ratio is more significant.

4.4.4.7 Model 3: Parameters and coefficients

A review of the Model 3 Beta-values indicates to what degree each of the political risk and external business variables affects the inward FDI flows, if the effects of all other predictors are held constant.

Table 109: Model 3 - Coefficients for complete model for FDI

Model		Std. Coef. Beta	t	Sig.
1	(Constant)		10.472	.000
	External Conflict	*-.153*	*-3.615*	*.000*
	Corruption	.222	2.761	.006
	Staff Security	*-.190*	*-3.222*	*.001*
	Quality of Bureaucracy	.250	3.725	.000
	Intellectual property protection	.761	6.737	.000
	Burden of customs procedures	*-.310*	*-3.957*	*.000*
	Judicial independence	*-.323*	*-3.639*	*.000*
2	(Constant)		13.012	.000
	External Conflict	.018	.509	.611
	Corruption	.122	1.757	.080
	Staff Security	*-.100*	*-2.039*	*.042*
	Quality of Bureaucracy	.023	.391	.696
	Intellectual property protection	.357	3.641	.000
	Burden of customs procedures	*-.177*	*-2.712*	*.007*
	Judicial independence	*-.293*	*-3.978*	*.000*
	Pillar 3 - Macro Environment	*-.241*	*-6.404*	*.000*
	Pillar 7 - Labor market efficiency	.399	9.356	.000
	Pillar 10 - Domestic Market Size	.489	12.993	.000
	GDP per Capita	.166	2.649	.008

Table 110: Model 3 - Collinearity statistics

Model		Tolerance	VIF
1	(Constant)		
	External Conflict	.880	1.136
	Corruption	.243	4.124
	Staff Security	.452	2.212
	Quality of Bureaucracy	.348	2.876
	Intellectual property protection	.123	8.148
	Burden of customs procedures	.256	3.906
	Judicial independence	.199	5.018
2	(Constant)		
	External Conflict	.784	1.275
	Corruption	.212	4.714
	Staff Security	.425	2.350
	Quality of Bureaucracy	.292	3.426
	Intellectual property protection	.106	9.466
	Burden of customs procedures	.237	4.214
	Judicial independence	.187	5.355
	Pillar 3 - Macro Environment	.715	1.399
	Pillar 7 - Labor market efficiency	.558	1.791
	Pillar 10 - Domestic Market Size	.716	1.397
	GDP per Capita	.260	3.851

4.4.4.8 Model 3: Summary of FDI specific political risk and external business variables

Through the process of linear regression analysis the research has firstly ranked the 12 key political risk variables identified in the P2 exploratory research in accordance with their ability to predict FDI inward flows to various country locations. Secondly, the research applied backward step-wise linear regression to identify the key most predictive political risk variables, limiting the variable set to 7 variables including External Conflict; Corruption; Staff Security; Quality of Bureaucracy; Intellectual property protection; Burden of customs procedures; Judicial independence with a combined R^2 value of .279, meaning with a predicative ability of 27.9%, which is slightly less than the 33.1% for the R^2 for offshore outsourcing

As indicated in the matrix and in isolation from the external business variables (Model 1 only), the model indicates a positive correlation between FDI flows and Intellectual property protection (Beta: .761, high T-value and significant at <.001); Quality of Bureaucracy (Beta: .250, second highest T-value and significant at <.001); and Corruption (Beta: .222, third lowest T-value but less significant at .006 and hence >.001). Similarly the model indicate a negative relationship between External Conflict; Staff security; Burden of customs and judicial independence all significant at <.001.

For the external business variables the model beta coefficients indicates a significant positive relationship between locations with high levels of Labour market efficiency and larger Domestic Market Size (all with high t-values and significant at <.001). There also appears to be a negative correlation between FDI flows and higher levels of macro environment stability (both with high t-values and significant at <.001).

4.5 Interpreting the Regression Analysis Results

4.5.1 Testing hypothesis #1

Hypothesis 1: Offshore outsourcing activities, as a non-equity and contract-based modality, are less sensitive to political risk considerations than general inward Foreign Direct Investment (FDI) in the choice of offshore locations.

A comprehensive review of the literature suggested that previous research have generally limited political risk research to ownership-based entry modes, or captive offshoring, on the notion that these entry modes represent a more complex investment form than contract-based entry modes like offshore outsourcing. The perception has been that since non-equity offshoring modalities have less capital at stake and no physical facilities at risk on the ground, political risk consideration should be a less significant concern. On this basis the research explored and mapped the extent to which offshore outsourcing and regular FDI differ in sensitivity to political risk in their offshore engagements.

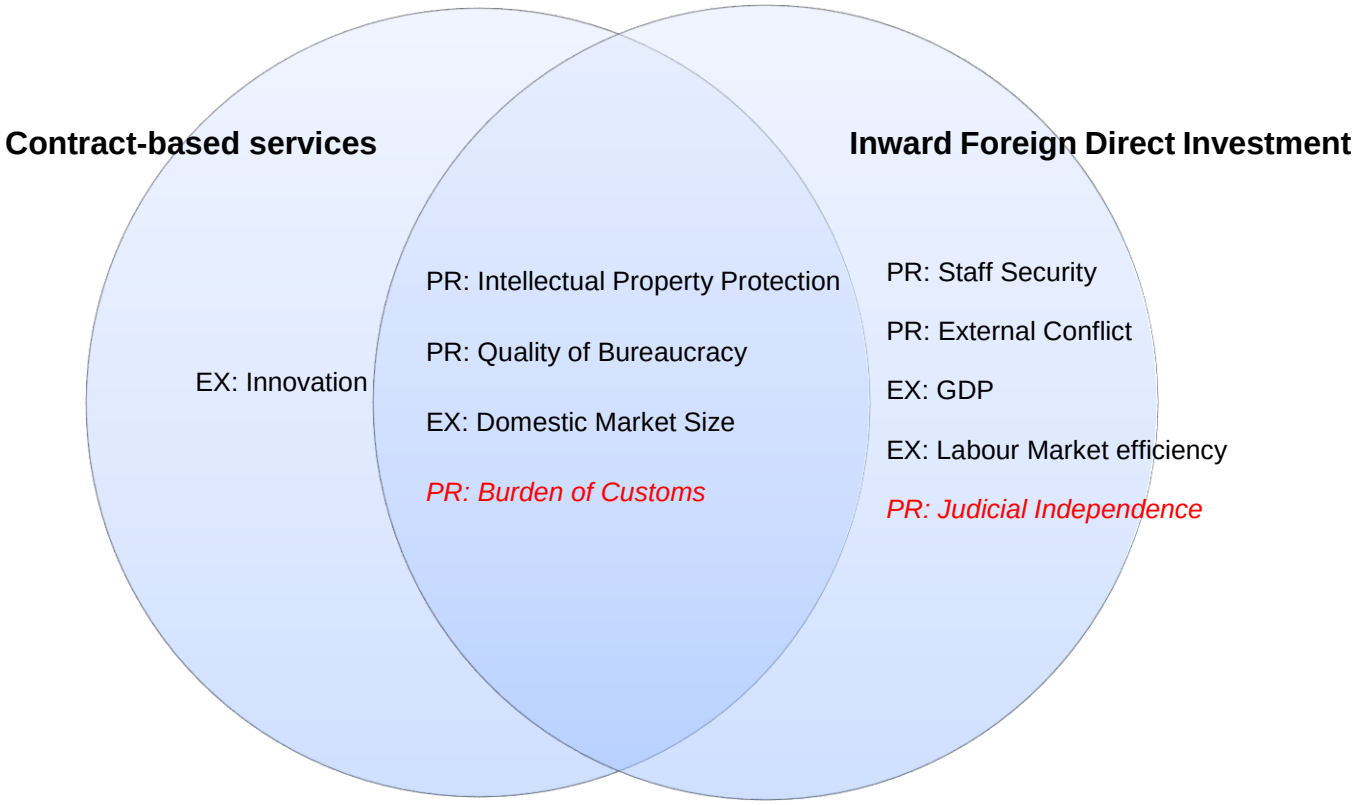
Firstly, in order to conduct a comparative analysis, the research applied the similar linear regression methodology for FDI inward flows as applied for the Offshore Outsourcing flow data. The analysis ranked the 12 key political risk variables identified in the exploratory research in accordance with their ability to predict offshoring flows to various country locations. Secondly, the research applied backward step-wise linear regression to identify the most predictive political risk variables, limiting the variable set to 7 variables, including External Conflict; Corruption; Staff Security; Quality of Bureaucracy; Intellectual property protection; Burden of customs procedures; Judicial independence with a combined R^2 value of .279, meaning with a predicative ability of 27.9%, which is slightly less than the 33.1% for the R^2 for offshore outsourcing. The same methodology was applied for external business variables and combined with the political risk findings yielding a model for predicting FDI flows with an R^2 of .544 meaning with a combined predicative ability of 54.4%.

In isolation from the external business variables (Model 1 only), the model indicates a positive correlation between FDI flows and Intellectual property protection (Beta: .761, high T-value and significant at <.001); Quality of Bureaucracy (Beta: .250, second highest T-value and significant at <.001); and Corruption (Beta: .222, third lowest T-value but less significant at .006 and hence >.001). Similarly the model indicate a negative relationship between External Conflict; Staff security; Burden of customs and judicial independence all significant at <.001. For the external business variables the model beta coefficients indicates a significant positive relationship between locations with high levels of Labour market efficiency and larger Domestic Market Size (all with high t-values and significant at <.001). There also appears to be a negative correlation between FDI flows and higher levels of macro environment stability (both with high t-values and significant at <.001).

Compared with the findings from the offshore outsourcing activities, the findings suggest a consistent overlap of key substantial variables, including Intellectual Property Protection; Quality of Bureaucracy and Burden of Customs all significant at <0.001 for both offshore outsourcing and FDI activities.

This is a significant finding as it highlights that for both FDI and outsourcing activities, institutional and regulatory factors in the host country are essential. Furthermore, the notion that Domestic Market size is a key external variable for both modalities suggest that an interlinkage between entry mode strategies and that offshore outsourcing should not be seen in isolation from companies longer-term market entry considerations.

Figure 12: Variables across offshore outsourcing versus FDI



The findings further suggest that both FDI and outsourcing activities operate in external environments characterized by high levels of custom burdens and macro-economic instability. This negative correlation suggests that much of the offshoring activities, whether FDI or outsourcing, take place in developing economies to leverage cost arbitrage, and that companies are identifying strategies to deal with these challenges. It should be noted that both offshoring and FDI flows appear related to environments which are considered politically vulnerable to both internal and external instability. However, for outsourcing activities Internal Conflict was non-significant at >.001 (.002) and External Conflict non-significant at >.001 (.025) For FDI External Conflict was significant at <.001.

The findings suggest that offshore outsourcing is less sensitive to security and stability related political risks like internal conflict, external conflict and staff security considerations than FDI, while equally sensitive to institutional and

regulatory variables relating to Intellectual Property Protection and Quality of Bureaucracy. The results can be considered as statistically significant and partly supporting the hypothesis that *Offshore outsourcing activities, as a non-equity and contract-based modality, is less sensitive to political risk considerations than general inward Foreign Direct Investment (FDI) in the choice of offshore locations.* The important distinction identified from the research is *what kind of* political risks is being considered. The findings confirms logically that political risks like security and conflict related risks will have a higher impact on investments with a physical presence including captive manufacturing plants or service centres. On the other hand, both contract-based outsourcing and FDI activities will equally be impacted by IP loss.

A final interesting finding is that the capacity for Innovation in a location appears to be a stronger predicative feature for contract-based offshoring than that of FDI. This findings suggest that while FDI is often designed as a means to access foreign markets or leverage labour arbitrage for manufacturing, offshore outsourcing is often more than a cost consideration and also a means to attract foreign talent and knowledge for competitive advantage. As these talent pools are often not available on the home market, offshore outsourcing becomes a tool for tapping into innovation centres around the world.

4.5.2 Testing hypothesis #2

Hypothesis 2: When the institutional and regulatory factors in the host country are strengthened, the volume of overall (ITO/BPO/KPO) contract-based offshore outsourcing will increase.

As summarized in the opening section, the findings of the explorative research on identifying and mapping political risk manifestations in offshore outsourcing suggests that the nature of offshore political risk exposure revolves increasingly around policy and legal predictability, including institutional capacity, confirming the relevance of incorporating institutional differentiations in the determination of external uncertainty. The below matrix summarizes the findings of 25 interviews and review of 91 offshore engagement cases, indicating that political risks with

the highest level of concern refers to policy, institutional capacity (bureaucracy) and legal unpredictability (contract enforcement).

Table 111: Overview of political risk distribution

Political Risk Description	Freq. of Mention	(%)
Policy predictability	25	21.6
Institutional capacity limitations	22	19.0
Legal unpredictability	19	16.4
Political instability	16	13.8
Instability of socio-economic environment	15	13.0
Macro-economic instability	7	6.0
Total	116	100%

This research project set out to determine if concerns with institutional and regulatory factors would translate into offshore outsourcing flows across a large sample of potential locations through the use of linear regression analysis. The methodology allowed for determining the measure of variability in the offshoring outsourcing flows accounted for by the 12 pre-identified political risk indicators. The findings suggest that the combined political risk variables account for a total of 38.0% of the variation in offshore outsourcing flows, confirming that political risk, in the choice of outsourcing supplier locations is a relevant and important factor in determining supplier choice and in post award of contract monitoring. With a small difference between R^2 and adjusted R^2 value at 1.7% the research findings further have a confirmed high generalizability level suggesting that the regression equation has significant validity.

Through the use of stepwise back ward regression, the methodology further allowed for a measure of the individual impact of each Political Risk variable as a predictor of offshore outsourcing flows, as a means for classification of relative importance. As captured in the findings matrix below, the beta coefficients indicates a significant and positive coefficient for Intellectual property protection regulations and the quality of bureaucracy. Similarly, there is a significant and negative relationship with the Burden of customs procedures. A less significant negative relationship also exists with Internal and external conflict, plus

government stability indicating a lesser impact on the predictive ability of the indicator in the model.

Table 112: Overview of coefficients and collinearity statistics

Model	Std. Coef.	t	Sig.	Correlations			Collinearity Statistics	
	Beta			Zero-order	Partial	Part	Tolerance	VIF
(Constant)		12.733	.000					
Intellectual property protection	.618	7.352	.000	.477	.331	.278	.202	4.942
Burden of customs procedures	*-.352*	*-4.841*	*.000*	*.297*	*-.225*	*-.183*	*.270*	*3.700*
Quality of Bureaucracy	.353	5.885	.000	.503	.270	.223	.397	2.519
Internal Conflict	*-.153*	*-3.145*	*.002*	*.051*	*-.148*	*-.119*	*.604*	*1.654*
External Conflict	*-.100*	*-2.246*	*.025*	*-.012*	*-.106*	*-.085*	*.716*	*1.397*
Government Stability	*-.078*	*-1.950*	*.052*	*-.111*	*-.093*	*-.074*	*.892*	*1.121*

The results of the regression analysis are clearly in line with the exploratory research findings, confirming a positive and significant relationship between offshore outsourcing flows and intellectual property protection and quality of bureaucracy. Similarly, the negative and significant relationship between burden of customs procedures and offshore outsourcing flows further confirms, together with the non-significant > .001 internal and external conflict and government stability variables, that offshore outsourcing engagements extend into often unstable and unpredictable environments. The degree of acceptable risk exposure is likely a consideration driven by cost-pressures, compelling companies to engage in low-cost countries at various political development stages. Overall the results can be considered as statistically significant and validating hypothesis #1 stating that "*When the institutional and regulatory factors in the host country are strengthened, the volume of overall (ITO/BPO/KPO) contract-based offshore outsourcing will increase".*

For the set of external business variables the model beta coefficients indicates a significant positive relationship between locations with high levels of labour

market efficiency, capacity for innovation and presenting a larger domestic market size (all with high t-values and significant at <.001). In addition technological readiness scores a high Beta and t-value, however the significance level is slightly lower at <.005. There also appears to be a negative correlation between offshore outsourcing flows and improved levels of higher education and more stable macro environment variables (both with high t-values and significant at <.001).

Overall the research produced a model with an R^2 value of .553 indicating that the final model account for a total of 55.3% of the variation in offshore outsourcing flows. The adjusted R^2, providing an indication of the generalizability of the model, suggests that if the model was derived from the full population rather than the given sample it would account for 0.8% less variance in the outcome suggesting a high level of generalizability.

There is a potential problem with autocorrelation of the disturbances within the data, which is often the case with time-series regression analysis. The standard Durbin–Watson d statistic provides an indication of autocorrelations and is computed at a value of .398 (Model 3), indicating a positive first-order serial correlation for the data sample. One consequence of autocorrelation might be that some or all estimated coefficients are biased, which could affect the interpretation of the relative impact of the indicators for political risk and institutions on foreign investment.

As further to the analysis provided on the overall sample of countries with outsourcing activities, the research also explored the particular political risk dynamics surrounding offshore outsourcing to low-cost countries, to test for any significant difference in outcome. The findings for the non-high income countries confirms the importance of institutional capacity through the positive relationship with the variable on quality of bureaucracy in the host location for both high and non-high income countries, and reconfirms that the bulk of offshore outsourcing takes place in locations with a potential instability reflected in the negative relationship with internal conflict variables. However, while the capacity for

Innovation as a predictor for offshore outsourcing flows is predominant in the all-inclusive sample, it is non-significant in the context of non-high income countries. This suggests that while companies use offshore outsourcing as a means to access talent and innovation, this outreach is mainly targeting high-income locations. This similarly, explains the non-significant relationship with Intellectual Property Rights legislation in the context of non-high-income countries, as less high-end KPO activities will be directed to these locations.

4.5.3 Testing hypothesis #3

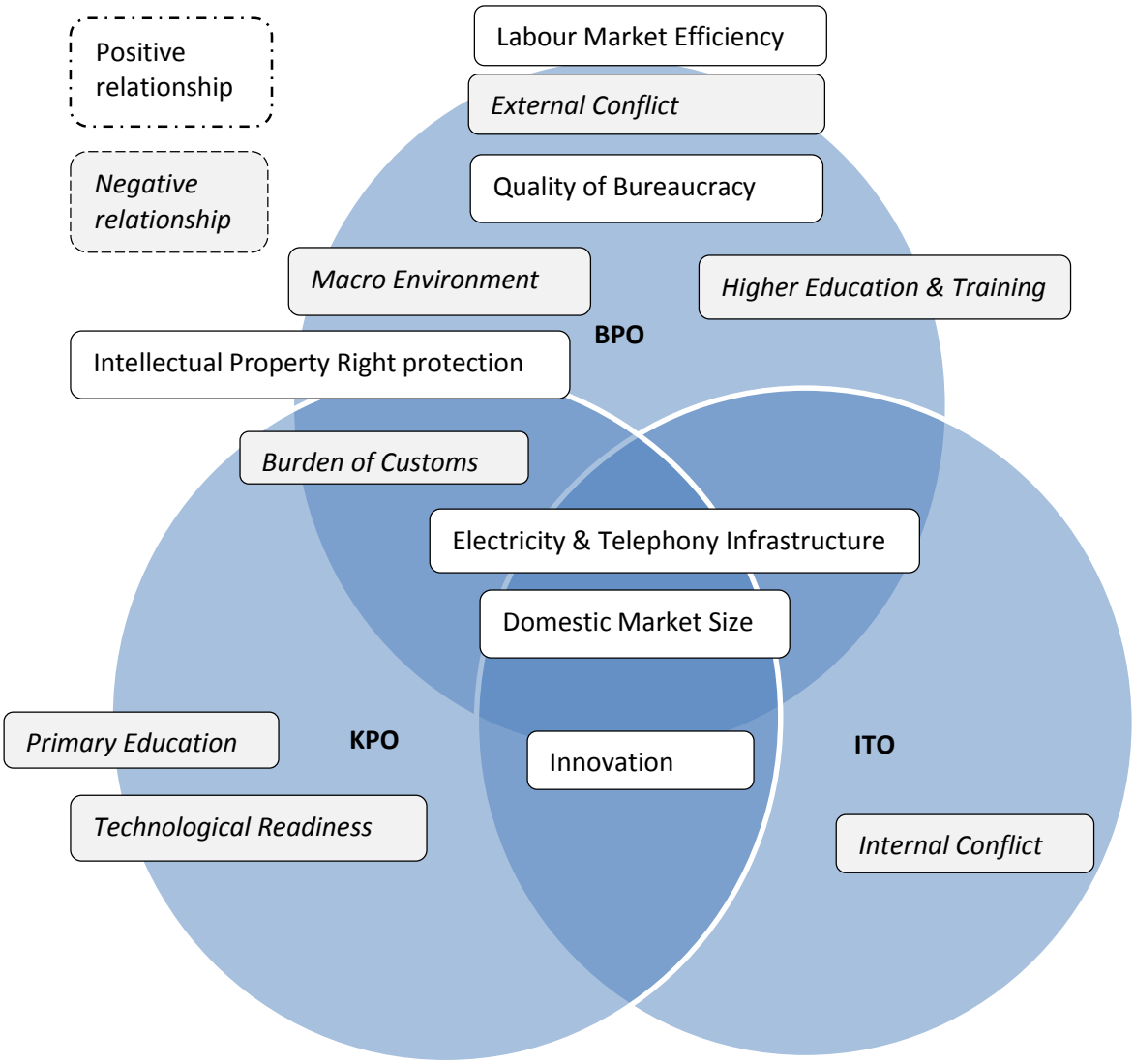
Hypothesis 3: When the institutional and regulatory factors in the host country are strengthened, the offshore outsourcing volumes of business activities with a higher knowledge content (KPO) is likely to increase.

