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Review

Identifying and managing risk in international construction projects

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ABSTRACT

Over the last decade, major construction projects have increasingly arisen in countries or regions that lack specialist, expert construction contractors, suppliers and consultants. Steps are being taken by governments in the Middle East, Eastern Europe, China, India and developing markets to address national infrastructure deficits, and by so doing, are creating new regions of booming construction demand. When coupled with anaemic growth in developed markets such as the United Kingdom, the USA and Western Europe, foreign markets present attractive opportunities to the global construction industry. However, foreign markets are littered with the cautionary tales of international contractors and consultants that have failed to grasp the intricacies and risks of operating in a new environment and have failed to capitalise on the opportunities available. By identifying the classes of risks, and undertaking detailed analysis, ranking and mitigation of relevant jurisdictional risks, participants in international construction projects will increase the likelihood of project success and commercial longevity in the new jurisdiction. Risk identification and assessment is not a science but an art, and while there are many potential approaches to the issue, we propose that our strategies for identifying, assessing, ranking and mitigating jurisdictional risks offer new international players a good chance of commercial success.

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INTRODUCTION

Construction is a significant global industry with reports valuing the industry between USD 2.27 trillion¹ and USD 7.5 trillion.² It has been suggested that global construction currently accounts for 13.4% of world output, estimated to increase to 14.6% by 2020.³ Whereas fifty years ago, the concept of a 'global' construction industry would have been something of an economic fiction, today, the mobility of labour, plant and capital, the ease of electronic communication technologies, and the advent of advanced project management techniques have assisted in transforming construction from a localised to a global industry. The growth and activities of multinational corporations have also been a major contributor to the creation of an "international construction market".⁴

Despite the cumulative size and value of the industry, construction remains a high-risk enterprise. Competition among contractors is keen and profit margins are thin.⁵ Cash flow is the lifeblood of the industry⁶ and the smallest of payment delays has the ability to disrupt and expose the entire supply chain to significant hardship. Insolvency is common, with the construction industry representing the single largest category of insolvencies in many countries.⁷ Project delivery risks are omnipresent and in many developed markets questions remain as to the continued flow of projects in light of fiscal deficits and soft private sector demand.⁸ It is within this environment that 'international construction' has become a trend used by construction companies to address domestic market risk and expand their market share.⁹

Successfully diversifying away from a single market ameliorates the risk of a country specific industry slowdown and may ultimately build a better supported and more profitable business. However, the move into a new jurisdiction or the acceptance of an international construction project does not in itself address the risk intrinsic to the industry and committing to an international project or foreign business does not guarantee success. Rather, international construction projects typically expose foreign participants to new and significantly greater risks, in addition to all of the usual project delivery risks experienced on domestic projects.

The main focus of this paper is the identification, assessment and mitigation of these jurisdictional risks, based on a review of the existing literature and international risk assessment tools and our experience in advising on over 150 international construction projects in the Middle East, the Far East, Eastern Europe and India, over the last four years.

While it is not our intention to discourage construction industry participants from pursuing global expansion and undertaking international projects, it is apparent that the quality and extent of risk identification, assessment and mitigation is frequently inadequate,¹⁰ exposing both the international enterprise and the established home entity to potentially significant losses and damage. The industry is littered with failed international endeavours and it is our hope that the ideas and suggestions proposed in this paper may help to avoid future cautionary tales.

¹ Marketresearch.com, *Datamonitor Report, Construction and Engineering: Global Industries Guide 2011*, http://www.researchandmarkets.com/reports/1934232/construction_and_engineering_global_industry_guide (accessed, April 16, 2012).

² Global Construction Perspectives and Oxford Economics, "Global Construction 2020—A global forecast for the construction industry over the next decade to 2020", <http://www.joinricsineurope.eu/uploads/files/RICSGlobalConstructionForecast2020.pdf> (accessed 19 March, 2012).

³ *Id.*

⁴ UNCTAD, World Investment Report, UN Doc. UNCTAD/WIR/2001 (2001).

⁵ J. Walewski and G.E. Gibson, *International Project Risk Assessment: Methods, Procedures and Critical Factors*, Centre Construction Industry Studies, Report No. 31, University of Texas, Austin (2003) at page 7.

⁶ *Dawnays Ltd v FG Minter Ltd.* [1971] 1 BLR 16, per Lord Denning.