As per the exploratory research, the further association of knowledge-based outsourcing (KPO) with loss of IP, policy change on foreign ownership and contract enforcement risks, suggests that institutional capacity i.e. legal enforcement of IP rights and contracts becomes increasingly important as the knowledge content and value of services are enhanced. The exploratory findings suggested that the company specific risk profile changes subject to the level of service value involved in the offshoring engagement and that risk should be considered in the context of low versus high value service delivery as a key distinction for the nature and level of exposure.

On this background the research explored the potential impact of the pre-identified political risk variables and external business environment variables in the offshore flows for the three identified types of offshore outsourcing i.e. ITO/KPO/BPO in order to present a comparative analysis. Through the process of linear regression analysis the research firstly ranked the 12 key political risk variables identified in the exploratory research in accordance with their ability to predict activity specific offshore outsourcing flows to various country locations. Secondly, the research applied backward step-wise linear regression to identify the key most predictive political risk variables, limiting the variable sets to the key variables for each outsourcing activity. The analysis yielded R values between

.517 up to .606 indicating the values of the multiple correlation coefficient between the 12 Political Risk Indicators and the offshore outsourcing flows for ITO/KPO/BPO (dependent variables). The value of the R^2, measuring how much of the variability in the offshore outsourcing flows is accounted for by the 12 indicators, is stated as (ITO - .267, KPO - .277 and BPO - .368). This indicates that the 12 political risk indicators account for a total of 26.7 to 27.7% of the variation in offshore outsourcing flows for ITO and KPO segments, and 36.8% of the BPO segment.

Figure 13: Variables across offshore outsourcing activities



The adjusted R2 provides an indication of the generalizability of the model and should ideally be very close to the R2 value. From the summary below it is clear that the difference is small for BPO at .368-.350-= 0.018 (or 1.8%), indicating that if the model was derived from the full population of BPO engagements rather than the given sample it would account for 1.8% less variance in the outcome. However, for ITO and KPO, the generalizability seems less at 3.0% for ITO and 4.3% for KPO, which is likely linked to the reduced N-sample size.

For the political risk variables the positive relationship between Quality of Bureaucracy and flows across all offshore outsourcing activities is a consistent trend with Beta values around .216-.268, however significant at <.001 for BPO only, while non-significant for KPO and ITO at >.001. For ITO the primary, and only significant variable at <.001 was Internal Conflict suggesting that ITO is more often outsourced to unstable locations. For BPO the primary risk variable was Intellectual Property Right protection with the highest Beta and T-value and significant at < .001. For BPO there are similar, less high Beta values, indicating negative relationships between BPO outsourcing and external conflict and Burden of Customs procedures both significant at < .001. For KPO the two primary variables were a positive and significant relationship with intellectual property protection with the by far highest Beta value (across all activities) and a negative relationship with Burden of Customs procedures also significant at .001.

In terms of external variables the ITO flows have a positive relationship with Domestic Market size and Innovation, both significant at .001, and a negative relationship with Electricity and telephony infrastructure. For KPO Innovation and Electricity and telephony infrastructure were both the primary and significant positive drivers, followed by Domestic Market size and Macroeconomic environment. Ironically Technical readiness featured as the highest negative variable followed by primary education, both significant at .001. Finally for BPO the main positive drivers were Electricity and telephony infrastructure and Domestic market, followed by Labour Market Efficiency. Contrary to ITO and KPO, Innovation was non-significant at > .001.

A review of the relationship with key political risk variables and cross-offshore outsourcing confirm that the offshore outsourcing industry cannot be assessed as one holistic group in terms of detailed risk assessment but should be reviewed through the lens of their activities i.e. ITO, KPO or BPO.

The indication of a negative relationship between ITO and offshore outsourcing flows suggest that ITO activities are more often outsourced to locations more exposed to internal conflict. One reason for this could be that the nature of the ITO activities are easier to divert in case of unrest and/or be completed through home-based arrangements a part of a business continuity plan. On a more detailed review of the dependent variable data in (Annex C.6), it is also clear that ITO outsourcing remains dominated by the India market. This may distort the findings as India, while being assessed through a one-country ratings in the independent variables, is a sub-continent with several outsourcing locations with varying exposure to country level or regional political risk events.

The finding that BPO activities have a positive relationship with mainly Quality of Bureaucracy and Labour Market efficiency suggests that typical BPO activities like management of call centres and back-office support activities is more labour intensive and requires more regulatory engagement with governments for the local suppliers of services. As BPO outsourcing contracts often become more integrated and require more long term and in-depth relationships it would make sense that HR and regulatory related issues experienced by the local contractors are more of a collective concern and hence a shared problem with the service buyer. Similarly, in order to leverage cost arbitrage for labour intensive back-office work the offshore outsourcing would often take place in a weak Macroeconomic environment, which explains the negative relationship, and in regions characterized by geo-political tension, but less so of internal conflict that could cause service distribution for the BPO activity.

As suspected the KPO segment came out with a strong and significant (at <.001) positive relationship with the strength of Intellectual Property Rights frameworks to protect any R&D activities conducted by the outsourcing companies. A more

detailed review of KPO flows in Annex C. 7, highlights that most of KPO activities are directed to locations like the United States, Germany, Canada and other EU locations. Overall the results can be considered as statistically significant indicating a strong statistical relationship between KPO flows and institutional capacity to protect against IP loss. While the findings are statistically significant the research cannot establish direct causality between the parameters and therefore only partly validating hypothesis #3: *When the institutional and regulatory factors in the host country are strengthened, the in-coming offshore outsourcing volumes of business activities with a higher knowledge content (KPO) is likely to increase.* The findings suggest that to attract KPO activities the location needs to ensure specifically the appropriate Intellectual Property Rights framework to safe guard the outputs of the R&D activities.

In terms of external business variables, domestic market size and basic electricity and telephony are the most important factors across all offshore outsourcing activities. While the need for a functioning basic electric and telephone infrastructure is intuitive it is also surprising in the sense that much of the outsourcing activities are assumed to take place in developing economies, and hence the infrastructure requirements will despite any cost incentives, bring a natural limit to outsourcing flows to many economies without the necessary infrastructure in place. More surprising is perhaps the pull-effect of a large domestic market, as contract-based offshoring is generally assumed to serve external entities i.e. through call centre activities, IT application management etc. The pull-effect of larger markets, and positioning of contract-based offshore outsourcing activities in potential domestic markets, suggests that offshore outsourcing could be considered part of a larger market entry strategy in line with the stages Model of Internationalization thinking (Valne and Johansson, 1977).

4.6 Concluding Comments

Since the 1990s offshoring has been a common feature in manufacturing strategies, and with technological advances within telecommunication and IT the

offshoring of services, like back-office operations and call centres, has joined the portfolio of business activities that are being consistently outsourced abroad.

The focus of this research has been to analyse and map political risk in the context of the offshore outsourcing industry to enhance the understanding of political risk as a determinant of offshore outsourcing location decisions. The systematic literature review suggested that previous political risk research have generally been limited to ownership-based activities, or captive offshoring, on the notion that these operations represent a more complex investment form than a contract-based operation. The perception has been that since non-equity offshoring modalities have less capital at stake and no physical facilities at risk on the ground, political risk consideration should be a less significant concern. On this notion there has been an absence of an analytical framework that goes beyond captive offshoring and that can adequately contribute, either in a taxonomic or an operational sense, to improve political risk management within the offshore outsourcing industry.

To overcome this gap this research applied an evidence-based approach, soliciting data from 25 interviewees and reviewing a total of 91 offshore engagements. The political risks experienced in offshoring engagements was mapped against the political risk indicators identified in the systematic literature and suggested that the offshore outsourcing industry was largely concerned with institutional and regulatory stability like contract enforcement, bureaucracy and corruption considerations, including political risk emanating from the home country government. Furthermore, the findings suggested a differentiation of political risk concerns across various types of outsourcing typologies, including Information Technology Outsourcing (ITO), Business Process Outsourcing (BPO) and Knowledge-based Outsourcing (KPO). Based on the literature review and findings of the exploratory study on political risk exposure among offshoring practitioners, a series of suggested correlations between offshoring firm's location decisions and political risk related predictors in the external location environment was hypothesized.

To analyse the significance of the hypotheses the research applied a linear multiple regression methodology based on aggregate and activity specific (ITO, KPO and BPO) datasets generated from the IMF Balance of Payment (BoP) database to function as the dependent variables. For the purpose of identifying appropriate data sources to compile the independent variable datasets a comprehensive review of existing governance and country indicators was conducted and a dataset compiled from various sources including the ICRG Index and the Global Competitiveness Index (GCI from the World Economic Forum). As research on offshore outsourcing has been hampered by the absence of available data, one of the major contributions of this research is the design and compilation of a dataset capturing location specific offshore outsourcing flows and the corresponding break-down into ITO, KPO and BPO specific categories.

Firstly, the research results validated the findings of the exploratory research, confirming a positive relationship between offshore outsourcing flows and institutional and regulatory factors. The research findings highlighted a positive and significant relationship between Intellectual Property Rights protection and the Quality of Bureaucracy and increased inflows of contract-based offshore outsourcing activities. The validated the hypothesis that "*When the institutional and regulatory factors in the host country are strengthened, the volume of overall (ITO/BPO/KPO) contract-based offshore outsourcing will increase".*

The research further analysed activity specific offshore outsourcing activities and mapped the political risk accounting for the highest variability in the offshoring outsourcing flows. The findings showed a dispersed distribution of political risk variables across ITO/KPO and BPO engagements, confirming the relevance of also analysing offshore outsourcing according to the nature of the outsourcing activity, rather than solely as a consolidated industry. Despite the contradictory results from the cross-industry analysis, the research obtained a significant (and positive) coefficient for Intellectual Property Rights protection with a very high Beta value for KPO activities, a significant but lower positive value for BPO and no indicated importance for ITO activities. These results are broadly in line other research suggesting that IP considerations and enforcement is a key feature in

companies R&D offshore location or entry mode decisions (Martinz-Noya and Garcia-Canal, 2011; Colovic, 2011). Overall the results partly validate that the hypotheses that "When the institutional and regulatory factors in the host *country are strengthened, and the business activity is of a higher knowledge content (KPO), the offshore outsourcing volumes will increase more than that of ITO and BPO engagements".* The findings suggest that to attract KPO activities the location needs to ensure specifically the appropriate Intellectual Property Rights framework to safe guard the outputs of the R&D activities.

Finally, the research addressed the perception that offshore outsourcing, as an offshoring modality is less susceptible to political risk and since non-equity offshoring modalities have less capital at stake and no physical facilities at risk on the ground, political risk consideration should be a less significant concern.

The results of the research validated that political risk is a genuine issue of concern in offshore outsourcing, despite being contract-based and therefore technically "outsourcing" risks to the suppliers. The research indicated that the 12 identified political risks accounted for 38.0% of the variability in the offshoring outsourcing flows suggesting that concerns about service disruptions and/or suppliers forwarding cost implications of external uncertainties to the service buyer features as a factor in considering supplier and location choice. The important distinction between offshore outsourcing and FDI activities identified from the research is *what kind of* political risks is being considered. The research yielded a significant and positive relationships with Intellectual Property Right protection and Bureaucracy, for both Offshore Outsourcing and FDI activities, while FDI locations was also related to security and conflict related variables. The findings confirms logically that political risks like security and conflict related risks will have a higher impact on investments with a physical presence including captive manufacturing plants or service centres, while contract-based outsourcing and FDI activities will be equally concerned with risks concerning IP loss and quality of bureaucracy.

As potential host countries compete to attract offshore outsourcing activities as a basis to enhance employment and project knowledge transfer opportunities into their economies, it would be prudent to take note of the perceived importance of strengthening institutional and regulatory factors. If the host country is seeking to attract outsourcing contracts within the areas of R&D, it would be especially important to ensure that the appropriate IP regulatory frameworks are in place, while for the more labour intensive BPO activities, a well-functioning labour market and minimal bureaucracy would have a high impact. While beyond the immediate scope of this research, it is also noteworthy to acknowledge that a well-functioning supporting ITC infrastructure in potential host countries is fundamental in order to attract offshore outsourcing activities.

REFERENCES

AGARWAL, J. and FEILS, D., 2007. Political Risk and the Internationalization of Firms: An Empirical Study of Canadian-based Export and FDI Firms. *Canadian Journal of Administrative Sciences (Canadian Journal of Administrative Sciences),* 24(3), pp. 165-181.

AKHTER, S.H. and CHOUDHRY, Y.A., 1993. Forced withdrawal from a country market: Managing political. *Business horizons,* 36(3), pp. 47.

AL KHATTAB, A., ALDEHAYYAT, J. and STEIN, W., 2010. Informing Country Risk Assessment in International Business. *International Journal of Business and Management,* 5(7), pp. 54-62.

ALON, I., GURUMOORTHY, R., MITCHELL, M.C. and STEEN, T., 2006. Managing micro-political risk: A cross-sector examination. *Thunderbird International Business Review,* 48(5), pp. 623-642.

ALON, I. and HERBERT, T.T., 2009. A stranger in a strange land: Micro political risk and the multinational firm. *Business horizons,* 52(2), pp. 127-137.

ANDERSON, E. and GATIGNON, H., 1986. Modes of Foreign Entry: A Transaction Cost Analysis and Propositions. *Journal of International Business Studies,* 17(3), pp. 1.

A.T. Kearney, 2014. Global Services Location Index (GSLI), URL: https://www.atkearney.com/research-studies/global-services-location-index. Accessed 15/02/2015.

AUBERT, B.A., RIVARD, S. and PATRY, M., 2004. A transaction cost model of IT outsourcing. *Information & Management,* 41(7), pp. 921.

BAAS, D, (2009) *"Approaches and challenges to political risk assessment*: The view from Export Development Canada", Risk Management, Vol. 12, 2010.

BARDHAN, A., JAFFEE, D. M. and KROLL, C. A. (eds.) (2013). *The Oxford Handbook of Offshoring and Global Employment,* 1st ed., Oxford University Press, UK.

BEKEFI, T. and EPSTEIN, M.J., 2008. Measuring and Managing Social and Political Risk. *Strategic Finance,* 89(8), pp. 33-41.

BELSO-MARTINEZ, J.A., 2010. Outsourcing Decisions, Product Innovation and the Spatial Dimension: Evidence from the Spanish Footwear Industry. *Urban Studies,* 47(14), pp. 3057.

BERGER, P.D. and ZENG, A.Z., 2006. Single versus multiple sourcing in the presence of risks. *Journal of the Operational Research Society,* 57(3), pp. 250-261.

BERGNER, D.J., 1982. Political Risk Analysis: An Asset Now, Soon A 'Must'. *Public Relations Quarterly,* 27(2), pp. 28.

BLACKMAN, A. and WU, X., 1999. Foreign direct investments in China's power sector: Trends, benefits, and barriers. *Energy Policy,* 27(12), pp. 695-711.

BODDEWYN, J.J. and BREWER, T.L., 1994. International-business political behavior: New theoretical directions. *Academy of Management. The Academy of Management Review,* 19(1), pp. 119-119.

BREWER, T.L., 1993. Trends in International Business, Thought, and Literature: The Past and Future of Political Analysis for International Business. *International Executive,* 35(6), pp. 539-548.

BREWER, T.L., 1983. The Instability of Governments and the Instability of Controls on Funds Transfers by Multinational Enterprises: Implications for Political Risk Analysis. *Journal of International Business Studies,* 14(3), pp. 147-157.

BREWER, T.L., 1981. Political Risk Assessment for Foreign Direct Investment Decisions: Better Methods for Better Results. *Journal of World Business,* 16(1), pp. 5-5.

BROUTHERS, K.D., 1995. The Influence of International Risk on Entry Mode Strategy in the Computer Software Industry. *Management International Review (MIR),* 35(1), pp. 7-28.

BROUTHERS, K.D., BROUTHERS, L.E. and WERNER, S., 2008. Resource-Based Advantages in an International Context. *Journal of Management,* 34(2), pp. 189-217.

BROUTHERS, K.D., BROUTHERS, L.E. and WERNER, S., 2002. Industrial sector, perceived environmental uncertainty and entry mode strategy. *Journal of Business Research,* 55(6), pp. 495-507.

BURT, D.N., DOBLER, D.W. and STARLING, S.L., 2003. *World Class Supply Management: The Key to Supply Chain Management.* 7 ed. New York, USA: McGraw-Hill Irwin.

BUSSE, M. and HEFEKER, C., 2007. Political risk, institutions and foreign direct investment. *European Journal of Political Economy,* 23(2), pp. 397-415.

BUTLER, K.C. and JOAQUIN, D.C., 1998. A Note on Political Risk and the Required Return on Foreign Direct Investment. *Journal of International Business Studies,* 29(3), pp. 599-607.

CHASE, C.D., KUHLE, J.L. and WAITHER, C.H., 1988. The Relevance of Political Risk in Direct Foreign Investment. *Management International Review (MIR),* 28(3), pp. 31-38.

CHEVALIER, A. and HIRSCH, G., 1981. The Assessment of the Political Risk in the Investment Decision. *The Journal of the Operational Research Society,* 32(7), pp. 599-599.

CHOW, G., 2008. Getting Back to Basics. *Canadian Transportation & Logistics,* 111(10), pp. 40-40.

CHRISTOPHER, M., MENA, C., KHAN, O. and YURT, O., 2011. Approaches to managing global sourcing risk. *Supply Chain Management,* 16(2), pp. 67-81.

CHRISTOPHER, M., PECK, H. and TOWILL, D., 2006. A taxonomy for selecting global supply chain strategies. *International Journal of Logistics Management,* 17(2), pp. 277-287.

CLARK, E. and TUNARU, R., 2003. Quantification of political risk with multiple dependent sources. *Journal of Economics and Finance,* 27(2), pp. 125-135.

CLICK, R.W., 2005. Financial and political risks in US direct foreign investment. *Journal of International Business Studies,* 36(5), pp. 559-575.

COASE, R. H. (1937), "The Nature of the Firm", *Economica,* vol. 4, no. 1, pp. 386-405.

CONTRACTOR, F., KUMAR, V., KUNDU, S. and PEDERSEN, T., 2010. Reconceptualizing the Firm in a World of Outsourcing and Offshoring: The Organizational and Geographical Relocation of High-Value Company Functions. *The Journal of Management Studies,* 47(8), pp. 1417.

COPLIN, W.D. and O'LEARY, M.K., 1983. Political Risk Analysis for Extractive Industries. *Strategy & Leadership,* 11(2), pp. 16-16.

COSSET, J. and ROY, J., 1991. The Determinants of Country Risk Ratings. *Journal of International Business Studies,* 22(1), pp. 135-142.

CUPITT, R.T., 1990. Foreign Political Risk Assessment: Government Instability and Nontariff Barriers to Trade. *International Trade Journal,* 4(4), pp. 341-355.

DAVID, R.J. and HAN, S., 2004. A Systematic Assessment of the Empirical Support for Transaction Cost Economics. *Strategic Management Journal,* 25(1), pp. 39-58.

DE MORTANGES, C.P. and ALLERS, V., 1996. Political risk Assessment: Theory and the Experience of Dutch Firms. *International Business Review,* 5(3), pp. 303.

DELIOS, A. and HENISZ, W.J., 2003. Political Hazards, Experience, and Sequential Entry Strategies: the International Expansion of Japanese Firms, 1980-1998. *Strategic Management Journal,* 24(11), pp. 1153-1164.

DEMIRBAG, M. and GLAISTER, K.W., 2010. Factors Determining Offshore Location Choice for R&D Projects: A Comparative Study of Developed and Emerging Regions. *The Journal of Management Studies,* 47(8), pp. 1534.

DEMIRBAG, M., MCGUINNESS, M. and ALTAY, H., 2010. Perceptions of Institutional Environment and Entry Mode: FDI from an Emerging Country. *Management International Review,* 50(2), pp. 207-240.

DENYER, D. and TRANFIELD, D., 2009. Producing a systematic review. Sage Publications.

DENYER, D., TRANFIELD, D. and AKEN, J.V., 2008. Developing design propositions through research synthesis. *Organization Studies,* 29(3), pp. 393-413.

DESBORDES, R., 2010. Global and Diplomatic Political Risks and Foreign Direct Investment. *Economics & Politics,* 22(1), pp. 92-125.

DI GREGORIO, D., 2005. Re-thinking country risk: insights from entrepreneurship theory. *International Business Review,* 14(2), pp. 209-226.

DUNNING, J.H., 2000. The eclectic paradigm as an envelope for economic and business theories of MNE activity. *International Business Review,* 9(2), pp. 163.

DUNNING, J.H., 1980. Toward an Eclectic Theory of International Production: some Empirical Tests. *Journal of International Business Studies,* 11(1), pp. 9-31.

EDMONDSON, A.C. and MCMANUS, S.E., 2007. Methodological Fit in Management Field Research. *Academy of Management Review,* 32(4), pp. 1155-1179.

ELLRAM, L.M., TATE, W.L. and BILLINGTON, C., 2008. Offshore outsourcing of professional services: A transaction cost economics perspective. *Journal of Operations Management,* 26(2), pp. 148-163.

EROL, C., 1985. An Exploratory Model of Political Risk Assessment and the Decision Process of Foreign Direct Investment. *International Studies of Management & Organization,* 15(2), pp. 75-91.

ERRAMILLI, M.K., 1992. Influence of some external and internal environmental factors on foreign market entry mode choice in service firms. *Journal of Business Research,* 25(4), pp. 263.

FATEHI-SEDEH, K. and SAFIZADEH, M.H., 1989. The Association Between Political Instability and Flow of Foreign Direct Investment. *Management International Review (MIR),* 29(4), pp. 4-13.

FEINBERG, S.E. and GUPTA, A.K., 2009. Mnc Subsidiaries and Country Risk: Internalization as a Safeguard Against Weak External Institutions. *Academy of Management Journal,* 52(2), pp. 381-399.

FIELD, A., 2009. *Discovering Statistics Using SPSS.* Second Edition edn. United Kingdom: Sage.

FITZPATRICK, M., 1983. The Definition and Assessment of Political Risk in International Business: A Review of the Literature. *Academy of Management Review,* 8(2), pp. 249-254.

FLAMM, K., 1984. The Volatility of Offshore Investment. *Journal of Development Economics,* 16(3), pp. 231-231.

FRYNAS, J., MELLAHI, K. and PIGMAN, G.A., 2006. First mover advantages in international business and firm-specific political resources. *Strategic Management Journal,* 27(4), pp. 321-345.

FRYNAS, J.G. and MELLAHI, K., 2003. Political Risks as Firm-Specific (Dis) Advantages: Evidence on Transnational Oil Firms in Nigeria. *Thunderbird International Business Review,* 45(5), pp. 541-565.

GAO, Y., 2009. Managing Political Risk in Cross-national Investment: A Stakeholder View. *Singapore Management Review,* 31(1), pp. 99-114.

GARVER, P., 2009. The Changing Face of Political Risk. In: G. VERHEYEN, ed, *Investing with Confidence: Understanding Political Risk Management in the 21st Century.* 1 edn. Washington, USA: The International Bank for Reconstruction and Development/The World Bank, pp. 81-90.

GHOLAMI, S., 2012. Critical Risk Factors in Outsourced Support Projects of IT. *Journal of Management Research,* 4(1), pp. 1-13.

GILLESPIE, K., 1989. Political Risk Implications for Exporters, Contractors and Foreign Licensors: The Iranian Experience. *Management International Review (MIR),* 29(2), pp. 41-52.

GIUNIPERO, L.C., 2004. Securing the upstream supply chain: a risk management approach. *International Journal of Physical Distribution & Logistics Management,* 34(9), pp. 698-713.

GOFFIN, K., 2009. Repertory Grid Technique. In: D. PARTINGTON, ed, *Essential Skills for Management Research.* Second edn. London: Sage Publications, pp. 199-225.

GOFFIN, K., 1994. *Repertory Grids in Market Research: An Example.* Working Paper Series edn. United Kingdon.

GOFFIN, K., RAJA, J., CLAES, B., SZWEJCZEWSKI, M. and MARTINEZ, V., 2012. Rigor in qualitative supply chain management research: lessons from applying repertory grid technique. *International Journal of Physical Distribution & Logistics Management,* 42(8), pp. 804-827.

GOODMAN, S.E. and RAMER, R., 2007. Identify and Mitigate the Risks of Global IT Outsourcing. *Journal of Global Information Technology Management,* 10(4), pp. 1-6.

GRAF, M. and MUDAMBI, S.M., 2005. The outsourcing of IT-enabled business processes: A conceptual model of the location decision. *Journal of International Management,* 11(2), pp. 253-268.

GREEN, R.T., 1974. Political Structures as a Predictor of Radical Political Change. *Columbia Journal of World Business,* 9(1), pp. 28.

GREEN, R.T. and KORTH, C.M., 1974. Political Instability and the Foreign Investor. *California management review,* 17(1), pp. 23-31.

HAHN, E.D., DOH, J.P. and BUNYARATAVEJ, K., 2009a. The Evolution of Risk in Information Systems Offshoring: the Impact of Home Country Risk, Firm Learning, and Competitive Dynamics. *MIS Quarterly,* 33(3), pp. 597-616.

HAIR, J.F., BLACK, W.C., BABIN, B.J. and ANDERSON, R.E., 2011. *Multivariate Data Analysis.* 7th edition edn. People's Republic of China: China Machine Press.

HANNER, F.T., 1979. Rating Investment Risks Abroad. *Business horizons,* 22(2), pp. 18.

HATONEN, J., ERIKSSON, T. and PAJU, T., 2009. 30+ years of research and practice of outsourcing - exploring the past and anticipating the future. *Journal of international management,* 15(2), pp. 142-155.

HENISZ, W.J. and HENISZ, W.J., 2000. The institutional environment for multinational investment. *Journal of Law, Economics & Organization,* 16(2).

HENISZ, W.J. and DELIOS, A., 2004. Information or influence? The benefits of experience for managing political uncertainty. *Strategic Organization,* 2(4), pp. 389-421.

HENISZ, W.J., MANSFIELD, E.D. and VON GLINOW, M.A., 2010. Conflict, security, and political risk: International business in challenging times. *Journal of International Business Studies,* 41(5), pp. 759-764.

HENISZ, W.J. and ZELNER, B.A., 2010. The Hidden Risks in Emerging Markets. *Harvard business review,* 88(4), pp. 88-95.

HENISZ, W.J., 2004. Political Institutions and Policy Volatility. *Economics & Politics,* 16(1), pp. 1-27.

HERATH, T. and KISHORE, R., 2009. Offshore Outsourcing: Risks, Challenges, and Potential Solutions. *Information Systems Management,* 26(4), pp. 312.

HILL, C. W. L., HWANG, P. and CHAN, W. K., 1990. An Eclectic Theory of the Choice of International Entry Mode, Strategic Management Journal, 11 (February), 117-128.

HOWELL, L.D., 2007. Political risk at the interface of civilizations: Bosnia and Herzegovina, Croatia, Iraq, and the United Arab Emirates. *Thunderbird International Business Review,* 49(4), pp. 403-416.

HOWELL, L.D., 1994. In harm's way. *World Trade,* 7(10), pp. 58.

HOWELL, L.D., 1992. Political Risk and Political Loss for Foreign Investment. *The International Executive (1986-1998),* 34(6), pp. 25.

HOWELL, L.D. and XIE, D., 1996. Asia at risk: the impact of methodology in forecasting. *Management Decision,* 34(9), pp. 6-16.

HOWELL, L.D. and CHADDICK, B., 1994. Models of Political Risk for Foreign Investment and Trade. *Columbia Journal of World Business,* 29(3), pp. 70-91.

IANKOVA, E. and KATZ, J., 2003. Strategies for political risk mediation by international firms in transition economies: the case of Bulgaria. *Journal of World Business,* 38(3), pp. 182.

IINTERNATIONAL MONETART FUND (IMF), 2007. *Balance of Payments and International Investment Position Manual*, Sixth Edition (BPM6). URL: https://www.imf.org/external/pubs/ft/bop/2007/pdf/bpm6.pdf.

JACKSON, G. and DEEG, R., 2008. Comparing capitalisms: understanding institutional diversity and its implications for international business. *Journal of International Business Studies,* 39(4), pp. 540-561.

JAKOBSEN, J., 2010. Old problems remain, new ones crop up: Political risk in the 21st century. *Business horizons,* 53(5), pp. 481-490.

JENSEN, N., 2008. Political Risk, Democratic Institutions, and Foreign Direct Investment. *Journal of Politics,* 70(4), pp. 1040-1052.

JENSEN, N.M. and JOHNSTON, N.P., 2011. Political Risk, Reputation, and the Resource Curse. *Comparative Political Studies,* 44(6), pp. 662-688.

JENSEN, N.M. and YOUNG, D.J., 2008. A Violent Future? Political Risk Insurance Markets and Violence Forecasts. *The Journal of Conflict Resolution,* 52(4), pp. 527.

JIMÉNEZ, A., 2010. Does political risk affect the scope of the expansion abroad? Evidence from Spanish MNEs. *International Business Review,* 19(6), pp. 619-633.

JIMÉNEZ, A., DE, L.F. and DURÁN, J.J., 2011. Is There an East-West Structure in the Location of FDI in Europe? The Role of Institutions and Political Risk. *Research in Economics & Business: Central & Eastern Europe,* 3(1), pp. 5-24.

JIMÉNEZ, A., DURÁN, J.J. and DE, L.F., 2011. Political risk as a determinant of investment by Spanish multinational firms in Europe. *Applied Economics Letters,* 18(8), pp. 789-793.

JOHANSON, J. AND VAHLNE, J.E., 1990. The Mechanism of Internationalization. *International Marketing Review,* 7(4), pp. 11-24.

JOHANSON. J & VAHLNE, J.E, 1977. The Internationalization Process of the Firm - A model of Knowledge Development and Increasing Foreign Market Commitment. *Journal of International Business Studies (pre-1986),* 8(1), pp. 23-32.

JUN, K. W., SINGH, H., 1996. The determinants of foreign direct investment: new empirical evidence. Transatlantic Corporations 5, 67–106.

JUTTNER, U., 2005. Supply chain risk management: Understanding the business requirements from a practitioner perspective. *International Journal of Logistics Management,* 16(1), pp. 120-141.

KEILLOR, B.D., WILKINSON, T.J. and OWENS, D., 2005. Threats to international operations: dealing with political risk at the firm level. *Journal of Business Research,* 58(5), pp. 629-635.

KESTERNICH, I. and SCHNITZER, M., 2010. Who is afraid of political risk? Multinational firms and their choice of capital structure. *Journal of International Economics,* 82(2), pp. 208-218.

KHAN, N. and FITZGERALD, G., 2004. Dimensions of Offshore Outsourcing Business Models. *Journal of Information Technology Case and Application Research,* 6(3), pp. 35-50.

KOBRIN, S.J., 1981a. Foreign Investments and the Management of Political Risk. *Journal of International Business Studies (pre-1986),* 12(000003), pp. 128.

KOBRIN, S.J., 1981b. Political Assessment by International Firms: Models or Methodologies? *Journal of Policy Modeling,* 3(2), pp. 251.

KOBRIN, S.J., 1980. Foreign enterprise and forced divestment in LDCs. *International organization,* 34(1), pp. 65-88.

KOBRIN, S.J., 1979. Political Risk: a Review and Reconsideration. *Journal of International Business Studies,* 10(1), pp. 67-80.

KOBRIN, S.J., 1976. Morality, Political Power and Illegal Payments. *Journal of World Business,* 11(4), pp. 105.

KOGUT, B., 1986. Designing Global Strategies: Profiting from Operation Flexibility. *International Executive,* 28(1), pp. 15-17.

KOTABE, M. and MURRAY, J.Y., 2004. Global sourcing strategy and sustainable competitive advantage. *Industrial Marketing Management,* 33(1), pp. 7.

KREMIC, T., TUKEL, O.I. and ROM, W.O., 2006. Outsourcing decision support: a survey of benefits, risks, and decision factors. *Supply Chain Management,* 11(6), pp. 467-482.

KULKARNI, S.P., 2001. The influence of the type of uncertainty on the mode of international entry. *American Business Review,* 19(1), pp. 94-101.

KUMAR, S. and SOSNOSKI, M., 2009. The Effects of China's Economic Growth on Domestic and International Supply Chains: Assessing the Risks. *Supply Chain Forum: International Journal,* 10(2), pp. 10-24.

KVEDARAVIŠIENĖ, G., 2008. Development of Nearshoring in Global Outsourcing Market. *Economics & Management,* , pp. 125-126.

KYAW, N.A. and ZONG, S., 2011. The Influence of Geographic Location on Performance of Us-Based Multinationals: an Empirical Analysis. *Journal of International Finance & Economics,* 11(1), pp. 91-109.

LAM, T., 2011. Vietnam Outsourcing Risks Management. *Journal of Applied Business Research,* 27(1), pp. 51-59.

LEAVY, B., 1984. Assessing Country Risk for Foreign Investment Decisions. *Long range planning,* 17(3), pp. 141-150.

LI, X. and BARNES, I., 2008. Proactive supply risk management methods for building a robust supply selection process when sourcing from emerging markets. *Strategic Outsourcing: an International Journal,* 1(3), pp. 252-267.

LISA WILLIAMS WALTON, 1997. Telephone survey: Answering the seven Rs to logistics research. *Journal of Business Logistics,* 18(1), pp. 217-231.

LIUHTO, K., HEIKKILÄ, M. and LAAKSONEN, E., 2009. Political risk for foreign firms in the Western CIS -- An analysis on Belarus, Moldova, Russia and Ukraine. *Journal for East European Management Studies,* 14(4), pp. 395-407.

LÓPEZ-DUARTE, C. and VIDAL-SUÁREZ, M.M., 2010. External uncertainty and entry mode choice: Cultural distance, political risk and language diversity. *International Business Review,* 19(6), pp. 575-588.

LUO, Y., 2001. Determinants of entry in an emerging economy: A multilevel approach. *The Journal of Management Studies,* 38(3), pp. 443-472.

MADHOK, A., 2002. Reassessing the Fundamentals and Beyond: Ronald Coase, the Transaction Cost and Resource-based Theories of the Firm and the Institutional Structure of Production. *Strategic Management Journal,* 23(6), pp. 535.

MADHOK, A. and TALLMAN, S., 2006. Call for papers: New directions in global and international strategy research: Beyond the transnational. *Journal of International Management,* 12(1), pp. 131-133.

MANUJ, I. and MENTZER, J.T., 2008. Global supply chain risk management strategies. *International Journal of Physical Distribution & Logistics Management,* 38(3), pp. 192-223.

MEIXELL, M.J. and GARGEYA, V.B., 2005. Global supply chain design: A literature review and critique. *Transportation Research: Part E,* 41(6), pp. 531-550.

MELLAHI, K. and FRYNAS, J.G., 2003. An Exploratory Study into the Applicability of Western Hrm Practices in Developing Countries: an Algerian Case Study. *International Journal of Commerce & Management,* 13(1), pp. 61.

MERRILL, J., 1982. Country Risk Analysis. *Columbia Journal of World Business,* 17(1), pp. 88.

MICALLEF, J.V., 1981. Political Risk Assessment. *Columbia Journal of World Business,* 16(2), pp. 47.

MICKAITIS, A., BARTKUS, E.V. and ZASCIZINSKIEN, G., 2009. Empirical Research of Outsourcing in Lithuanian Small Business Segment. *Engineering Economics,* 65(5), pp. 91-101.

MILLER, K.D., 1992. A Framework for Integrated Risk Management in International Business. *Journal of International Business Studies,* 23(2), pp. 311.

MIN, H., LATOUR, M. and WILLIAMS, A., 1994. Positioning Against Foreign Supply Sources in an International Purchasing Environment. *Industrial Marketing Management,* 23(5), pp. 371-382.

MINOR, J., 2003. Mapping the New Political Risk. *Risk Management (00355593),* 50(3), pp. 16-21.

MODARRESS, B. and ANSARI, A., 2007. The Economic, Technological, and National Security Risks of Offshore Outsourcing. *Journal of Global Business Issues,* 1(2), pp. 165-175.

MONAGHAN, C.M., 2010. Latin American Opportunities Booming, But Risk Managers Face New Exposures. *National Underwriter / P&C,* 114(24), pp. 27-28.

MUDAMBI, R. and NAVARRA, P., 2003. Political Tradition, Political Risk and Foreign Direct Investment in Italy. *Management International Review (MIR),* 43(3), pp. 247-265.

MUMPOWER, J.L., LIVINGSTON, S. and LEE, T.J., 1987. Experts Judgements of Political Riskiness. *Journal of Forecasting,* 6(1), pp. 51-65.

MURTHA, T.P. and LENWAY, S.A., 1994. Country Capabilities and the Strategic State: how National Political Institutions Affect Multinational Corporations' Strategies. *Strategic Management Journal,* 15, pp. 113-129.

NAKATSU, R.T. and IACOVOU, C.L., 2009. A comparative study of important risk factors involved in offshore and domestic outsourcing of software development projects: A two-panel Delphi study. *Information & Management,* 46(1), pp. 57.

OETZEL, J., 2005. Smaller may be beautiful but is it more risky? Assessing and managing political and economic risk in Costa Rica. *International Business Review,* 14(6), pp. 765-790.

OETZEL, J.M., BETTIS, R.A. and ZENNER, M., 2001. Country Risk Measures: How Risky Are They? *Journal of World Business,* 36(2), pp. 128.

PALACIOS, A. and GRIFFIN, T., 2011. Country Risks and Fdi: Empirical Evidence from Latin American Countries. *Journal of International Business Research,* 10(1), pp. 9-25.

PALUGOD, N. and PALUGOD, P.A., 2011. Global Trends in Offshoring and Outsourcing. *International Journal of Business & Social Science,* 2(16), pp. 13-19.

PECK, H., 2005. Drivers of supply chain vulnerability: an integrated framework. *International Journal of Physical Distribution & Logistics Management,* 35(3/4), pp. 210-232.