⁷ Kingsway Financial Assessments Pty Ltd, *Corporate Insolvency in the Australian Construction Sector – ASIC insolvency data, key findings 2009/2010*. <http://www.kingswayassessments.com.au/announcements/construction-insolvency-analysis> (accessed, 19 March, 2012).

⁸ *Supra*, n2.

⁹ G. Ofori, *Globalization and Industry Development: research opportunities* 18 Construction Management Economics, 257–262 (2000). See also R. Bon and D. Crostwaith, *The Future of International Construction*. Thomas Telcord, London, (2000).

¹⁰ Our experience in this respect is confirmed by the existing literature. See, for example, P.X.W. Zou, G. Zhang, and J. Wang, *Identifying Key Risks in Construction Projects: Life Cycle and Stakeholder Perspectives*. Proceedings of the 12th Pacific Rim Real Estate Society Conference, Auckland, New Zealand, 22–25 (Jan, 2006).

THE 'WHAT', 'WHY' AND 'WHERE' OF INTERNATIONAL CONSTRUCTION PROJECTS

When we speak of international construction projects, we typically mean projects in which the contractor, the lead consultant and the employer are not of the same nationality and at least one of them is working outside his country of origin.¹¹ Government procured projects can be considered 'international' in circumstances where the main contractor is a foreign company, or where the main contractor is a branch or subsidiary of a foreign company. Of course, the structure of major projects is typically quite complex, often involving many different international companies. Indeed, it is common for a procurer or employer to be local, the main contractor to be a foreign company, major plant suppliers or nominated subcontractors being from a different country, other subcontractors and suppliers being a combination of local and international companies, financing provided by international or offshore banks, and the professional consultancy firms also being domiciled in a jurisdiction different to that of the site. Within the teams of each organisation, it is also common to find a mix of different nationalities and languages, particularly in developing markets or 'expat heavy' regions, such as the Middle East. All of these international components are also common in private projects or developments, with the additional possibility that the developer or procurer could also be a foreign entity. It is apparent that there is a significant range of factors that can make a construction project 'international' in nature.

If it is accepted that the trend of globalisation in construction is to continue, it is useful to consider the drivers for this trend. Why are we seeing more international construction projects? Sixteen of the world's top twenty construction contractors and fifty-two of the top 100 by revenue are domiciled in North America or Western Europe,¹² where fiscal deficits will constrain government spending for some time to come¹³ and where private sector investment is muted. Many of the world's major emerging markets do not face the same type of budgetary constraints, yet at the same time are suffering from significant infrastructure deficits. The combination of these factors make it likely that the major infrastructure projects worldwide will be concentrated in emerging markets¹⁴ for the foreseeable future, making these markets potentially attractive for major international contractors.

In addition to the likely demand for domestic infrastructure assets in developing countries, the growing global relevance of these markets has led to the recent award of major international sporting events to developing nations. Many of these events have given and will continue to give rise to significant construction expenditure, both directly connected to the hosting of the relevant event and in respect of associated assets and infrastructure. The current trend of awarding the FIFA World Cup to developing nations is an excellent example of the increasing importance of developing markets, and the construction demand that is following such paradigm shift. Consider the 2010 World Cup in South Africa, and the award of the subsequent World Cup hosting rights to Brazil, Russia and Qatar. The FIA Formula One World Championship has also demonstrated a similar developing nation focus, with India to host its first Grand Prix in 2012, following on from the additions of Bahrain and China in 2004, Turkey in 2005, Abu Dhabi in 2007, Singapore in 2008 and South Korea in 2010. It is proposed that Russia will host a round of the Formula One World Championship from 2014. The delivery of major sporting events by developing nations demands the construction of the specific sporting asset as well as associated infrastructure, constituting an additional stream of potential construction projects for major international contractors with the requisite expertise.

The growth of construction projects in developing markets (combined with accelerating urbanisation and a burgeoning middle class) has created a certain momentum that is driving construction investment in sectors necessary to service developing markets growth. This effect is bringing additional, 'associated' construction projects to market in both developing and developed markets.

The consumption of raw materials and resources in the development and urbanisation of developing nations has supported significant price appreciation in a number of commodities, thereby creating larger margins for the mining sector and positively affecting the feasibility of more mining and resources projects. This has contributed to a massive increase in capital expenditure on mine and

¹¹ E.H.W Chan and H.C.H Suen, *Legal Issues of Dispute Management in International Construction Projects Contracting*, Constr. LJ., Vol. 21(4), 291–305 (2005), at 292.