PEDERSEN, T. and ØRBERG JENSEN, P.D., 2011a. The economic geography of offshoring: the fit between activities and local context. *Journal of management studies,* 48(2), pp. 352-372.

PEDERSEN, T. and ØRBERG JENSEN, P.D., 2011b. The economic geography of offshoring: the fit between activities and local context. *Journal of management studies,* 48(2), pp. 352-372.

PFOHL, H. and LARGE, R., 1993. Sourcing from Central and Eastern Europe: Conditions and implementation. *International Journal of Physical Distribution & Logistics Management,* 23(8), pp. 5-5.

PIGOTT, T.D., 2001. A Review of Methods for Missing Data. *Educational Research and Evaluation,* 7(4), pp. 353-383.

PRASAD, A., 2006. Market Entry Decisions. *Journal of Management Research (09725814),* 6(3), pp. 137-144.

POLITICAL RISK SERVICES GROUP (PRSG), International Country Risk Guide (ICRG) period 1988-2014. URL: http://epub.prsgroup.com/products/international-country-risk-guide-icrg. Purchased March 2015.

RAMARAPU, N., PARZINGER, M.J. and LADO, A.A., 1997. Issues in foreign outsourcing: Focus on applications development and support. *Information Systems Management,* 14(2), pp. 27-31.

RAO, S. and GOLDSBY, T.J., 2009. Supply chain risks: a review and typology. *International Journal of Logistics Management,* 20(1), pp. 97-123.

RICE, G. and MAHMOUD, E., 1990. Political Risk Forecasting by Canadian Firms. *International Journal of Forecasting,* 6(1), pp. 89-89.

RIOS-MORALES, R., GAMBERGER, D., ŠMUC, T. and AZUAJE, F., 2009. Innovative methods in assessing political risk for business internationalization. *Research in International Business and Finance,* 23(2), pp. 144-156.

RITCHIE, B. and BRINDLEY, C., 2007. Supply chain risk management and performance: A guiding framework for future development. *International Journal of Operations & Production Management,* 27(3), pp. 303-322.

ROBOCK, S.H., 1971. Political Risk: Identification and Assessment. *Columbia Journal of World Business,* 6(4), pp. 6.

ROOT, F.R., 1994. *Entry Strategies for International Markets.* First Edition edn. San Francisco: Jossey-Bass.

KUMAR, S., KWONG, A. and MISRA, C., 2009. Risk mitigation in offshoring of business operations. *Journal of Manufacturing Technology Management,* 20(4), pp. 442-459.

SANDERS, N.R., LOCKE, A., MOORE, C.B. and AUTRY, C.W., 2007. A Multidimensional Framework for Understanding Outsourcing Arrangements. *Journal of Supply Chain Management,* 43(4), pp. 3-15.

SCHLOMER, G.L., BAUMAN, S. and CARD, N.A., 2010. Best Practices for Missing Data Management in Counseling Psychology. *Journal of Counseling Psychology,* 57(1), pp. 1-10.

SCHMIDT, D.A., 1986. Analyzing Political Risk. *Business horizons,* 29(4), pp. 43.

SCHOENHERR, T., 2010. Outsourcing decisions in global supply chains: an exploratory multi-country survey. *International Journal of Production Research,* 48(2), pp. 343.

SETHI, S.P. and LUTHER, K.A.N., 1986a. Political Risk Analysis and Direct Foreign Investment: Some Problems of Definition and Measurement. *California management review,* 28(2), pp. 57-57.

SETHI, S.P. and LUTHER, K.A.N., 1986b. Political Risk Analysis and Direct Foreign Investment: Some Problems of Definition and Measurement. *California management review,* 28(2), pp. 57-68.

SHARMA, V.M. and ERRAMILLI, M.K., 2004. Resource-based explanation of entry mode choice. *Journal of Marketing Theory and Practice,* 12(1), pp. 1-18.

SICA, A.L., 2011. Supply Chain Risk: Hidden Exposures for Your Company. *Contract Management,* 51(6), pp. 70-76.

SIMON, J.D., 1985. Political Risk Forecasting. *Futures,* 17(2), pp. 132-132.

SIMON, J.D., 1984. A Theoretical Perspective on Political Risk. *Journal of International Business Studies,* 15(3), pp. 123-143.

SLANGEN, A.H.L. and TULDER, R.J.M.V., 2009. Cultural distance, political risk, or governance quality? Towards a more accurate conceptualization and measurement of external uncertainty in foreign entry mode research. *International business review,* 18(3), pp. 276-291.

SMITH, M.E., 2008. Psychological Foundations of Supply Chain Risk Management. In: G.A. ZSIDISIN and B. RITCHIE, eds, *Supply Chain Risk - A Handbook of Assessment, Management and Performance.* First Edition edn. New York: Springer, pp. 219-234.

SODHI, M.S. and LEE, S., 2007. An analysis of sources of risk in the consumer electronics industry. *The Journal of the Operational Research Society,* 58(11), pp. 1430-1439.

STRAUB, S., 2008. Opportunism, corruption and the multinational firm's mode of entry. *Journal of International Economics,* 74(2), pp. 245-263.

TALLMAN, S.B., 1988. Home Country Political Risk and Foreign Direct Investment I. *Journal of International Business Studies,* 19(2), pp. 219-219.

TRANFIELD, D., DENYER, D. and SMART, P., 2003. Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management,* 14(3), pp. 207-222.

TRENT, R.J. and ROBERTS, L.R., 2010. *Managing Global Supply and Risk: Best Practices, Concepts and Strategies.* 1 edn. USA: Ross Publishing.

UNTED NATIONS CONFERENCE FOR TRADE AND DEVELOPMENT (UNCTAD), *Foreign Direct Investment Flows and Stock - Inward and outward foreign direct investment flows, annual, 1970-2013*. URL: http://unctad.org/en/Pages/DIAE/FDI%20Statistics/FDI-Statistics.aspx. Accessed 26/02/2015.

VAN WYK, J., 2010. Political Sources of International Business Risk: an Interdisciplinary Framework. *Journal of International Business Research,* 9(1), pp. 103-119.

VASCO SANCHEZ-RODRIGUES, A.P. and NAIM, M.M., 2010. Evaluating the causes of uncertainty in logistics operations. *International Journal of Logistics Management,* 21(1), pp. 45-64.

VESTRING, T., ROUSE, T. and REINERT, U., 2005. Hedge Your Offshoring Bets. *MIT Sloan Management Review,* 46(3), pp. 27-29.

VITHARANA, P. and DHARWADKAR, R., 2007. Information Systems Outsourcing: Linking Transaction Cost and Institutional Theories. *Communications of AIS,* 2007(20), pp. 346-370.

WADE, J., 2005. Political Risk in Eastern Europe. *Risk Management (00355593),* 52(3), pp. 24-29.

WAN, J., WAN, D. and ZHANG, H., 2010. *Case Study on Business Risk Management for Software Outsourcing Service Provider with ISM.* Scientific Research Publishing.

WEISS, R.M. and AZARAN, A., 2007. *Outward Bound: Considering the Business and Legal Implications of Outsourcing*. *Georgetown Journal of International Law,* 38(3), pp. 735-753.

WERNER, S., BROUTHERS, L.E. and BROUTHERS, K.D., 1996. International Risk and Perceived Environmental Uncertainty: the Dimensionality and Internal Consistency of Miller's Measure. *Journal of International Business Studies,* 27(3), pp. 571-587.

WILLIAMSON, O.E., 2010. Transaction Cost Economics: The Natural Progression. *Journal of Retailing,* 86(3), pp. 215-226.

WILLIAMSON, O.E., 2008. Outsourcing: Transaction Cost Economics and Supply Chain Management. *Journal of Supply Chain Management,* 44(2), pp. 5-16.

WILLIAMSON, O.E., 2002. The Theory of the Firm as Governance Structure: From Choice to Contract. *Journal of Economic Perspectives,* 16(3), pp. 171-195.

WILLIAMSON, O.E., 1995. Hierarchies, Markets and Power in the Economy in Economy: An Economic Perspective. *Industrial & Corporate Change,* 4(1), pp. 21-49.

WILLIAMSON, O. E. (1985), *The Economic Institutions of Capitalism,* 1st ed., The Free Press, New York, USA.

WORLD ECONOMIC FORUM (WEF), 2014. *The Global Competitiveness Report 2014–2015.* The Global Competitiveness and Benchmarking Network. URL: http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf. Accessed 17/01/2015.

WORLD TRADE ORGANIZATION (WTO), 2005. *World Trade Report 2005, III Thematic Essays, C. Offshoring Services*: Recent Developments and Prospects. URL: https://www.wto.org/english/res_e/booksp_e/anrep_e/world_trade_report05_e.pdf. Accessed 04/02/2015.

WU, D.D. and OLSON, D., 2010. Enterprise risk management: a DEA VaR approach in vendor selection. *International Journal of Production Research,* 48(16), pp. 4919.

WYK, J.V. and LAL, A.K., 2010. Fdi Location Drivers and Risks in Mena. *Journal of International Business Research,* 9(2), pp. 99-116.

YATES, J.F. and STONE, E.R., 1992. The risk construct. *Risk-taking behavior.* Oxford, England: John Wiley & Sons, Oxford, pp. 1-25.

YI, C.Y., 2011. Supply chain flexibility in an uncertain environment: exploratory findings from five case studies. *Supply Chain Management,* 16(4), pp. 271-283.

ZHANG, K.H. and MARKUSEN, J.R., 1999. Vertical multinationals and host-country characteristics. *Journal of Development Economics,* 59(2), pp. 233-252.

ZHANG, L. and ZHAO, S.X., 2007. Geographical Changes in Foreign Direct Investment and Impacts on Regional Economic Integration in China: The Case Study of the Pan-PRD Regionalization. *China Review,* 7(2), pp. 191-219.

ZHAO, H., 2003. Country factor differentials as determinants of FDI flow to China. *Thunderbird International Business Review,* 45(2), pp. 149-169.

ZHAO, H., LUO, Y. and SUH, T., 2004. Transaction cost determinants and ownership-based entry mode choice: a meta-analytical review. *Journal of International Business Studies,* 35(6), pp. 524-544.

ZSIDISIN, G.A., 2003. A grounded definition of supply risk. *Journal of Purchasing & Supply Management,* 9(5), pp. 217.

ZSIDISIN, G.A. and ELLRAM, L.M., 2003. An agency theory investigation of supply risk management. *Journal of Supply Chain Management,* 39(3), pp. 15-15.

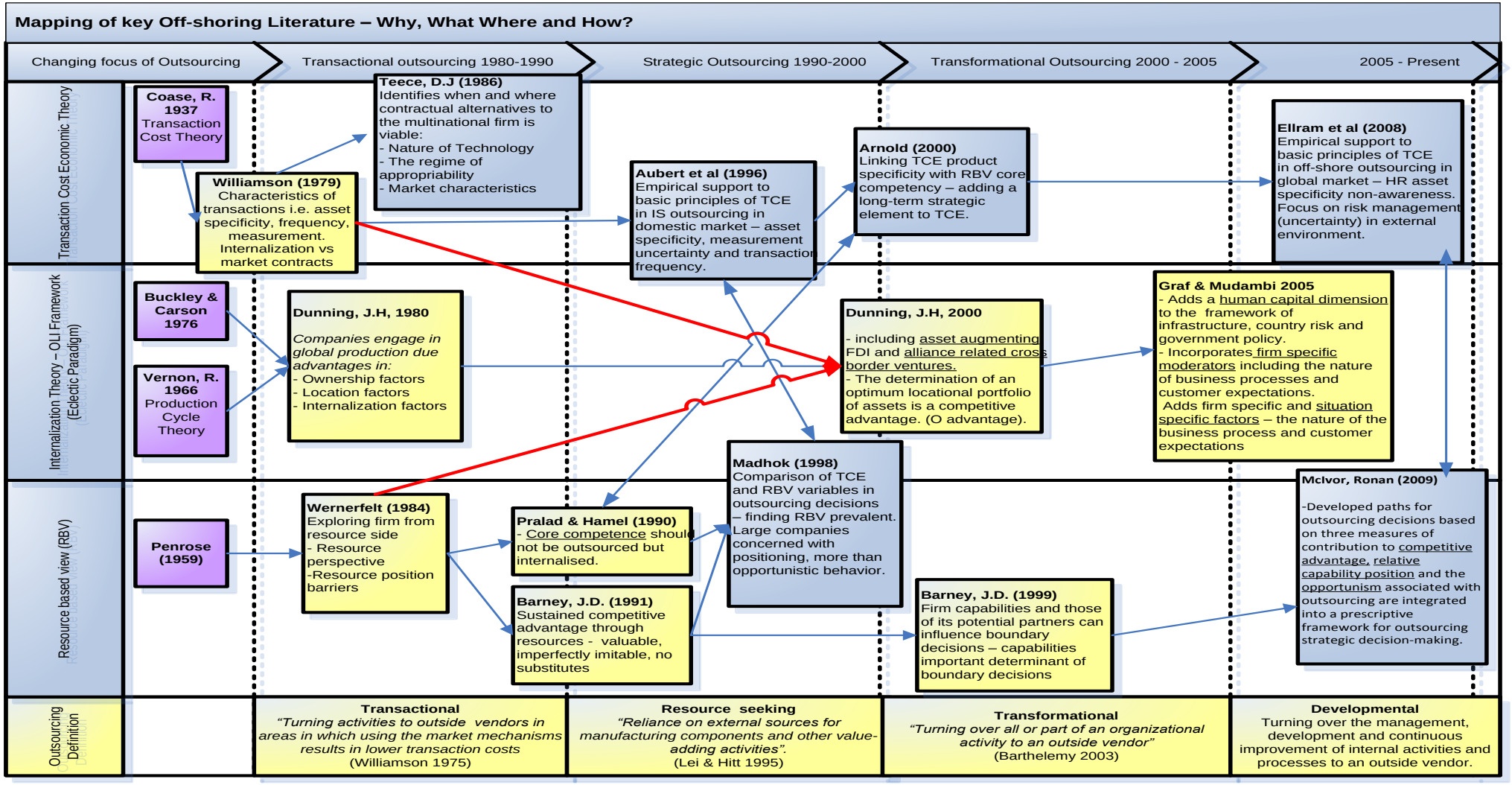
ZSIDISIN, G.A., ELLRAM, L.M., CARTER, J.R. and CAVINATO, J.L., 2004. An analysis of supply risk assessment techniques. *International Journal of Physical Distribution & Logistics Management,* 34(5), pp. 397-413.

ZUCKERMAN, M., 2007. *Sensation seeking and risky behavior.* Washington, DC, US: American Psychological Association, Washington, DC.

APPENDICES

Appendix A :

A.1 Offshore literature map and historical developments



A.2 Overview of key articles

No.	Article Reference	Journal	Journal rating*
1	(Agarwal and Feils, 2007)	Journal of Administrative Sciences	n/a
2	(Alon and Herbert, 2009)	Business horizons	1*
3	(Boddewyn and Brewer, 1994)	Academy of Management Review	4*
4	(Brewer 1993)	International Executive	n/a
5	(Busse and Hefeker, 2007)	European Journal of Political Economy	3*
6	(Contractor, Kumar, Kundu and Pedersen, 2010)	The Journal of Management Studies	4*
7	(de Mortanges and Allers, 1996)	The Journal of Management Studies	4*
8	(Delios and Henisz, 2003)	Strategic Management Journal	4*
9	(Demirbag and Glaister, 2010)	Journal of Management Studies	4*
10	(Desbordes, 2010)	Economics & Politics	n/a
11	(Di Gregorio, 2005)	International Business Review	3*
12	(Feinberg and Gupta, 2009)	Academy of Management Journal	4*
13	(Gao, 2009)	Singapore Management Review	n/a
14	(Green, 1974)	Columbia Journal of World Business	n/a
15	(Hahn, Doh, and Bunyaratave, 2009)	MIS Quarterly	4*
16	(Herath and Kishore, 2009)	Information Systems Management	1*
17	(Howell and Chaddick, 1994)	Journal of World Business	3*
18	(Jackson and Deeg, 2008)	Journal of International Business Studies	4*
19	(Keillor, Wilkinson and Owens, 2005)	Journal of Business Research	3*
20	(Kobrin, 1981)	Journal of Policy Modelling	n/a
21	(Kremic and Rom, 2006)	Supply Chain Management	3*
22	(Leavy, 1984)	Long range planning	3*
23	(López-Duarte and Vidal-Suárez, 2010)	International Business Review	3*
24	(Nakatsu and Iacovou, 2009)	Information & Management	3*
25	(Oetzel, 2005)	International Business Review	3*
26	((Pedersen and Ørberg Jensen, 2011))	Journal of Management Studies	4*
27	(Rice and Mahmoud, 1990)	International Journal of Forecasting	3*
28	(Rios-Morales, Gamberger, Smuc and Azuaje, 2009)	Research in International Business and Finance	n/a
29	(Robock, 1971)	Columbia Journal of World Business	n/a
30	(Schoenherr, 2010)	International Journal of Production Research	3*
31	(Simon, 1984)	Journal of International Business Studies	4*

32	(Sodhi and Lee, 2007)	Journal of the Operational Research Society	2*
33	(Van Wyk, 2010)	Journal of International Business Research	n/a
34	(Vitharana and Dharwadkar, 2007)	Communications of AI	n/a
35	(Zhao, Luo and Suh, 2004)	Journal of International Business Studies	4*

** The core articles were extracted from a range of journals, with the ranking indicated in accordance the Cranfield University, Journal recommendations for Academic Publication, Eighth edition, April 2011.*

A.3 Main political risk articles from Literature Review

Entry No:	Author	Citation	Source
1	Akhter, S. H. and Choudhry, Y. A. (1993),	"Forced withdrawal from a country market: Managing political.", Business horizons, vol. 36, no. 3, pp. 47.	ABI ProQuest or EBSCO
2	Al Khattab, A., Aldehayyat, J. and Stein, W. (2010),	"Informing Country Risk Assessment in International Business", International Journal of Business and Management, vol. 5, no. 7, pp. 54-62.	ABI ProQuest or EBSCO
3	Alon, I., Gurumoorthy, R., Mitchell, M. C. and Steen, T. (2006),	"Managing micro political risk: A cross-sector examination", Thunderbird International Business Review, vol. 48, no. 5, pp. 623-642.	ABI ProQuest or EBSCO
4	Alon, I. and Herbert, T. T. (2009),	"A stranger in a strange land: Micro political risk and the multinational firm", Business horizons, vol. 52, no. 2, pp. 127-137.	ABI ProQuest or EBSCO
5	Bergner, D. J. (1982),	"Political Risk Analysis: An Asset Now, Soon A 'Must'", Public Relations Quarterly, vol. 27, no. 2, pp. 28.	ABI ProQuest or EBSCO
6	Blackman, A. and Wu, X. (1999),	"Foreign direct investments in China's power sector: Trends, benefits, and barriers", Energy Policy, vol. 27, no. 12, pp. 695-711.	ABI ProQuest or EBSCO

7	Brewer, T. L. (1981),	"Political Risk Assessment for Foreign Direct Investment Decisions: Better Methods for Better Results", Journal of World Business, vol. 16, no. 1, pp. 5-5.	ABI ProQuest or EBSCO
8	Brewer, T. L. (1983),	"The Instability of Governments and the Instability of Controls on Funds Transfers by Multinational Enterprises: Implications for Political Risk Analysis", Journal of International Business Studies, vol. 14, no. 3, pp. 147-157.	ABI ProQuest or EBSCO
9	Brewer, T. L. (1993),	"Trends in International Business, Thought, and Literature: The Past and Future of Political Analysis for International Business", International Executive, vol. 35, no. 6, pp. 539-548.	ABI ProQuest or EBSCO
10	Busse, M. and Hefeker, C. (2007),	"Political risk, institutions and foreign direct investment", European Journal of Political Economy, vol. 23, no. 2, pp. 397-415.	ABI ProQuest or EBSCO
11	Butler, K. C. and Joaquin, D. C. (1998),	"A Note on Political Risk and the Required Return on Foreign Direct Investment", Journal of International Business Studies, vol. 29, no. 3, pp. 599-607.	ABI ProQuest or EBSCO
12	Chase, C. D., Kuhle, J. L. and Waither, C. H. (1988),	"The Relevance of Political Risk in Direct Foreign Investment", Management International Review (MIR), vol. 28, no. 3, pp. 31-38.	ABI ProQuest or EBSCO
13	Chevalier, A. and Hirsch, G. (1981),	"The Assessment of the Political Risk in the Investment Decision", The Journal of the Operational Research Society, vol. 32, no. 7, pp. 599-599.	ABI ProQuest or EBSCO
14	Clark, E. and Tunaru, R. (2003),	"Quantification of political risk with multiple dependent sources", Journal of Economics and Finance, vol. 27, no. 2, pp. 125-135.	ABI ProQuest or EBSCO