¹² Engineering News-Record, 'The Top 225 International Contractors 2011', <http://enr.construction.com/toplists/InternationalContractors/001-100.asp>, (accessed 20 March, 2012)

¹³ *Supra*, n 2 at page 7.

¹⁴ *Id.*

infrastructure development in some sectors of the mining industry, leading to a ‘secondary’ construction boom. By way of example, the Australian Government Bureau of Resources and Energy Economics recorded that in October 2011 there were 102 energy, mineral mining, mineral processing and associated infrastructure projects in Australia at an advanced stage, meaning either committed to or under construction.¹⁵ These projects constitute a record capital expenditure of AUD 231.8 billion, which is a 34 per cent increase from April 2011 and a 74% increase from October 2010.¹⁶ Of the 102 projects, twenty-one are infrastructure projects with a capital cost of AUD 21 billion.¹⁷ While Australia may not be considered a developing market, it is enjoying a related construction boom as a corollary of the robust developing markets construction sector and is creating other potential opportunities for international construction players with experience in delivering resources and associated infrastructure projects.

It is clear that construction sector opportunities are increasing in less traditional markets, while weakness remains in the traditionally strong construction markets of Western Europe,¹⁸ England¹⁹ and the USA.²⁰ Most of the world’s major construction contractors with the necessary skills, expertise and experience to deliver major construction projects, are domiciled in Western Europe, England and the USA.²¹ From our perspective, this is primarily why we are seeing more ‘international’ construction projects.

The above also encapsulates the ‘where’ of international construction projects. It is forecast that the most dynamic growth for construction over the next decade will come from emerging markets in India, China, Asia Pacific, South and Central America, the Middle East, Africa and parts of East Europe.²² This will create potentially appealing opportunities for organisations with the requisite expertise that are domiciled in more stagnant developed markets. The abovementioned markets clearly constitute a significant geographical spread, however, many of these markets do not have major, experienced domestic construction contractors, subcontractors or suppliers with the requisite expertise and capabilities to deliver large scale, high quality projects. Obviously, not all markets will be of interest to all international contractors and suppliers but it is likely that most major players with a traditional reliance on developed markets will be looking to these engines of construction growth to drive profitability for the next decade.

CONSTRUCTION RISKS—THE DISTINCTION BETWEEN PROJECT DELIVERY AND JURISDICTIONAL RISKS

The nature of construction makes it an inherently risky commercial enterprise. One need only consider issues such as protracted contract periods, complicated processes, environmental factors, financial intensity and dynamic organisation structures, to name a few of the common risk issues.²³ Construction risk can typically be separated into two main classes project delivery risk and jurisdictional risk. Every project has both types of risks. However, jurisdictional risks on domestic projects are not often analysed or consciously mitigated on a project by project basis, as they are often considered generic ‘business risks’ and mitigated through existing corporate policies.

Project delivery risks are risks that relate to the delivery of a specific project and to the financing and construction of a specific asset. These risks include things such as counter-party risk, site and

¹⁵A. Copeland and G. Stanwix, “Mining industry major projects – October 2011” Bureau of Resources and Energy Economics, Canberra, November(2011),

¹⁶See *Id.* at 12.

¹⁷See *Id.* at 16.

¹⁸D. Crosthwaite, *Davis Langdon - World Construction 2011*, <http://www.davisl Langdon.com/upload/StaticFiles/EME%20Publications/Other%20Research%20Publications/WorldConstruction2011.pdf> (accessed 20 March, 2012). at

¹⁹*Id.* See also the Office for National Statistics, Statistical Bulletin, *Output in the Construction Industry*, Q4 2009, at http://www.statistics.gov.uk/hub/release-calendar/index.htmlnewquery=*&uday=0&umonth=0&uyear=0&title=Output+and+Employment+in+the+Construction+Industry&pagetype=calendar-entry&lday=&lmonth=&lyear= (accessed,20 March, 2012)

²⁰J. Anderson, *The U.S. Construction Industry – 2009 & 2010, the lean years* RICS Americas, [http://www.ricsamericas.org/files/editor/file/Member%20Articles/The%20construction%20industry%202009%20%202010%20-%20Anderson\(1\).pdf](http://www.ricsamericas.org/files/editor/file/Member%20Articles/The%20construction%20industry%202009%20%202010%20-%20Anderson(1).pdf) (accessed 20 March, 2012).

²¹*Supra*, n. 12.

²²*Supra*, n. 2 at 8. See also *supra* n. 15 at 2.

²³P.X.W. Zou, G. Zhang, and J. Wang., *Identifying Key Risks in Construction Projects: Life Cycle and Stakeholder Perspectives*, Proceedings of the 12th Pacific Rim Real Estate Society Conference, Auckland, New Zealand, (22–25 Jan 2006).

ground condition risks, construction contract risk profile, the availability of financing and bankability of a project, materials price escalation risks and the like.

Jurisdiction risks are risks that relate more generally to the jurisdiction within which the project is to be delivered and the asset constructed. While these are not directly connected to a specific project, the consequence of such a risk occurring could weigh heavily on a project. Jurisdictional risks include things like legal entity establishment and licensing procedures, political and social stability, exchange rate risk, currency controls, availability of dispute resolution forums and enforcement issues, to name a few.

Every construction project faces project delivery risk and some jurisdictional risk, however the jurisdictional risks faced on domestic construction contracts are fewer and usually of lower consequence than jurisdictional risks on international projects. When a construction participant is established and domiciled in the same jurisdiction as the project and the reporting currency of the company is the same as the payment currency of the project, the jurisdictional risks are often quite low and it is likely that mitigation of many of the risks becomes part of the corporate policies and procedures.

Of course on international projects, jurisdictional risks can be very significant. When looking to perform works in a foreign country, the jurisdictional risks can include economic barriers to entering the market, tax and tariff issues, currency risks, insurance risks, risks of expropriation or nationalisation, political and social instability, relationships with the ruling government, applicable social, business and religious customs, dispute resolution and enforcement options, governing law risks, adequacy of surrounding infrastructure, approvals and permits issues, importation and customs issues, payment risks and customs, bonding and security customs, and labour issues including visa issues and national labour participation. While it is possible for almost any of these risk issues to arise in a domestic project, the familiarity with the jurisdiction and the longevity of business in that market (combined with established corporate policies to address domestic jurisdictional risk) tends to mitigate jurisdictional risks on domestic projects.

For example, economic barriers are typically overcome prior to or during the initial establishment of the business, otherwise the business typically fails. Tax and tariff issues in the home jurisdiction are normally well understood and the costs factored into the business model. Currency issues do not typically present major risks on domestic projects and insurance risk and availability is generally understood and accepted based on the practices and availability within the home jurisdiction. This is not to say that jurisdictional risks do not exist with respect to domestic projects but rather that successful mitigation strategies are frequently in place in respect of the risks and the familiarity with the issues and prior success in avoiding or mitigating the risks, which creates a justified degree of comfort.

When analysing international construction projects, the separate identification and analysis of project delivery risks and jurisdictional risks is important. Expertise in identifying, analysing and mitigating project delivery risk is a skill that is somewhat transferable between jurisdictions and projects,²⁴ meaning that staff with this existing skillset may be successfully deployed to analyse and act on project delivery risks in an international project, with some support from in-country experts such as legal advisors.

On the other hand, jurisdictional risks by their nature change from country-to-country and region-to-region. Staff with experience in analysing and advising on project delivery risk in one jurisdiction will not necessarily be able to advise effectively on jurisdictional risk on an international project or new business. Similarly, risk identification and analysis tools applied to project delivery risks may not be transferrable to jurisdictional risk identification and analysis.

Recognition of the existence of these two separate types of risks and acceptance of the distinction between project delivery risks and jurisdictional risks constitutes the first step in effectively identifying, analysing and mitigating risks in international construction projects, but of course for the risk approach to be effective, it is necessary to take the next step in applying an effective strategy for identifying, assessing and mitigating the risks.

²⁴H. Zhi, *Risk management for overseas construction projects*, Intl. J. of Project Mgt., Vol. 13 No. 4 pp. 231–237, (1995) at 233.

PROJECT DELIVERY RISKS

For the sake of brevity, we do not intend to assess or review project delivery risks in detail or to propose comprehensive structures for the identification, assessment and mitigation of project delivery risks. It is our experience that many major construction contractors have adequate policies with respect to project delivery risks, or are at least aware of such risks and the potential consequences of failing to adequately address and deal with these risks.²⁵

It is important to recognise, however, that aspects of project delivery risk can change depending on the jurisdiction of the project. Accordingly, while there may be policies and procedures in place to identify and mitigate project delivery risks in the home jurisdiction, these will likely need some tailoring for international projects. cost overruns²⁶ are common from project to project. However, the relative likelihood or consequence of such risks will differ according to the type and location of a project.