15	Click, R. W. (2005),	"Financial and political risks in US direct foreign investment", Journal of International Business Studies, vol. 36, no. 5, pp. 559-575.	ABI ProQuest or EBSCO
16	Coplin, W. D. and O'Leary, M. K. (1983),	"Political Risk Analysis for Extractive Industries", Strategy & Leadership, vol. 11, no. 2, pp. 16-16.	ABI ProQuest or EBSCO
17	Cosset, J. and Roy, J. (1991),	"The Determinants of Country Risk Ratings", Journal of International Business Studies, vol. 22, no. 1, pp. 135-142.	ABI ProQuest or EBSCO
18	Cupitt, R. T. (1990)	, "Foreign Political Risk Assessment: Government Instability and Nontariff Barriers to Trade", International Trade Journal, vol. 4, no. 4, pp. 341-355.	ABI ProQuest or EBSCO
19	de Mortanges, C. P. and Allers, V. (1996),	"Political risk Assessment: Theory and the Experience of Dutch Firms", International Business Review, vol. 5, no. 3, pp. 303.	ABI ProQuest or EBSCO
20	Delios, A. and Henisz, W. J. (2003),	"Political hazards, experience and sequential entry strategies: The International Expansion of Japanese Firms, 1980-1998", Strategic Management Journal, vol. 24, no. 11, pp. 1153-1164.	ABI ProQuest or EBSCO
21	Desbordes, R. (2010)	"Global and Diplomatic Political Risks and Foreign Direct Investment", Economics & Politics, vol. 22, no. 1, pp. 92-125.	ABI ProQuest or EBSCO
22	Di Gregorio, D. (2005)	, "Re-thinking country risk: insights from entrepreneurship theory", International Business Review, vol. 14, no. 2, pp. 209-226.	ABI ProQuest or EBSCO

23	Erol, C. (1985)	"An Exploratory Model of Political Risk Assessment and the Decision Process of Foreign Direct Investment", International Studies of Management & Organization, vol. 15, no. 2, pp. 75-91.	ABI ProQuest or EBSCO
24	Fatehi-Sedeh, K. and Safizadeh, M. H. (1989)	"The Association Between Political Instability and Flow of Foreign Direct Investment", Management International Review (MIR), vol. 29, no. 4, pp. 4-13.	ABI ProQuest or EBSCO
25	Feinberg, S. E. and Gupta, A. K. (2009)	"Mnc Subsidiaries and Country Risk: Internalization as a Safeguard Against Weak External Institutions", Academy of Management Journal, vol. 52, no. 2, pp. 381-399.	ABI ProQuest or EBSCO
26	Fitzpatrick, M. (1983)	"The Definition and Assessment of Political Risk in International Business: A Review of the Literature", Academy of Management Review, vol. 8, no. 2, pp. 249-254.	ABI ProQuest or EBSCO
27	Gao, Y. (2009)	"Managing Political Risk in Cross-national Investment: A Stakeholder View", Singapore Management Review, vol. 31, no. 1, pp. 99-114.	ABI ProQuest or EBSCO
28	Goodman, S. E. and Ramer, R. (2007)	"Identify and Mitigate the Risks of Global IT Outsourcing", Journal of Global Information Technology Management, vol. 10, no. 4, pp. 1-6.	ABI ProQuest or EBSCO
29	Green, R. T. (1974)	"Political Structures as a Predictor of Radical Political Change", Columbia Journal of World Business, vol. 9, no. 1, pp. 28.	ABI ProQuest or EBSCO
30	Green, R. T. and Korth, C. M. (1974)	"Political Instability and the Foreign Investor", California management review, vol. 17, no. 1, pp. 23-31.	ABI ProQuest or EBSCO

31	Hanner, F. T. (1979)	"Rating Investment Risks Abroad", Business horizons, vol. 22, no. 2, pp. 18.	ABI ProQuest or EBSCO
32	Henisz, W. J. and Delios, A. (2004)	"Information or influence? The benefits of experience for managing political uncertainty", Strategic Organization, vol. 2, no. 4, pp. 389-421.	ABI ProQuest or EBSCO
33	Henisz, W. J., Mansfield, E. D. and Von Glinow, M. A. (2010)	"Conflict, security, and political risk: International business in challenging times", Journal of International Business Studies, vol. 41, no. 5, pp. 759-764.	ABI ProQuest or EBSCO
34	Howell, L. D. (2007)	"Political risk at the interface of civilizations: Bosnia and Herzegovina, Croatia, Iraq, and the United Arab Emirates", Thunderbird International Business Review, vol. 49, no. 4, pp. 403-416.	ABI ProQuest or EBSCO
35	Howell, L. D. and Chaddick, B. (1994)	"Models of political risk for foreign investment and trade: An assessment of three approaches", Journal of World Business, vol. 29, no. 3, pp. 70-70	ABI ProQuest or EBSCO
36	Howell and Xie	"Asia at risk: the impact of methodology in forecasting", Journal of Management Decision, Vol.34, Issue 9, pp. 6-16.	ABI ProQuest or EBSCO
37	Iankova, E. and Katz, J. (2003)	"Strategies for political risk mediation by international firms in transition economies: the case of Bulgaria", Journal of World Business, vol. 38, no. 3, pp. 182.	ABI ProQuest or EBSCO
38	Jakobsen, J. (2010)	"Old problems remain, new ones crop up: Political risk in the 21st century", Business horizons, vol. 53, no. 5, pp. 481-490.	ABI ProQuest or EBSCO
39	Jensen, N. (2008),	"Political Risk, Democratic Institutions, and Foreign Direct Investment", Journal of Politics, vol. 70, no. 4, pp. 1040-1052.	ABI ProQuest or EBSCO

40	Jiménez, A. (2010),	"Does political risk affect the scope of the expansion abroad? Evidence from Spanish MNEs", International Business Review, vol. 19, no. 6, pp. 619-633.	ABI ProQuest or EBSCO
41	Jiménez, A., de, l. F. and Durán, J. J. (2011),	"Is There an East-West Structure in the Location of FDI in Europe? The Role of Institutions and Political Risk", Research in Economics & Business: Central & Eastern Europe, vol. 3, no. 1, pp. 5-24.	ABI ProQuest or EBSCO
42	Jiménez, A., Durán, J. J. and de, l. F. (2011),	"Political risk as a determinant of investment by Spanish multinational firms in Europe", Applied Economics Letters, vol. 18, no. 8, pp. 789-793.	ABI ProQuest or EBSCO
43	Kesternich, I. and Schnitzer, M. (2010)	"Who is afraid of political risk? Multinational firms and their choice of capital structure", Journal of International Economics, vol. 82, no. 2, pp. 208-218.	ABI ProQuest or EBSCO
44	Khan, N. and Fitzgerald, G. (2004)	"Dimensions of Offshore Outsourcing Business Models", Journal of Information Technology Case and Application Research, vol. 6, no. 3, pp. 35-50.	ABI ProQuest or EBSCO
45	Kobrin, S. J. (1979)	"Political Risk: a Review and Reconsideration", Journal of International Business Studies, vol. 10, no. 1, pp. 67-80.	ABI ProQuest or EBSCO
46	Kogut, B. (1986)	"Designing Global Strategies: Profiting from Operation Flexibility", International Executive, vol. 28, no. 1, pp. 15-17.	ABI ProQuest or EBSCO
47	Kvedaravišienė, G. (2008),	"Development of Near shoring in Global Outsourcing Market", Economics & Management, pp. 125-126.	ABI ProQuest or EBSCO
48	Kyaw, N. A. and Zong, S. (2011),	"The Influence of Geographic Location on Performance of Us-Based Multinationals: an Empirical Analysis", Journal of International Finance & Economics, vol. 11, no. 1, pp. 91-109.	ABI ProQuest or EBSCO

49	Leavy, B. (1984)	"Assessing Country Risk for Foreign Investment Decisions", Long range planning, vol. 17, no. 3, pp. 141-150.	ABI ProQuest or EBSCO
50	Liuhto, K., Heikkilä, M. and Laaksonen, E. (2009)	"Political risk for foreign firms in the Western CIS -- An analysis on Belarus, Moldova, Russia and Ukraine", Journal for East European Management Studies, vol. 14, no. 4, pp. 395-407.	ABI ProQuest or EBSCO
51	López-Duarte, C. and Vidal-Suárez, M. M. (2010)	"External uncertainty and entry mode choice: Cultural distance, political risk and language diversity", International Business Review, vol. 19, no. 6, pp. 575-588.	ABI ProQuest or EBSCO
52	Merrill, J. (1982)	"Country Risk Analysis", Columbia Journal of World Business, vol. 17, no. 1, pp. 88.	ABI ProQuest or EBSCO
53	Micallef, J. V. (1981),	"Political Risk Assessment", Columbia Journal of World Business, vol. 16, no. 2, pp. 47.	ABI ProQuest or EBSCO
54	Mickaitis, A., Bartkus, E. V. and Zascizinskien, G. (2009),	"Empirical Research of Outsourcing in Lithuanian Small Business Segment", Engineering Economics, vol. 65, no. 5, pp. 91-101.	ABI ProQuest or EBSCO
55	Min, H., LaTour, M. and Williams, A. (1994),	"Positioning Against Foreign Supply Sources in an International Purchasing Environment", Industrial Marketing Management, vol. 23, no. 5, pp. 371-382.	ABI ProQuest or EBSCO
56	Modarress, B. and Ansari, A. (2007),	"The Economic, Technological, and National Security Risks of Offshore Outsourcing", Journal of Global Business Issues, vol. 1, no. 2, pp. 165-175.	ABI ProQuest or EBSCO

57	Mudambi, R. and Navarra, P. (2003)	"Political tradition, political risk and foreign direct investment in Italy", Management International Review, vol. 43, no. 3, pp. 247-265.	ABI ProQuest or EBSCO
58	Mumpower, J. L., Livingston, S. and Lee, T. J. (1987)	"Experts Judgments of Political Riskiness", Journal of Forecasting, vol. 6, no. 1, pp. 51-65.	ABI ProQuest or EBSCO
59	Murtha, T. P. and Lenway, S. A. (1994)	"Country Capabilities and the Strategic State: how National Political Institutions Affect Multinational Corporations' Strategies", Strategic Management Journal, vol. 15, pp. 113-129.	ABI ProQuest or EBSCO
60	Oetzel, J. (2005)	"Smaller may be beautiful but is it more risky? Assessing and managing political and economic risk in Costa Rica", International Business Review, vol. 14, no. 6, pp. 765-790.	ABI ProQuest or EBSCO
61	Oetzel, J. M., Bettis, R. A. and Zenner, M. (2001),	"Country Risk Measures: How Risky Are They?", Journal of World Business, vol. 36, no. 2, pp. 128.	ABI ProQuest or EBSCO
62	Palacios, A. and Griffin, T. (2011),	"Country Risks and Fdi: Empirical Evidence from Latin American Countries", Journal of International Business Research, vol. 10, no. 1, pp. 9-25.	ABI ProQuest or EBSCO
63	Pfohl, H. and Large, R. (1993)	"Sourcing from Central and Eastern Europe: Conditions and implementation", International Journal of Physical Distribution & Logistics Management, vol. 23, no. 8, pp. 5-5.	ABI ProQuest or EBSCO
64	Prasad, A. (2006)	"Market Entry Decisions", Journal of Management Research (09725814), vol. 6, no. 3, pp. 137-144.	ABI ProQuest or EBSCO
65	Ramarapu, N., Parzinger, M. J. and Lado, A. A. (1997)	"Issues in foreign outsourcing: Focus on applications development and support", Information Systems Management, vol. 14, no. 2, pp. 27-31.	ABI ProQuest or EBSCO

66	Rice, G. and Mahmoud, E. (1990),	"Political Risk Forecasting by Canadian Firms", International Journal of Forecasting, vol. 6, no. 1, pp. 89-89.	ABI ProQuest or EBSCO
67	Robock, S. H. (1971),	"Political Risk: Identification and Assessment", Columbia Journal of World Business, vol. 6, no. 4, pp. 6.	ABI ProQuest or EBSCO
68	Schmidt, D. A. (1986),	"Analyzing Political Risk", Business horizons, vol. 29, no. 4, pp. 43.	ABI ProQuest or EBSCO
69	Schoenherr, T. (2010),	"Outsourcing decisions in global supply chains: an exploratory multi-country survey", International Journal of Production Research, vol. 48, no. 2, pp. 343-378.	ABI ProQuest or EBSCO
70	Sethi, S. P. and Luther, K. A. N. (1986),	"Political Risk Analysis and Direct Foreign Investment: Some Problems of Definition and Measurement", California management review, vol. 28, no. 2, pp. 57-57.	ABI ProQuest or EBSCO
71	Sica, A. L. (2011)	"Supply Chain Risk: Hidden Exposures for Your Company", Contract Management, vol. 51, no. 6, pp. 70-76.	ABI ProQuest or EBSCO
72	Simon, J. D. (1984)	"A Theoretical Perspective on Political Risk", Journal of International Business Studies, vol. 15	ABI ProQuest or EBSCO
73	Simon, J. D. (1985)	"Political Risk Forecasting", Futures, vol. 17, no. 2, pp. 132-132. no. 3, pp. 123-143.	ABI ProQuest or EBSCO
74	Slangen, A. H. L. and van Tulder, R. J. M. (2009)	"Cultural distance, political risk, or governance quality? Towards a more accurate conceptualization and measurement of external uncertainty in foreign entry mode research", International Business Review, vol. 18, no. 3, pp. 276-291.	ABI ProQuest or EBSCO
75	Straub, S. (2008)	"Opportunism, corruption and the multinational firm's mode of entry", Journal of International Economics, vol. 74, no. 2, pp. 245-263.	ABI ProQuest or EBSCO

76	Tallman, S. B. (1988)	"Home Country Political Risk And Foreign Direct Investment I", Journal of International Business Studies, vol. 19, no. 2, pp. 219-219.	ABI ProQuest or EBSCO
77	Van Wyk, J. (2010)	"Political Sources of International Business Risk: an Interdisciplinary Framework", Journal of International Business Research, vol. 9, no. 1, pp. 103-119.	ABI ProQuest or EBSCO
78	Vasco Sanchez-Rodrigues, A. P. and Naim, M. M. (2010),	"Evaluating the causes of uncertainty in logistics operations", International Journal of Logistics Management, vol. 21, no. 1, pp. 45-64.	ABI ProQuest or EBSCO
79	Vestring, T., Rouse, T. and Reinert, U. (2005)	"Hedge Your Off shoring Bets", MIT Sloan Management Review, vol. 46, no. 3, pp. 27-29.	ABI ProQuest or EBSCO
80	Vitharana, P. and Dharwadkar, R. (2007),	"Information Systems Outsourcing: Linking Transaction Cost and Institutional Theories", Communications of AIS, vol. 2007, no. 20, pp. 346-370.	ABI ProQuest or EBSCO
81	Wade, J. (2005)	"Political Risk in Eastern Europe", Risk Management (00355593), vol. 52, no. 3, pp. 24-29.	ABI ProQuest or EBSCO
82	Wan, J., Wan, D. and Zhang, H., (2010)	Case Study on Business Risk Management for Software Outsourcing Service Provider with ISM, Scientific Research Publishing.	ABI ProQuest or EBSCO
83	Weiss, R. M. and Azaran, A. (2007)	"Outward Bound: Considering the business and legal implications of international outsourcing", Georgetown Journal of International Law, vol. 38, no. 3, pp. 735-753.	ABI ProQuest or EBSCO
84	Wu, D. D. and Olson, D. (2010)	"Enterprise risk management: a DEA VaR approach in vendor selection", International Journal of Production Research, vol. 48, no. 16, pp. 4919.	ABI ProQuest or EBSCO
85	Wyk, J. V. and Lal, A. K. (2010)	"Fdi Location Drivers and Risks in Mena", Journal of International Business Research, vol. 9, no. 2, pp. 99-116.	ABI ProQuest or EBSCO

86	Yi, C. Y. (2011)	"Supply chain flexibility in an uncertain environment: exploratory findings from five case studies", Supply Chain Management, vol. 16, no. 4, pp. 271-283.	ABI ProQuest or EBSCO
87	Zhang, L. and Zhao, S. X. (2007)	"Geographical Changes in Foreign Direct Investment and Impacts on Regional Economic Integration in China: The Case Study of the Pan-PRD Regionalization", China Review, vol. 7, no. 2, pp. 191-219.	ABI ProQuest or EBSCO
88	Zhao, H. (2003)	"Country factor differentials as determinants of FDI flow to China", Thunderbird International Business Review, vol. 45, no. 2, pp. 149-169	ABI ProQuest or EBSCO

Appendix B :

B.1 Repertory Grid Interview Script

Explanation to the Interviewee:

Introduction and personal statement

Interview administration instructions

Biographical data

Position and title in the company, plus ears of experience

Description of the company offshoring structure and activities

Role in the design and management of offshoring activities

Elements - Identification of Constraints (or Risk):

Based on the wide political risk definition (shared with the interviewee by email and reiterated at interview) the interviewee names six offshoring engagements that was affected by some level of political impact.

Write the constraints (or risks) on random pre-numbered cards (I.e. 5; 1; 4; 3; 2; 6)

Constructs and pole constructs - Present triad and collect constructs:

The interviewee is asked: *"Please think about how two of these engagements are similar and different from the 3rd in terms of political risk exposure.*

The political risk construct is defined – Noting that the meanings of the constructs need to be probed

Rating of Constraints (or Risks):

Rate the triad elements on pre-decided scale against construct, and then rate all other elements (constraints) and enter on pre-prepared grid against a 1-5 scale.