In our experience, the market position with respect to construction contract risk transfer is one of the most significant areas where project delivery risks change between jurisdictions. Some of the most common contractual issues that change from market-to-market include: site conditions and unforeseeable physical conditions, qualifying causes of delay for extensions of time, the quantum and cap on liquidated damages for delay, back-to-back subcontracting and pay-when-paid arrangements, timeframes and procedures for certification and payment of interim sums, advance payments rights and security, performance security and retentions issues, taking over issues, notification issues and timeframes, defects rectification and statutory obligations (including 'decennial liability') and the rights and role of the engineer/superintendent/employer's representative. It is likely that international contractors and subcontractors may have official policies and established views with respect to assumptions of risk on the aforementioned issues, but such policies and views may not be appropriate or transferrable if the market position on the issues is different in a new jurisdiction.

So, while the skills necessary to identify, assess and mitigate project delivery risks may exist within professional teams of major contractors, it is likely that some fine tuning and local analysis is necessary to ensure that the domestic skills are adequately and appropriately applied in new jurisdictions, on international projects.

JURISDICTIONAL RISKS

Much of the uncertainty and difficulty faced by participants in international construction projects can be traced to new or magnified jurisdictional risks. These are the changeable factors that relate to the national/regional market or the local construction industry and can be split into three general classes: political risks, economic/financial risks and social risks.²⁷ The success or failure of an international construction project is often determined by the effectiveness of the identification, assessment and mitigation of the jurisdictional risks. Without intending to constitute a comprehensive list of all the potential jurisdictional risks, we detail below (Table 1) twenty of the most common jurisdictional risks of international projects in respect of which a failure to accurately identify, analyse and mitigate these can spell disaster for the project or the international endeavour.²⁸

RISK IDENTIFICATION

Risk identification is usually the logical starting point in a risk due diligence process²⁹ and in our opinion is the most important step. Often, risk identification processes are either too subjective or too quantitative³⁰ and the adequacy of the process is often affected by the skill, understanding and objectivity of the individual performing the task. We frequently see construction professionals whose experience on a previous, unsuccessful project has significantly coloured their views on risk identification and ranking, resulting in a focus on the issues that caused problems on the previous

²⁵J. Walewski, E.Gibson and E. Vines, *Risk Identification and Assessment for International Construction Projects*, ICEC International Cost Management Journal. [online] Ljubljana, Slovenia: ICEC. <http://www.icoste.org/news/icmj-2/#more-5> (accessed 22 March, 2012).

²⁶Supra, n. 24.

²⁷Supra, n. 24, at 232.

²⁸This list has been compiled based on our experience and with some reference to the Construction Industry Institute, International Project Risk Assessment Implementation Resource 181-2, October 2003.

²⁹Supra, n. 5.

³⁰Id. at 14.

Table 1. Twenty identifications of risk.

Risk	Issue/Consequence
Business case/economic feasibility	Sufficiently detailed financial modelling should be undertaken with respect to the likely costs and required equity investment, revenues, margins and after-tax profits that may be achieved. This analysis should consider any legal or economic barriers to entry. This analysis should be undertaken in consultation with local professional assistance, particularly with respect to issues such as legal and economic barriers to entry, before significant resources are invested in a new market and of course before submitting a tender for any project in a new country.
Tax	Consideration of the local tax regime and tax consequences in the home jurisdiction should be considered in assessing the business case, but the potential consequences of adverse taxation issues are so great that the issue deserves independent identification and professional analysis. The risk of the implementation of new taxes as a result of changes in law should also always be considered.
Currency	The cost, availability and utility of currency hedging should be considered, as should the stability of the local unit. Pegged currencies may alleviate some of this risk but will not extinguish the need to consider hedging. Some consideration should also be given to the possibility of currency restructuring (for example, the potential creation of a GCC currency or the potential dissolution of the Euro etc).
Market conditions, standards and practices	These issues will likely be considered in assessing the business case, but also deserve individual analysis. The saturation of the market and available margins are important issues, so too are the expected quality of construction, the availability of high quality professional support and subcontractors/suppliers etc, the standard view with respect to timely interim payments, and any potential unpopularity of a new western/international participant in the local market.
Insurance	It is common practice in some markets to require all insurance to be project specific, and to be issued by locally based insurers. This may be a problem for companies that arrange group-wide, global policies, or where insurance terms or costs in the foreign jurisdiction are less favourable than in the home jurisdiction.
Legal entity establishment	The laws surrounding legal entity establishment can create significant jurisdictional risks. By way of example, the UAE enables the establishment of branches of foreign companies, however a branch is not a separate legal entity, thereby exposing the home company to all of the liabilities of the branch and potentially creating tax consequences in the home country. A separate legal entity can be established in the UAE but requires a 51% Emirati shareholder. Therefore in the UAE, careful consideration needs to be given to the choice of entity, appropriate structuring, preparation and negotiation of the associated agreements and documents.
Expropriation	In some markets, particularly where there is no robust or enforced rule of law or indefeasibility of title, direct expropriation (seizing of land, property or assets) can be a significant jurisdictional risk. Indirect expropriation can also be an issue, arising from the implementation of discriminatory taxes, refusals to grant export or import permits, or changes to the legislative landscape that affect the ability of the international entity to undertake its business.
National employment	In some markets, local conditions of contract or local law requires a specific proportion of nationals to be employed by the international party working in the relevant country, and requires preferential treatment to be given to local suppliers and subcontractors. Forced employment of nationals can create cost base pressure for international contractors, and forced contracting with local subcontractors and suppliers which can create both quality and costs risks.