B.2 Repertory Grid Analysis Data Extraction Matrix

Date: **Interviewee:** **Interviewer:** **Start:** **Finish:**

No.		*Engagement 1*	*Engagement 2*	*Engagement 3*	*Engagement 4*	*Engagement 5*	*Engagement 6*	
Political risk								Impact
1		*	*	*				
2					*	*	*	
3		*	*		*			
4		*		*		*		
5		*			*		*	

6			*	*		*		
7				*	*		*	
8		*				*	*	
9			*		*		*	
10								

Note: Stars indicate the three elements included in each of the triads

B.3 Distribution of samples across Industry and offshored service type

No.	Industry	Description of offshored business component
1	Academia	IT Support
2	Accounting	Back-office Support
3	Accounting	AP/AR/GL Accounting
4	Banking	Application management
5	Banking	Application management
6	Banking	Application Outsourcing Processing
7	Banking	Check processing
8	Banking	IT Helpdesk
9	Banking	Programme Development
10	Banking	Internal Financial Services
11	Banking	Application Management
12	Engineering Services	Delivery of Engineering & architectural services for global clients
13	Entertainment	Messaging Systems development
14	Financial Services	Processing of financial services
15	Financial Services	Shared Service Center
16	Financial Services	Processing of financial services
17	Financial Services	Processing of financial services
18	Financial Services	Processing of financial services
19	Gaming Industry	Programme Development
20	Gaming Industry	Programme Development
21	Gaming Industry	Programme Development
22	Healthcare	Claims Processing
23	Healthcare	Health Insurance Processing
24	Healthcare	Health Insurance Processing
25	Healthcare	Health Insurance Processing
26	Healthcare	Health Insurance Processing
27	Healthcare	Health Insurance Processing
28	Healthcare	Health Insurance Processing
29	Healthcare	Processing of Insurance Claims
30	Insurance	Processing of insurance claims

31	Insurance	Processing of insurance claims
32	Insurance	Data entry and Insurance Business Cycle
33	Insurance/Re-insurance	Outsourcing investment management
34	IT - Electronic Games	Electronic Games Development
35	IT Industry	Call Center - Specific Support Channel
36	IT Industry	Call Center - English Support
37	IT Industry	Call Center - English/Japanese
38	IT Industry	Call Center Support - English/Spanish/Portuguese
39	IT Industry	Written Support
40	Manufacturing - Heavy equipment	Developing software embedded in crane manufacturing
41	Marketing	Consumer Product Marketing
42	Medical Equipment	Manufacturing of medical equipment
43	Medical Equipment	Remote Database Support
44	Pharma	Multiple Frame Agreements for research and development
45	Pharma	Pharmaceutical product manufacturing and development
46	Pharma	Clinical testing
47	Pharma	Clinical testing
48	Pharma	Clinical testing
49	Pharma	Clinical testing
50	Pharma	Clinical testing
51	Pharma	Clinical testing
52	Pharma	Clinical testing
53	Pharma	Programme Development
54	Pharma	Programme Development
55	Pharma	Programme Development
56	Pharma	Clinical Testing
57	Pharma	Clinical Testing
58	Pharma	Clinical Testing
59	Pharma	Clinical Testing
60	Pharma	Clinical Testing
61	Pharma	Clinical Testing
62	Production	Back-office Support
63	Production	IT Application support

64	Production	Back-office Support
65	Production	IT Application support
66	Production	Back-office Support
67	Public Utility	Remote Database Support
68	Public Utility	Remote Database Support
69	Retail	Call centre/Helpdesk
70	Software	Application development and testing
71	Software Industry	Software and product development
72	Software Industry	Software and product development
73	Software Industry	IT Application support
74	Software Industry	Software and product development
75	Software product development	Software and product development
76	Software product development	Remote Database Support
77	Telecom	Operations Center with Helpline and proactive management
78	Telecom	Call Center services
79	Telecom	Business Customer Interfacing
80	Telecom	Technical Support
81	Telecom	Engineering Support
82	US Exchange	Outsourcing of commodities and securities exchange
83	Utilities	Infrastructure Application & Procurement processing
84	Utilities	Application management
85	Utilities	Application management
86	Web based consumer industry	Data entry and indexing of historical documents
87	Web based consumer industry	Data entry and indexing of historical documents
88	Web based consumer industry	Data entry and indexing of historical documents
89	Web based consumer industry	Data entry and indexing of historical documents
90	Web based consumer industry	Data entry and indexing of historical documents
91	Web based consumer industry	Data entry and indexing of historical documents

Appendix C :

C.1 Governance Indexes considered for the political risk indicators (Independent Variables)

Index Name	Producer	Stated purpose	Format	Scales	Coverage (Years)	Coverage (countries)	Web address
Global Competitive Index (GCI)	World Economic Forum with Columbia University	The Global Competitiveness Index (GCI) attempts to quantify the impact of a number of key factors which contribute to create the conditions for competitiveness, with particular focus on the macroeconomic environment, the quality of the country's institutions, and the state of the country's technology and supporting infrastructure.	The index is composed of nine pillars: 1. Institutions 2. Infrastructure 3. Macro economy 4. Health and primary education 5. Higher education and training 6. Market efficiency (goods, labour, financial) 7. Technological readiness 8. Business sophistication 9. Innovation	Uses a 1-7 scale Higher average score means higher degree of competitiveness	First data: Collected in 1979 Latest data: Collected in 2005 Stated frequency: Annual	Global 125 countries	http://www.weforum.org/issues/global-competitiveness http://reports.weforum.org/global-competitiveness-report-2014-2015/downloads/

Country Policy and Institutional Assessment	World Bank	The Country Policy and Institutional Assessment (CPIA) aims to assess the quality of a country's present policy and institutional framework.	The CPIA rates countries against a set of 16 criteria grouped in four clusters: (a) economic management; (b) structural policies; (c) policies for social inclusion and equity; and (d) public sector management and institutions.		First data: collected in the 1970s (but not publicly available) Latest data: collected in 2006 (first made publicly available) Stated frequency: Annual	78 countries	http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/ENVIRONMENT/EXTDATASTA/0,,contentMDK:21115900~menuPK:2935553~pagePK:64168445~piPK:64168309~theSitePK:2875751,00.html
The Worldwide Governance Indicators (WGI)	World Bank Institute	To provide periodic cross-country estimates of six dimensions of governance, as well as access to a large dataset of underlying individual sources of governance data	Aggregate and individual governance indicators for six dimensions of governance: ▪ Voice and Accountability ▪ Political Stability and Absence of Violence ▪ Government Effectiveness ▪ Regulatory Quality ▪ Rule of Law ▪ Control of Corruption	The 'Governance Matters' indicators use a scale from -2.5 to 2.5 (higher values indicate higher quality of governance).	Period 1996–2013	Global 213 countries.	http://info.worldbank.org/governance/wgi/index.aspx#home

Heritage Foundation's Economic Freedom Index (EFI)	Heritage Foundation and Wall Street Journal	To develop systematic, empirical measurement of economic freedom in countries throughout the world.	The 2004 Index on Economic Freedom measures how well countries score on a list of 50 independent variables divided into 10 broad factors of economic freedom: trade policy, fiscal burden of government, government intervention in the economy, monetary policy, capital flows and foreign investment, banking and finance, wages and prices, property rights, regulation	Countries are ranked on a 1-5 scale	First data: Collected in 1994.	161 countries	http://www.heritage. org/research/features/index/countryFiles/English/2004Index.pdf
Corruption Perception Index (CPI)	Transparency International	To provide data on 'corruption in international business transactions'	A composite index drawing on 9 independent institutions including: Freedom House, PWC, WEF, Gallup, World Bank and Economist Intelligence Unit.		First data: Earliest data used dates from 1980. Latest data: Collected in 2006.	163 countries globally	Available from the Transparency International internet site: www.transparency.org/policy_research/surveys_indices/cpi
Bertelsmann's Transformation	Bertelsmann Foundation and the Centre	The Bertelsmann Transformation Index (BTI) is intended to evaluate the	For the Management Index, all the countries in the study are ranked according to progress in which		First data collected: 2003	119 developing and	http://www.bti-project.de/bti-home/

Status Index (TSI)	for Applied Research (C.A.P) at Munich University	progress, development and transformation of countries in transition	transformation has resulted from judicious management of the economy, with the best country receiving the highest rank.		Latest data collected: 2005 Frequency: Every two years	transition countries worldwide.	
Opacity Index	Kurtzman Group	To discourage opacity, due to the cost it imposes on countries in terms of reduced foreign direct investment.	The methodology measures opacity based on five distinct components: business and government corruption (costs from corruption, based on Transparency International and other sources); ineffective legal system (overall function of legal system, effectiveness in resolving disputes and protecting businesses); costs of doing business (including losses from bureaucratic red tape, non-trans parent taxation, and costs from organized crime and terrorism); inadequate accounting and governance practices.	The final score is derived by rescaling all of the above categories and taking the simple average of the five sub-indices; separately, the scores for each individual sub-index can show companies here the threats lie in each country.	First data: Collected in 2001. Latest data: 2004. Stated frequency: Not stated.	The 2004 index covers 48 countries worldwide.	http://www.kurtzmangroup.com/opacity_index.htm

Political Constraint Index	Henisz, University of Pennsylvania	Measure the feasibility of change in policy given the structure of a nation's political institutions and the preference of the actors that inhabit them. The Political Constraint Index is used for political risk analysis for investment purposes and for predicting policy variability more generally.	The index uses quantitative data on the number of independent branches of administrative government with veto power, over policy change, and the distribution of preferences within those veto players. These data are analyzed in a simple spatial model of political interaction to assess the feasibility with which any one actor can secure a change in the status quo.	Scale 0 (most hazardous - no checks and balances) to 1 (most constrained)	First data: Some data collected as early as 1815 Latest data: Collected in 2004 Stated Frequency: Annual	Global: 234 countries	http://www.management.wharton.upenn.edu/henisz/

C.2 Review of methodology and data sources applied in comparable political risk research

Author	Year	Citation	Journal Name	Contribution	Research approach	Sample types
Mumpower & Livingston	1987	Experts Judgments of Political Riskiness.	Journal of Forecasting	Highlights the relative limited difference in political risk expert judgments and that of "naïve" experts, highlighting the limited predictive ability of experts. Also notes the predictive importance of infant mortality rate and other development variables.	Applied factor analysis, linear regression and cluster analysis in data analysis	83 developing countries covering 1984-2003
Fatehi & Safizadeh	1989	The Association Between Political Instability and Flow of Foreign Direct Investment.	Management International Review (MIR)	Explores the association between US MNCs investment (FDI) and political instability, identifying positive correlation between protest demonstrations, successful assassinations, political strikes and political execution and FDI inflow, suggesting that symptoms of socio-political instability by and large have had lasting effects on US FDI decisions.	Applied multiple regression analysis with FDI serving as dependent variable and frequencies of socio-political served as independent variable.	3857 international expansions of 665 Japanese manufacturing firms
Rice & Mahmoud	1990	Political Risk Forecasting by Canadian Firms.	International Journal of Forecasting	The research explores political risk forecasting among Canadian firms linking forecasting and management decision making. Results showed that personal judgments was by far the most used political risk forecasting method, second was scenario planning and last was the Delphi method. The biggest problem were that the assessments tend to be reactive and unreliable data	Applied Fischer's Least Significant Difference (LSD) technique to identify "groups" within the respondent pool	Looked at years 1950-82 and 15 countries with global spread
Oetzel & Zenner	2001	Country Risk Measures: How Risky Are They?	Journal of World Business	Investigates the extent to which country risk measures can predict periods of intense instability. Findings indicate that commercial risk measures are very poor at predicting actual realized risks.	Applied a punctuated equilibrium framework	
Delios & Henisz	2003	Political hazards, experience and sequential entry strategies: The	Strategic Management Journal	The study found support for the role of experience in the firm's international expansion and sensitivity to political uncertainty. The study adds political hazard to the stages	Applied Co variation Data mining on Japanese overseas investment	5-8000 German parent

		international expansion of Japanese firms.		model, including measuring political hazards, cultural block distance, and investment experience.		companies and about 13,500 affiliates located in more than 140 countries
Zhao	2003	Country factor differentials as determinants of FDI flow to China.	Thunderbird International Business Review	The study focused on empirically examining the importance of source country factors in explaining the level of FDI in China. Findings revealed that high level of growth when the Chinese market exhibited a high growth rate than source countries; when the source countries had a relative stronger currency. However FDI flow was low when China had a relatively less stable political environment and higher operational risk.	Applied Multiple Regression	Data extracted from the Almanac of China's Foreign Economic Relations and Trade
Mudambi & Navarra	2003	Political tradition, political risk and foreign direct investment in Italy.	Management International Review	The research finds that the major influence on the location of investment emanates from location and infrastructural factors, while local political tradition is influential at the margin.	Applied a two-step econometric model	See source list
Keillor & Wilkinson	2005	Threats to international operations: Dealing with political risk at the firm level.	Journal of Business Research	Explores relationships between specific forms of political risk i.e. transfer restrictions and ownership/control restrictions and the political activities used by firms to manage these risks finding that political activities of firms is related to the threats that they face.	Survey	0
Busse & Hefeker	2007	"Political risk, institutions and foreign direct investment"	European Journal of Political Economy	The paper examines a wide range of indicators for political risk and to identify the relative importance of these indicators for FDI inflows. The result indicate that government stability, internal and external conflicts, corruption, law & order, ethnic tensions, democratic accountability and bureaucratic quality of government matter for the investment decision of MNCs.	Applied factor analysis, linear regression and cluster analysis in data analysis	0

				Strongest are GOV, Internal Conflict, Law & order and Econ, while corruption matters over time but only marginally.		
Agarwal & Feils	2007	Political risk and the internationalization of firms: An empirical study of Canadian-based export and FDI firms.	Journal of Administrative Sciences	Explores the critical political risk concerns among exporters finding increasing concern with red tape from bureaucratic inefficiency to corruption.	Repeated Measures within Subjects - MANOVA	Currency crisis used as surrogate for economic or political events
Sanders, Locke, Moore & Autry	2007	A multidimensional framework for understanding outsourcing arrangements.	Journal of Supply Chain Management	The study established a framework clarifying the broad spectrum of outsourcing modalities in terms of scope and criticality, outlining their respective risks and advantages. The study does not inform on inherent political risks.	In-depth interviews	19 Senior Managers
Sodhi & Lee	2007	An analysis of sources of risk in the consumer electronics industry.	The Journal of the Operational Research Society	Describes many of the risks associated with any global supply chain in the electronics industry. Develops an understanding of supply chain risks in the consumer electronics industry, identifying both strategic and operational level risks.	Case study	IMF FDI flows from 108 countries
Straub	2008	Opportunism, corruption and the multinational firm's mode of entry.	Journal of International Economics	Explores institutional constraints in host countries with focus on corruption constraints. Distinguishes between bureaucratic and political corruption, finding that in the absence of corruption MNE would prefer FDI, however both kind of corruption shifts the trade-off marginally toward debt. The debt contracts are defined as projects where MNE engage in a licensing agreement with the host country.	Correlation	FDI capital flows measured in the IMFs International Financial Statistics Database covering 106 countries

Feinberg & Gupta	2009	MNC subsidiaries and Country Risk: Internalization as a Safeguard Against Weak External Institutions.	Academy of Management Journal	The study focuses on MNC risk management in high risk locations post-entry and confirms that trade internalization is increased under uncertainty.	Correlation	21 Source Countries investment 1983-1999 yielding 357 observations
Nakatsu & Lacovou	2009	A comparative study of important risk factors involved in offshore and domestic outsourcing of software development projects.	Information & Management	The study generates a list of risk factors for domestic and outsourced software development projects and compares the two contexts.	A two-panel Delphi Study	24 Exporters and 21 FDIs (10% respond rate)
Rios-Morales, Gamberger, Smuc and Azuaje, 2009	2009	Innovative methods in assessing political risk for business internationalization	Research in International Business and Finance	The paper assesses the relevance and action ability of "Good Governance" indicators in political risk assessment. The findings suggest that quantitative indicators of good governance may provide the basis for accurate and meaningful model's for assessment and prediction of political risk.	Integrative Data mining - 1. Uses the Political Instability task Force (PITF) dataset as the source of information about political instability. 2. Uses the GG indicators of the World Bank.	1722 R&D projects by MNEs located in developed and emerging economies
Hahn, Doh, and Bunyaratave	2009	The evolution of risk in Information Systems Offshoring	MIS Quarterly	The study find that firm-specific experience and the core "risk-gab" between home and host country are predictive of companies pursuing progressively riskier locations, but that their effects dissipate as environment-wide experience is incorporated.	Merging datasets from Worldwide Governance Indicators (WGI) and International Country Risk Guide (ICRG) - and the LOCO monitor database developed by OCO consulting	IS projects (881)

Kesternich & Schnitzer	2010	"Who is afraid of political risk? Multinational firms and their choice of capital structure"	Journal of International Economics	Explores how MNC chose the capital structure of their foreign affiliates in response to political risk i.e. ownership or leverage. Findings suggest that as political risk increases, ownership tends to decrease, while leverage will increase/decrease based on type of political risk. Focus on expropriation, intellectual property rights and confiscatory taxes.	OLS regression - using data from the Deutche Bundesbank and ICRG as a measure of political risk.	170
López-Duarte & Vidal-Suárez	2010	"External uncertainty and entry mode choice: Cultural distance, political risk and language diversity"	International Business Review	Aims at analyzing the effect of external uncertainty on entry mode choice i.e. between WOS and JV. Findings suggest that managers interested in expanding through FDI should consider language diversity as a main factor influencing the entry mode choice.	Logistic regression models	15 outsourcing offshore experts and 17 Domestic outsourcing experts
Wan & Zhang	2010	Business Risk Management for Software Outsourcing Service Provider	Scientific Research Publishing	The study constructs a risk structure based on established correlations between risk factors for a Software Outsourcing service between Hong Kong and Guangdong. The model identifies political & legal risks as one of the five most important considerations.	Applies an Interpretive Structural Model using a re-order reachable matrix.	19 Executives
Demirbag & Glaister	2010	Factors determining offshore location choice for R&D projects.	Journal of Management Studies	Focuses on R&D outsourcing and the location choice. At the regional level, findings show that the R&D wage difference and knowledge infrastructure difference between home and host countries, the science and engineering talent pool size, and the political risk level of host countries are important determining factors. At the firm level, experience of overseas R&D projects and prior experience with research in the host country are found to be important location determinants.	Multi logistic regression model - used LOCO database maintained by OCO consulting.	Samsung electronics

Pedersen and Ørberg Jensen	2011	The economic geography of off shoring: The fit between activities and local context.	Journal of Management Studies	Analyzes the fit between destination attributes and attributes of offshored business activities and reveals a multi-facet location pattern in which firm strategies, to some degree follow, a logic where manufacturing is relocated to low-cost destinations and R&D is relocated to high-cost destinations.	Survey	881 IS projects
Gholami	2012	Critical risk factors in outsourced support projects of IT.	Journal of Management Research	Determines the critical risk factors in the Information Technology (IT) projects outsourcing. Identifies legal and political risk as being a main concern for ITO and identifies sub-categories i.e. (Privacy rule, Law and order, accountability, Quality of Bureaucracy).	Semi structured interview	1504 Danish firms

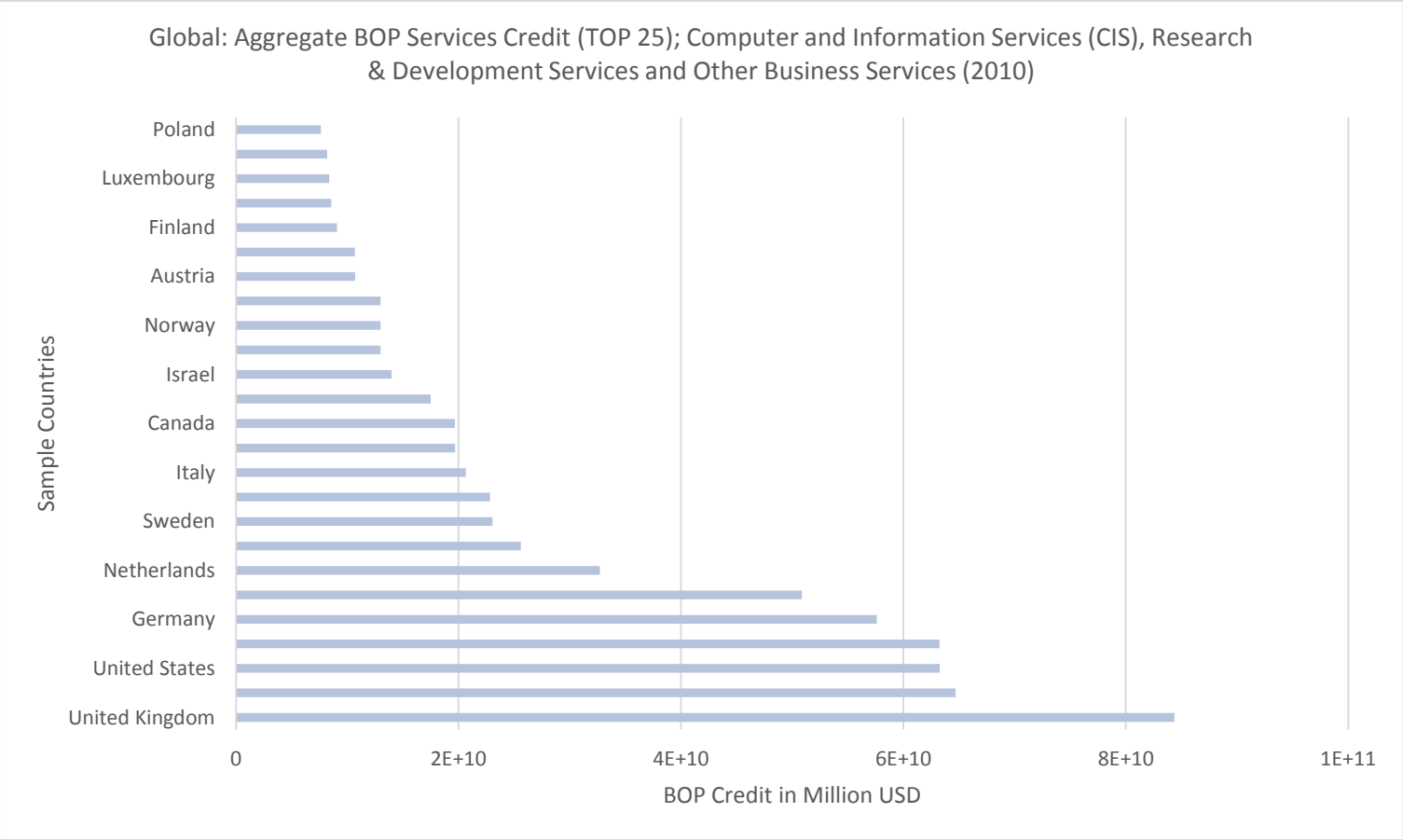
C.3 Overview of Data Sources and Scope for Independent Variables

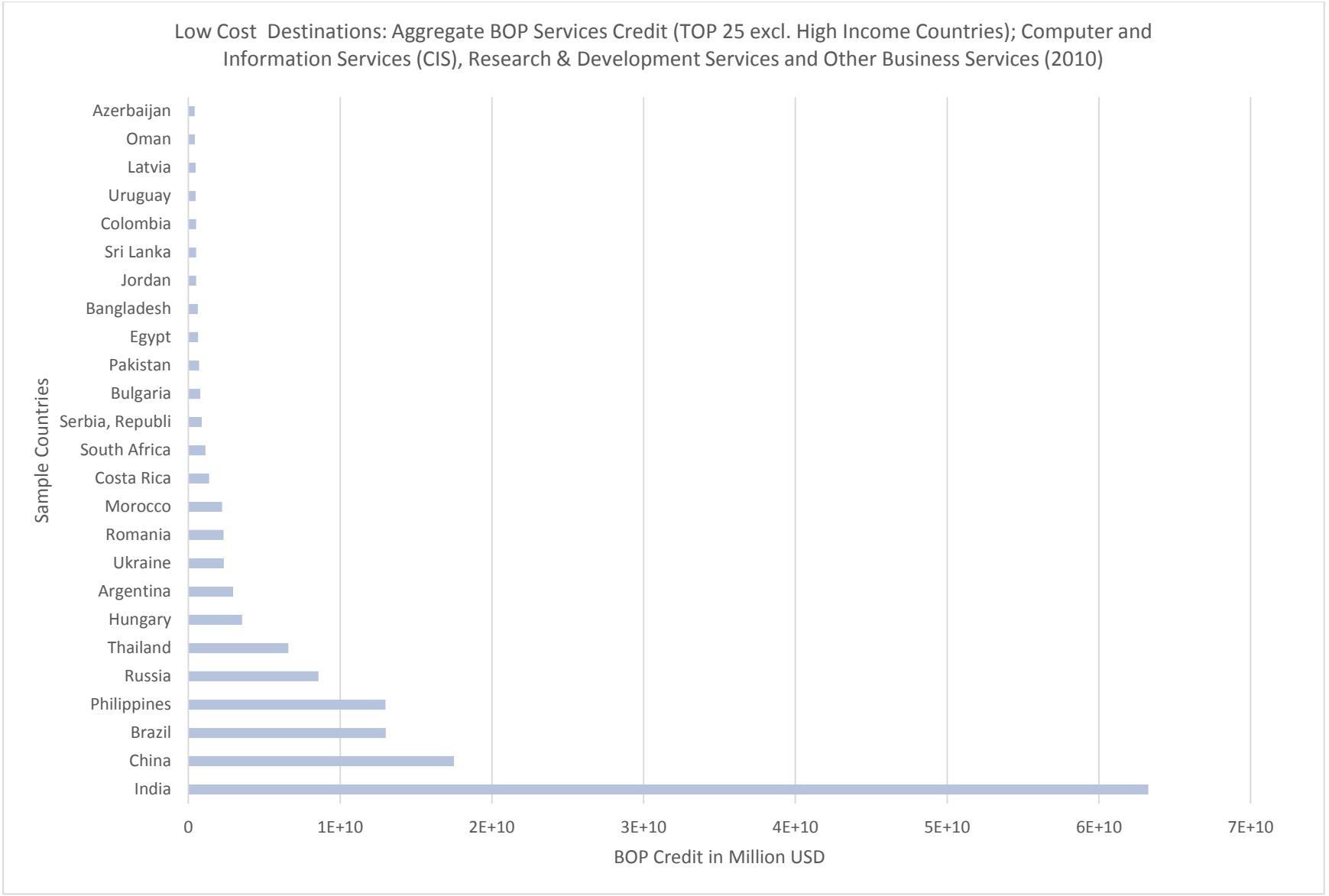
No.	Overall Risk Family	Risk Description	Data Heading	Data Source	Data Type	Data Description
1.	*Policy predictability*	Home-Country Risk				Data unavailable
		Change of data management regulatory framework				Data unavailable
		Predictability & transparency of tax regime				Data unavailable
		Predictability of labor regulations				Data unavailable
2.	*Political Instability*	Geo-political Risk	External Conflict	PRS Group - the International Country Risk Guide	1-12 (best)	A measure of both the risk to the incumbent government from foreign action, ranging from non-violent external pressure (diplomatic pressures, withholding of aid, trade restrictions, territorial disputes, sanctions, etc.) to violent external pressure (cross-border conflicts to all-out war). The risk rating assigned is the sum of three subcomponents: War, Cross-Border Conflict, and Foreign Pressures
		Internal unrest	Internal Conflict	PRS Group - the International Country Risk Guide	1-12 (best)	A measure of political violence in the country and its actual or potential impact on governance. The risk rating assigned is the sum of three subcomponents: Civil War/Coup Threat, Terrorism/Political Violence, and Civil Disorder.
		Terrorism	Business costs of terrorism	Global Competitiveness Index, 1.13	1-7 (best)	In your country, to what extent does the threat of terrorism impose costs on businesses? [1 = to a great extent; 7 = not at all]

		Host Government Stability	Government Stability	PRS Group - the International Country Risk Guide	1-12 (best)	A measure of both of the government's ability to carry out its declared program(s), and its ability to stay in office. The risk rating assigned is the sum of three subcomponents: Government Unity, Legislative Strength, and Popular Support.
3.	*Instability of socio-economic environment*	Social unrest	Socio-economic conditions	PRS Group - the International Country Risk Guide	1-12 (best)	A measure of the socioeconomic pressures at work in society that could constrain government action or fuel social dissatisfaction. The risk rating assigned is the sum of three subcomponents: Unemployment, Consumer Confidence, and Poverty.(
		Organized Crime	Business costs of crime and violence	Global Competitiveness Index, 1.14	1-7 (best)	In your country, to what extent does the incidence of crime and violence impose costs on businesses? [1 = to a great extent; 7 = not at all]
		Organized Crime	Organized crime	Global Competitiveness Index, 1.15	1-7 (best)	In your country, to what extent does organized crime (mafia-oriented racketeering, extortion) impose costs on businesses? [1 = to a great extent; 7 = not at all]
		Organized Labor Strike	Cooperation in labor-employer relations	Global Competitiveness Index 7.01	1-7 (best)	In your country, how would you characterize labor-employer relations? [1 = generally confrontational; 7 = generally cooperative]
		Wage Flexibility	Flexibility of wage determination	Global Competitiveness Index 7.02	1-7 (best)	In your country, how are wages generally set? [1 = by a centralized bargaining process; 7 = by each individual company]
4.	*Macro-economic instability*	Currency Fluctuations	Exchange Rate Stability	PRS Group - the International Country Risk Guide	Annual % Change	Annual percentage change in the exchange rate of the national currency against the USD (against the EUR in the case of the USD; prior to 2000, to the DM).
		Wage Inflation	Inflation, annual % change*	Global Competitiveness Index, 3.03	Annual % Change	Annual percent change in consumer price index (year average)

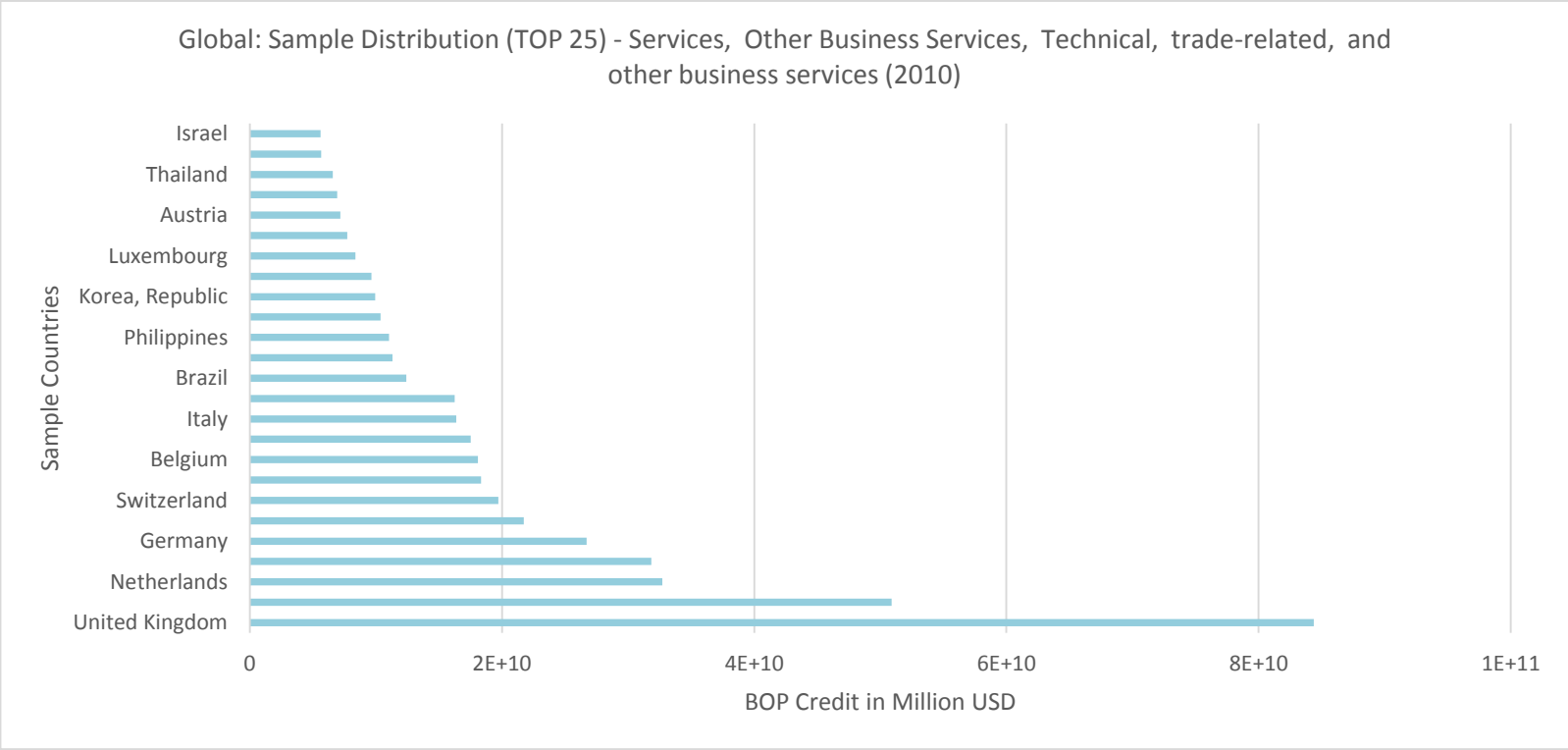
5.	*Institutional capacity limitations*	Host country bureaucracy	Burden of customs procedures	Global Competitiveness Index, 6.13	1-7 (best)	In your country, how efficient are the customs procedures (related to the entry and exit of merchandise)? [1 = not efficient at all; 7 = extremely efficient]
		Host country bureaucracy	Quality of Bureaucracy	PRS Group - the International Country Risk Guide	1-4 (Best)	Institutional strength and quality of the bureaucracy is a shock absorber that tends to minimize revisions of policy when governments change.
		Institutional Corruption	Irregular payments and bribes	Global Competitiveness Index, 1.05	1-7 (best)	Average score across the five components of the following Executive Opinion Survey question: In your country, how common is it for firms to make undocumented extra payments or bribes connected with (a) imports and exports; (b) public utilities; (c) annual tax payments; (d) awarding of public contracts and licenses; (e) obtaining favorable judicial decisions? In each case, the answer ranges from 1 [very common] to 7 [never occurs].
6.	*Legal unpredictability*	Contract enforcement	Judicial independence	Global Competitiveness Index, 1.06	1-7 (best)	In your country, to what extent is the judiciary independent from influences of members of government, citizens, or firms? [1 = heavily influenced; 7 = entirely independent]
		Contract enforcement	Efficiency of legal framework in settling disputes	Global Competitiveness Index, 1.10	1-7 (best)	In your country, how efficient is the legal framework for private businesses in settling disputes? [1 = extremely inefficient; 7 = extremely efficient]
		Contract enforcement	Efficiency of legal framework	Global Competitiveness Index, 1.11	1-7 (best)	In your country, how easy is it for private businesses to challenge government actions and/or regulations through the legal system? [1 = extremely difficult; 7 = extremely easy]
		Loss of IP	Intellectual property protection	Global Competitiveness Index, 1.02	1-7 (best)	In your country, how strong is the protection of intellectual property, including anti-counterfeiting measures? [1 = extremely weak; 7 = extremely strong]

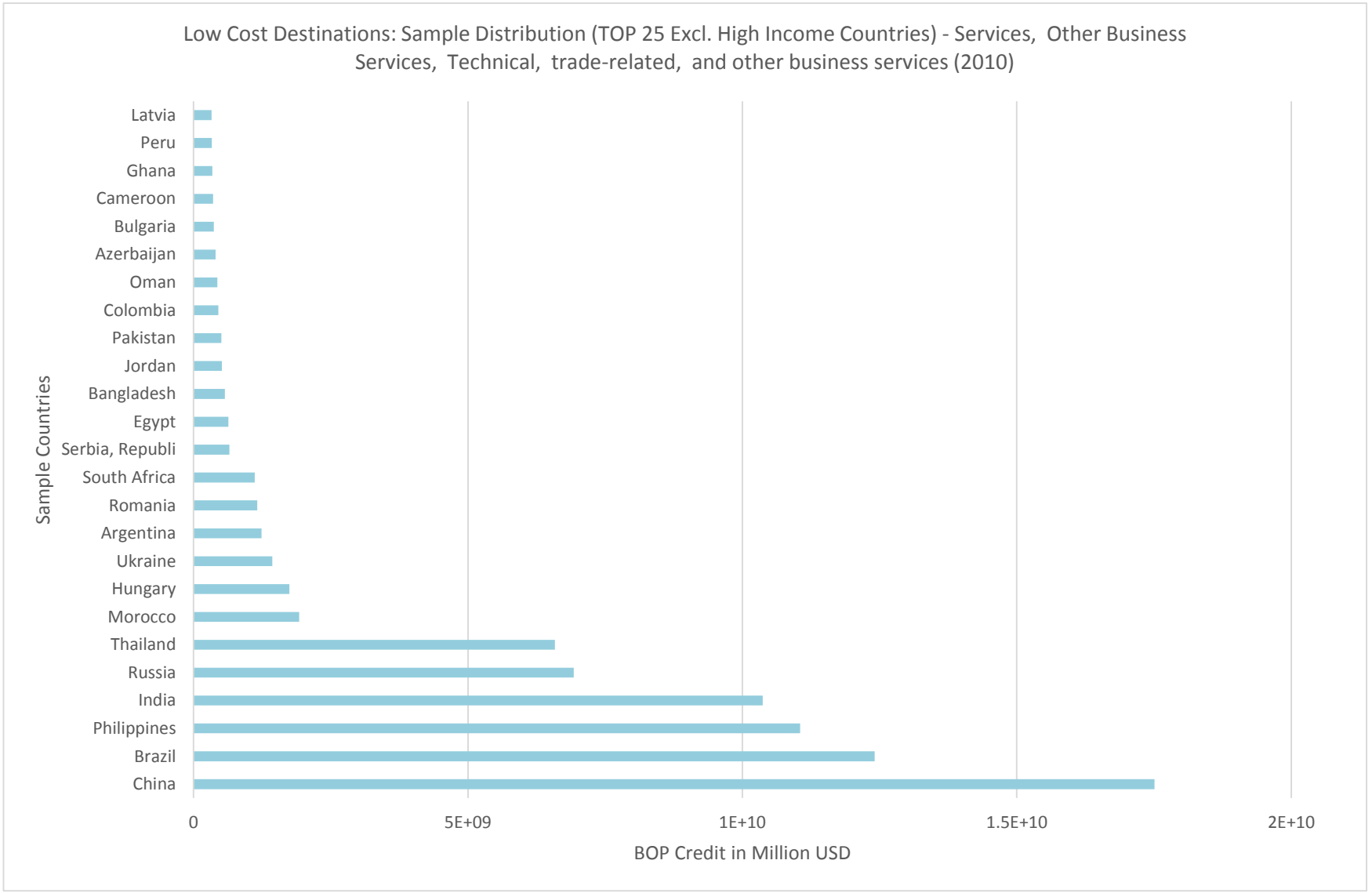
C.4 Aggregate BOP Services Credit - Computer and Information Services (CIS), Research & Development Services and Other Business Services (2010)