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Table 1. (continued)

Risk	Issue/Consequence
Political stability	Political stability in developing markets can be a major risk issue. Political stability is of particular concern with respect to projects where revenue is paid by the government periodically over a long term, such as in public private partnership (PPP) projects. Overturned or replaced governments can place PPP projects at risk, and changes in government procurement imperatives can affect the market.
Social stability	Effectively linked to political stability, social unrest and violence constitutes a genuine jurisdictional risk for some projects. The so-called 'Arab Spring' and the resulting reluctance of international participants and funders to be involved in project financed deals during early 2011 is indicative of the potential consequences of social unrest.
Government relationships	In both public and private projects, poor relationships or the lack thereof with the incumbent government can constitute a significant jurisdictional risk. Of course, the more involved a government is in a specific project, or the more politically or socially sensitive the project, the greater the potential consequences.
Regional traditions and business practices	While this in some ways goes without saying, a failure to understand or recognise local practices can significantly affect the success of an international venture or project. This is a major risk where a project/site team is imported from the home country and does not have regional experience, as the application of foreign business practices may be inappropriate in a new jurisdiction and may have adverse consequences on the project or business relationships.
Cultural and religious issues	Directly linked to regional traditions and practices, failure to recognise and be sensitive to local cultural and religious issues can affect an international project and can also create potential legal exposure. Religious issues such as Eid and Ramadan (including the reduced working hours during Ramadan which are legislated in some Middle Eastern countries), and awareness of daily prayer times, as well as cultural issues such as the importance of face to face meetings, all constitute important issues to be recognised and understood in some markets.
Governing law	New participants to foreign jurisdictions may assume that the issue of the governing law of a contract can be up for negotiation. In some markets, however, there are customs or requirements with respect to governing law. Some local procurers (particularly governments) will require the national law to govern the contract, potentially exposing the international party to the delivery of a contract under an unfamiliar legal regime.
Dispute resolution and enforcement	Similarly, a foreign party may have an expectation with respect to the dispute resolution mechanism to be incorporated into the contract. While these issues are often open to negotiation, local customs do tend to have an impact. For example, the deletion of Dispute Adjudication Boards from the standard FIDIC (International Federation of Consulting Engineers) terms is very common in the UAE and arbitration under the Dubai International Arbitration Centre (DIAC) Rules is by far the most common method of formal dispute resolution. In any new jurisdiction, issues of enforceability of judgments or arbitral awards can also potentially create significant jurisdictional risks.
Regional forms of contract	New participants should be aware of the prevailing regional form of contract for the particular project and the standard risk profile of any special conditions/particular conditions. For example, civil construction projects in the Middle East are often delivered under an amended form of the FIDIC Red Book 1999, with employer-friendly amendments that range from reasonably balanced to completely outrageous. A new participant in the Middle East civil construction market would benefit from a strong grasp of the FIDIC form. Similarly, many Middle East Engineering Procurement and Construction (EPC) projects are delivered under an amended FIDIC Silver Book, or a 'bespoke' contract heavily based on that form.

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Table 1. (continued)

Risk	Issue/Consequence
Health and safety	There is often a marked difference in the understanding of health and safety issues between developed markets and developing markets. This can create problems for international construction companies with corporate governance policies mandating best health and safety practices. Deficits in knowledge of health and safety issues amongst labouring and site teams in developing markets also creates potential reputational risks for international companies, in the event of a site tragedy. Whilst these risks can be mitigated by education and policy, such change can be a slow and imperfect process.
Subcontractor and supply chain quality	The domestic success of construction contractors is often driven by strong relationships with quality subcontractors and suppliers. These relationships often take time to develop and are the result of 'trial and error'. It can be a significant risk to be 'trailing' new subcontractors or suppliers on a major international project, but without previous regional experience, an international contractor may have no other option. In addition to the risk of selecting the wrong subcontractors or suppliers, international contractors face the risk of being unable to find adequately skilled subcontractors in the local jurisdiction. This can create a quality and project delivery risk for the international contractor. It may be possible to address these risks by establishing informal 'strategic alliances' with local subcontractors, and to use such arrangements to educate the supply chain as to the quality requirements, but this is, of course, a long-term strategy.
Importation, customs and visa issues	Failure to secure customs clearance for construction plants can create schedule risk and potentially costs pressure, in the event that plant has to be hired or procured locally. Similarly, risks or delays in securing visas for international professional staff and labour can result in significant time and potential cost consequences.
Climate	While not a risk issue in every jurisdiction, climatic issues necessitate consideration. Projects in the Middle East for example suffer climatic risk due to the heat and humidity during the summer months which effect labour efficiency and consequently work quality. The legislated labour break during the middle of the day is also a climate related risk. Countries with monsoonal seasons also require careful climatic risk assessment and work scheduling.

project or in a previous jurisdiction, sometimes at the expense of other potentially important risk issues. We also often see participants entering a foreign jurisdiction or a new region for the first time, who fail to identify classes of risks because they do not occur in the domestic jurisdiction and are therefore not recognised as potential risks. These "unknown unknowns"³¹ can pose significant problems, as the failure to recognise or identify the existence of the risk means that no steps are taken to identify, examine, transfer, mitigate or manage the risk.

It is for these reasons that we strongly recommend the establishment of a specific corporate governance policy by construction participants considering a move into a foreign jurisdiction or contemplating the delivery of an international project. Logical components to such a corporate governance policy include the requirement to procure a detailed jurisdictional risk analysis at the business case/feasibility stage (including a careful assessment of insurance availability and terms, and currency hedging availability and cost). In addition, a policy with respect to the maximum value of projects to be assumed within the first few years in a new market is recommended, combined with a mandatory 'lessons learned' reporting process and a requirement for the use of a generic, formal project risk assessment matrix.

The jurisdictional risk analysis should ideally be performed by professionals educated or experienced in the company's home jurisdiction but also with significant, reasonably current experience in the proposed foreign jurisdiction. International lawyers, management consultants or financial advisors may be well placed to provide this jurisdictional risk analysis.

The implementation of a policy capping the maximum value of contracts to be adopted can minimise the 'worst case' potential exposure, while the important jurisdictional lessons are learned. Perhaps, more appropriate than a 'maximum value of contracts' policy would be a 'maximum

³¹With apologies to Donald Rumsfeld.

exposure' policy, as this would allow higher value contracts to be taken on without increasing the financial exposure by establishing either a thinly capitalised, foreign special purpose vehicle or by forming a project joint venture. While we accept such a policy would not be appropriate in all situations, it bears consideration given that many international construction companies fail or struggle on their first projects due to regional inexperience.³² We have seen many examples of international participants "learning" the process of project delivery in a new jurisdiction while trying to deliver high profile, highly complex and massively valued projects. Not only are the financial risks in doing this quite significant but the reputational risks should also be recognised.

A failure to successfully deliver a high profile project for a powerful procurer could threaten the reputation of the international participant in the new jurisdiction and thereby affect the ability of the international participant to leverage the lessons learned on the first project to subsequent projects. If failures on early projects adversely affect the regional reputation, it can also become impossible for the international company to earn back early losses on subsequent projects. By starting relatively small, the essential lessons can be learned while assuming lower risks. Of course, the starting small policy will only reap genuine rewards if it is combined with a formal 'lessons learned' reporting policy, which we explore further in the risk mitigation section below.

Finally, international participants should consider the use of a generic, formal risk identification and assessment tool, such as the International Project Risk Assessment (IPRA) tool prepared by the Construction Industry Institute³³ to assist in identifying risks. While we would caution against the performance of any risk assessment process without recourse to local professional support, particularly with respect to legal and taxation issues, the IPRA tool can be effective in identifying the classes of risks that may occur on an international project. In the absence of reliable, local knowledge, a generic risk assessment tool may assist in identifying more potential risk issues and minimising the "unknown unknowns."