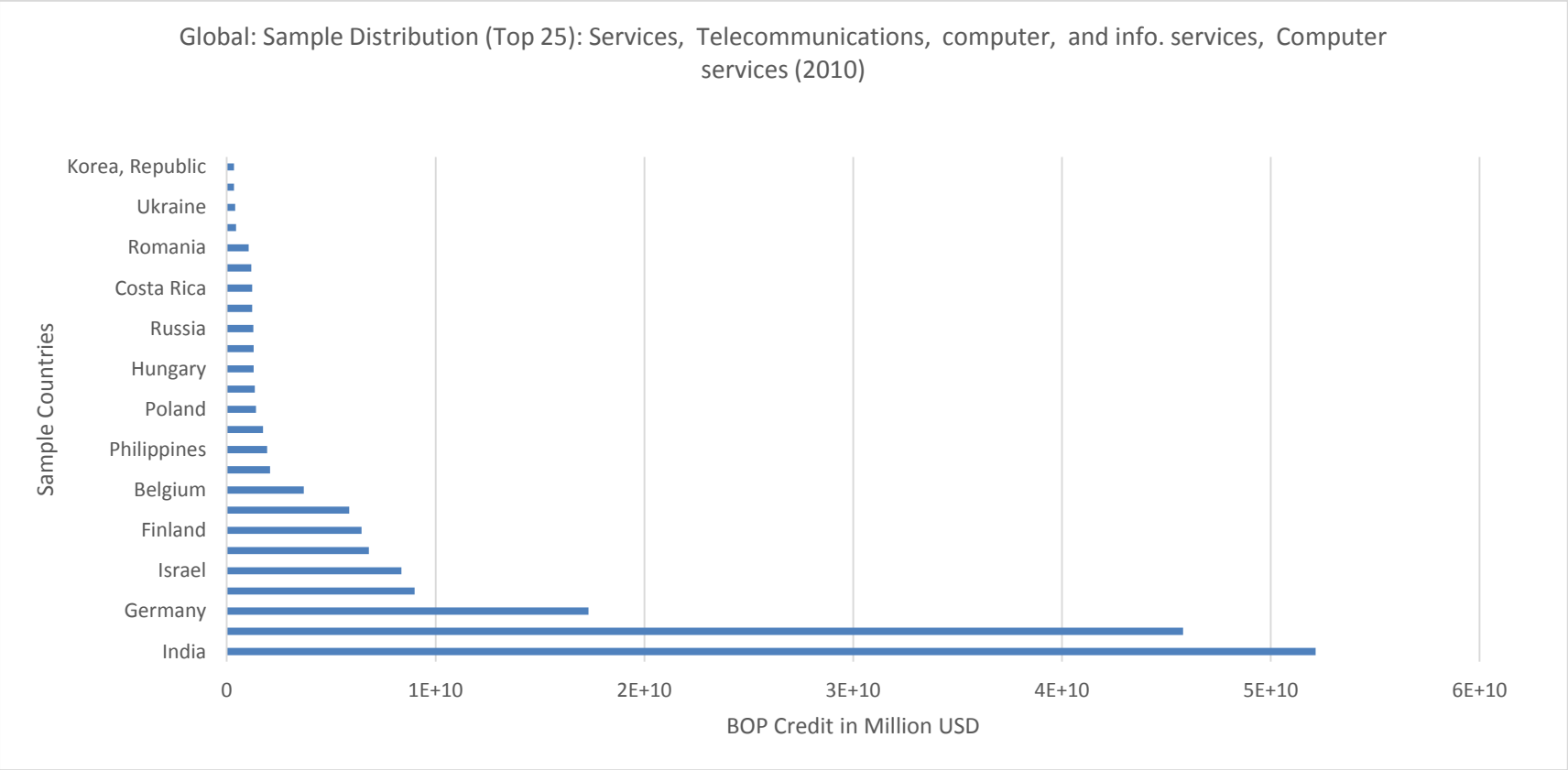

Low Cost Destinations: Aggregate BOP Services Credit (TOP 25 excl. High Income Countries); Computer and Information Services (CIS), Research & Development Services and Other Business Services (2010)
Sample Countries
Azerbaijan
Oman
Latvia
Uruguay
Colombia
Sri Lanka
Jordan
Bangladesh
Egypt
Pakistan
Bulgaria
Serbia, Republi
South Africa
Costa Rica
Morocco
Romania
Ukraine
Argentina
Hungary
Thailand
Russia
Philippines
Brazil
China
India
0
1E+10
2E+10
3E+10
4E+10
5E+10
6E+10
7E+10
BOP Credit in Million USD

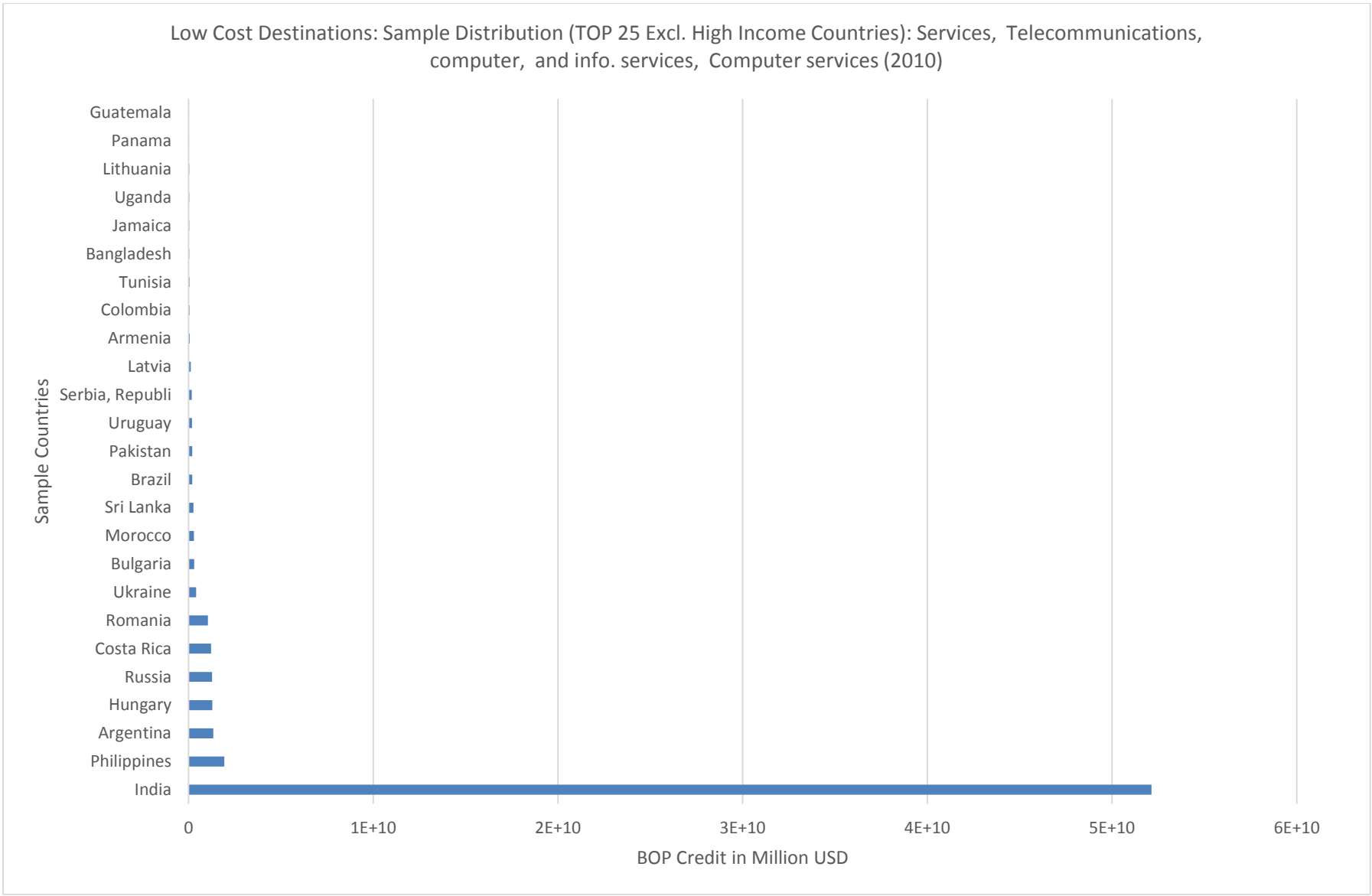
C.5 Sample Distribution (BPO TOP 25) - Services, Other Business Services, Technical, trade-related, and other business services (2010)



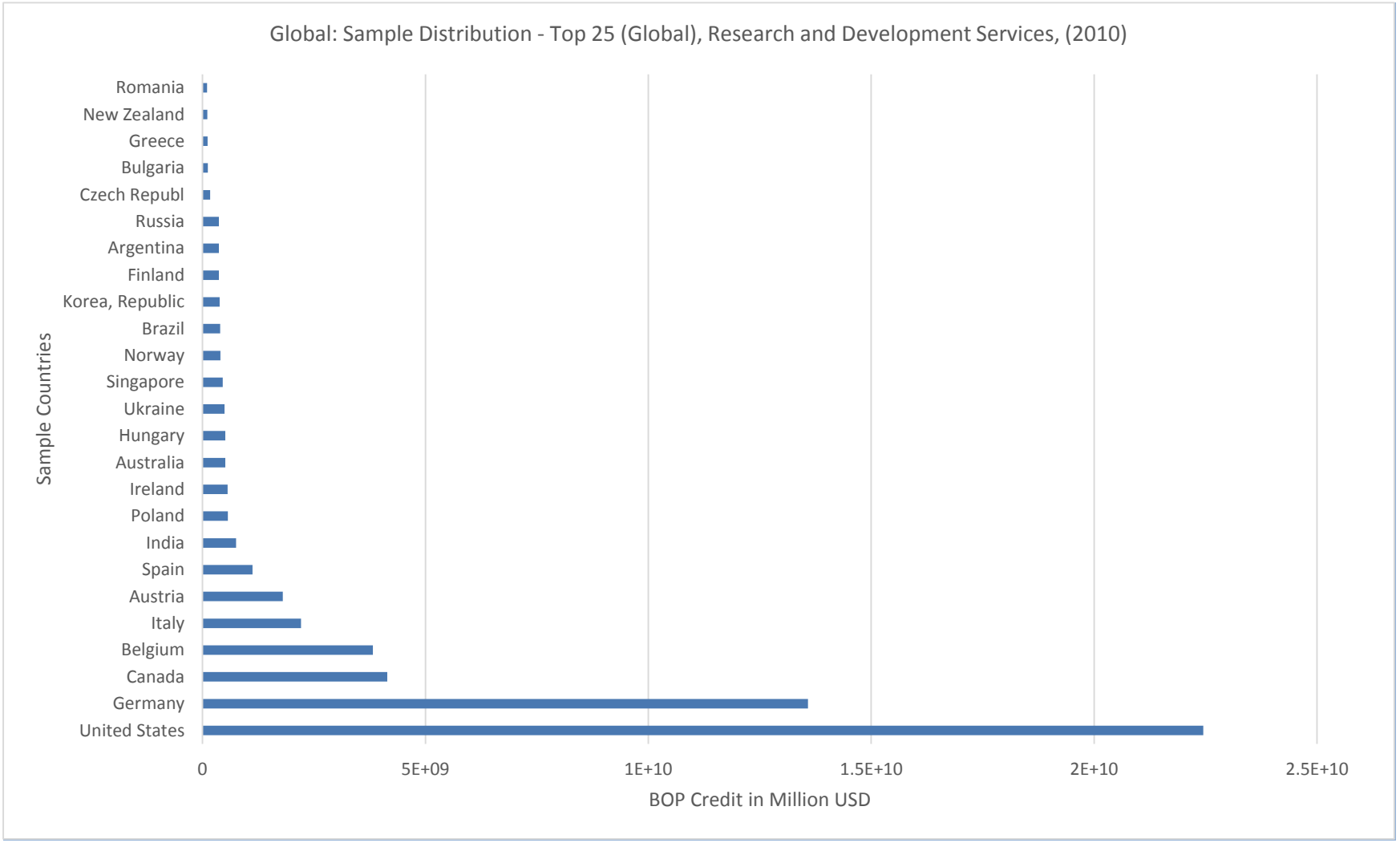

Low Cost Destinations: Sample Distribution (TOP 25 Excl. High Income Countries) - Services, Other Business Services, Technical, trade-related, and other business services (2010)
Sample Countries
Latvia
Peru
Ghana
Cameroon
Bulgaria
Azerbaijan
Oman
Colombia
Pakistan
Jordan
Bangladesh
Egypt
Serbia, Republi
South Africa
Romania
Argentina
Ukraine
Hungary
Morocco
Thailand
Russia
India
Philippines
Brazil
China
0
5E+09
1E+10
1.5E+10
2E+10
BOP Credit in Million USD

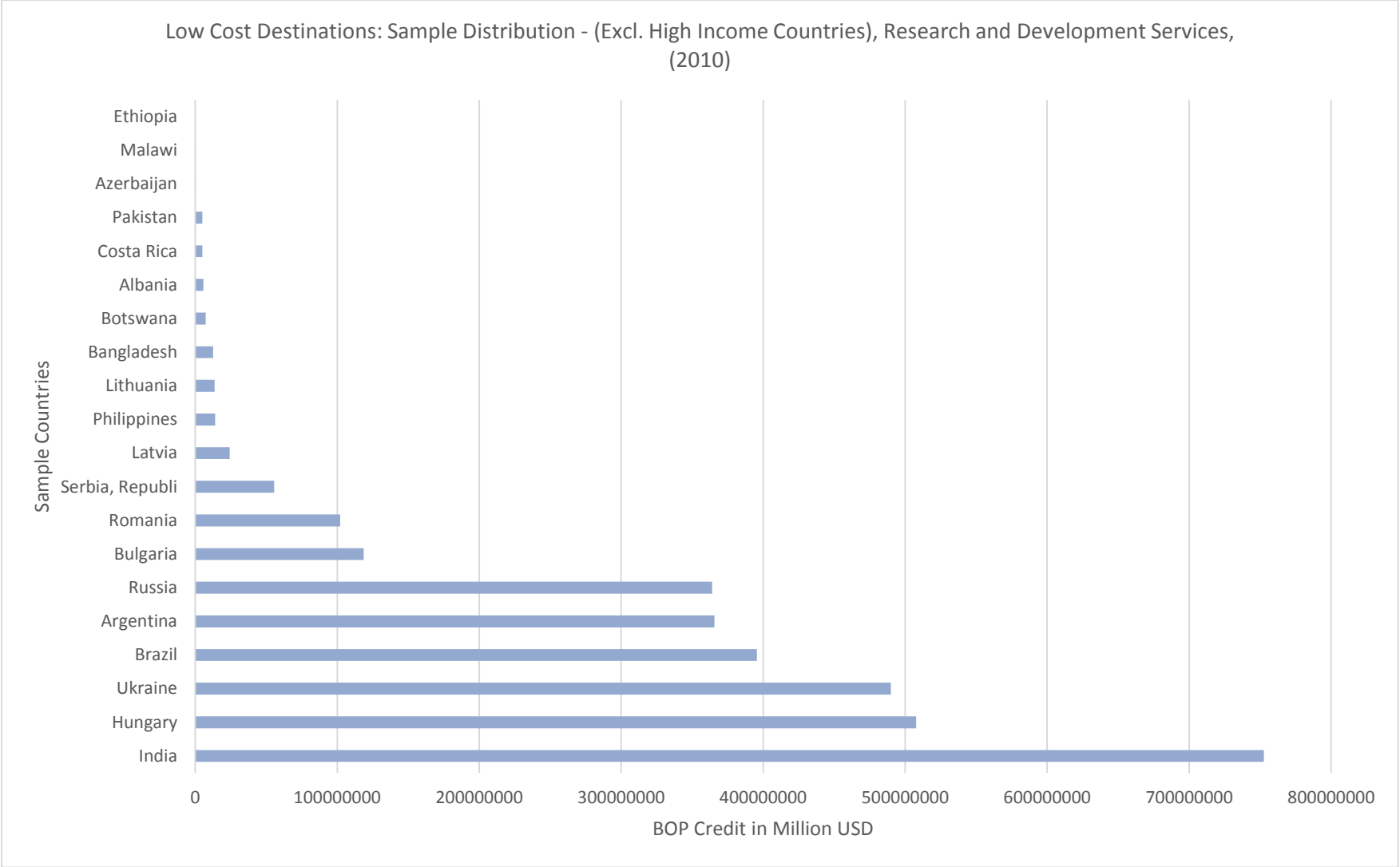
C.6 Sample Distribution (ITO Top 25): Services, Telecommunications, computer, and information services, Computer services (2010)




Low Cost Destinations: Sample Distribution (TOP 25 Excl. High Income Countries): Services, Telecommunications, computer, and info. services, Computer services (2010)
Guatemala
Panama
Lithuania
Uganda
Jamaica
Bangladesh
Tunisia
Colombia
Armenia
Latvia
Serbia, Republi
Uruguay
Pakistan
Brazil
Sri Lanka
Morocco
Bulgaria
Ukraine
Romania
Costa Rica
Russia
Hungary
Argentina
Philippines
India
Sample Countries
0
1E+10
2E+10
3E+10
4E+10
5E+10
6E+10
BOP Credit in Million USD

C.7 Sample Distribution – KPO Top 25 (Global), Research and Development Services, (2010)




Low Cost Destinations: Sample Distribution - (Excl. High Income Countries), Research and Development Services, (2010)
Sample Countries
Ethiopia
Malawi
Azerbaijan
Pakistan
Costa Rica
Albania
Botswana
Bangladesh
Lithuania
Philippines
Latvia
Serbia, Republi
Romania
Bulgaria
Russia
Argentina
Brazil
Ukraine
Hungary
India
0
100000000
200000000
300000000
400000000
500000000
600000000
700000000
800000000
BOP Credit in Million USD

C.8 Top 25 A.T. Kearny Index of Best Offshore Outsourcing locations

TOP 25 A.T. Kearny Index of Best Offshore Outsourcing locations	Country Rank
India	1
China	2
Malaysia	No data
Mexico	No data
Indonesia	No data
Thailand	6
Philippines	4
Brazil	3
Bulgaria	15
Egypt	17
Vietnam	No data
Chile	No data
Sri Lanka	20
Romania	10
Jordan	19
Russia	5

Costa Rica	12
Pakistan	16
Bangladesh	18
Tunisia	34
Ghana	27
Panama	No data
Hungary	7
Morocco	11
Argentina	8

C.9 Comparison of Standardized Coefficients Outcomes (List-wise versus pair-wise exclusion)

		Standardized Coefficients (Beta)	Standardized Coefficients (Beta)
		List-wise exclusion	Pair-wise exclusion
1	Political risk variables		
	External Conflict	*-.094*	*-.010*
	Corruption	.148	.232
	Government Stability	*-.068*	*-.051*
	Internal Conflict	*-.167*	*-.239*
	Staff Security	*-.065*	*-.121*
	Quality of Bureaucracy	.305	.294
	Cooperation in labor-employer relations	.076	.085
	Intellectual property protection	.692	.695
	Efficiency of legal framework in settling disputes	*-.096*	*-.120*
	Burden of customs procedures	*-.379*	*-.424*
	Judicial independence	*-.053*	*-.026*
	Exchange Rate Stability	.003	*-.001*
1	External business variables		
	Pillar 2 - Electricity and telephony infrastructure	.054	.073
	Pillar 3 - Macro Environment	*-.232*	*-.221*
	Pillar 4 - Primary Education	.052	.009
	Pillar 5 - Higher education and training	*-.372*	*-.244*
	Pillar 7 - Labor market efficiency	.165	.156
	Pillar 9 - Technological readiness	.290	.131
	Pillar 10 - Domestic Market Size	.526	.491
	Pillar 12 - Innovation	.349	.312
	GDP per Capita	*-.019*	.099

C.10 Comparison of variable ranking - List-wise versus pair-wise exclusion

Political Risk Variables	
	List-wise exclusion
Intellectual property protection	0.692
Quality of Bureaucracy	0.305
Corruption	0.148
Cooperation in labor-employer relations	0.076
Exchange Rate Stability	0.003
Judicial independence	*-0.053*
Staff Security	*-0.065*
Government Stability	*-0.068*
External Conflict	*-0.094*
Efficiency of legal framework in settling disputes	*-0.096*
Internal Conflict	*-0.167*
Burden of customs procedures	*-0.379*

Political Risk Variables	Pair-wise exclusion
Intellectual property protection	0.695
Quality of Bureaucracy	0.294
Corruption	0.232
Cooperation in labor-employer relations	0.085
Exchange Rate Stability	*-0.001*
External Conflict	*-0.010*
Judicial independence	*-0.026*
Government Stability	*-0.051*
Efficiency of legal framework in settling disputes	*-0.120*
Staff Security	*-0.121*
Internal Conflict	*-0.239*
Burden of customs procedures	*-0.424*

External Business Variables	
	List-wise exclusion
Pillar 10 - Domestic Market Size	0.526
Pillar 12 - Innovation	0.349
Pillar 9 - Technological readiness	0.290
Pillar 7 - Labor market efficiency	0.165
Pillar 2 - Electricity and telephony infrastructure	0.054
Pillar 4 - Primary Education	0.052
GDP per Capita	*-0.019*
Pillar 3 - Macro Environment	*-0.232*
Pillar 5 - Higher education and training	*-0.372*

External Business Variables	Pair-wise exclusion
Pillar 10 - Domestic Market Size	0.491
Pillar 12 - Innovation	0.312
Pillar 7 - Labor market efficiency	0.156
Pillar 9 - Technological readiness	0.131
GDP per Capita	0.099
Pillar 2 - Electricity and telephony infrastructure	0.073
Pillar 4 - Primary Education	0.009
Pillar 3 - Macro Environment	*-0.221*
Pillar 5 - Higher education and training	*-0.244*