RISK ASSESSMENT AND RANKING

The Construction Industry Institute IPRA tool contains a 'baseline' for assessment and ranking of the identified risks. In circumstances where a new international participant has very little local knowledge and few options to improve its local knowledge, the 'baseline' may assist in assessing and ranking risks for a project, but as we note above, we consider that the use of a generic risk identification and assessment tool should be supplemented with external professional support.

Risk assessment is an art masquerading as a science and the nature of the subject matter makes it impossible for anyone to accurately forecast which events or circumstances will be more important than others on a particular project and which are more likely to occur or carry the most serious consequences. Experience and a detailed knowledge of a local market can significantly improve the chances of getting the process right but nobody can guarantee the accuracy of a risk assessment and ranking process. It is for this reason that generic analysis tools must be supplemented, and that risk assessment and ranking should be an integrated process involving management, project and site teams, local and international teams and external risk professionals. The collation of a number of voices may be a laborious process, but the consolidation of input from across an organisation minimises the likelihood of individual biases and may assist in focussing the process.

GENERAL ISSUES IN RISK MITIGATION

The purpose of risk identification, assessment and ranking is, of course, to enable appropriate and efficient risk mitigation strategies to be implemented. The maxim that risks should rest with the party best placed to manage the risk³⁴ is conceptually appealing, but is rarely borne out in practice. Often, risk is imposed onto the supply chain as a function of comparative bargaining power, meaning that contractors and subcontractors must be particularly vigilant and strategic with respect to risk identification, assessment and mitigation strategies. It is of course uneconomic for a main contractor to transfer or avoid all risk, this means that the identification, assessment and ranking process is critical to enable appropriate mitigation strategies to be implemented.

³²Supra, n. 25.

³³Construction Industry Institute, IPRA— *International Project Risk Assessment*, CII Implementation Resource 181-2, (October 2003).

³⁴Supra, n. 25.

Risks can be addressed in three key ways: transferral of risk by contract, purchasing protection through insurance or hedging, or by active management of retained risks and adequate pricing to justify the retained risk. The ability to transfer risks by contract depends on the existence of another party willing and able to assume the risk. Subcontractors are typical recipients of transferred risks, however, such a strategy only provides protection to a main contractor if the subcontractor is of adequate financial standing to meet its potential obligations to the main contractor. This also is only possible if the main contractor is able to secure terms under the subcontract that provide a full 'flow down' of risks under the main contract in respect of the subcontracted works. However, there is a genuine risk in developing markets where local subcontractors will accept flow down risk without recognising the risks being assumed and without implementing their own risk mitigation strategies. While an international main contractor may then have contractual rights against a subcontractor when events ultimately come to pass, the reputational damage of failing to successfully deliver a project and suing subcontractors may be significant, as may be the potential financial exposure if the subcontractor is a small enterprise unable to satisfy a significant judgement or arbitral award.

In a design and construct project, the subcontract between the main contractor and the designer constitutes a major transfer of risk by contract, but as with works subcontracts, demands that the designer be of adequate financial standing to provide protection on a 'flow down' basis to the main contractor.

It should also be noted that it is rare for a main contractor to secure a seamless transfer of risk faced under the main contract to its subcontractors. This is primarily because the main contractor assumes the total risk for project delivery, whereas each individual subcontractor only assumes risk proportional to its subcontract works. The rate and cap of liquidated damages constitutes a clear example where one subcontractor could be late in the performance of its works and thereby expose the main contractor to liability for one single rate of liquidated damages under the main contract. The difference in rates of damages per day and the different caps on liquidated damages potentially leaves the main contractor significantly exposed. Similarly, the value of performance security issued by a subcontractor, against the value of performance security issued by the main contractor to the employer, leaves the main contractor exposed. It is for these reasons that the transfer of risk by contract should not be considered a complete mitigation strategy in itself and should in all circumstances be supplemented by active risk management.

The use of insurance is a worldwide risk response that is vital to the construction industry. International projects demand all of the usual insurance coverage taken on domestic construction projects, but also lend themselves to consideration of other policies. Decennial liability insurance is theoretically available in jurisdictions with legislated decennial liability exposure for contractors and architects however, the cost of such policies is typically prohibitive. Perhaps more common and appropriate for projects in unstable countries is political risk insurance. Political risk insurance generally provides protection with respect to currency inconvertibility, expropriation, political violence and terrorism,³⁵ and can thereby constitute an effective strategy for 'worst case' protection.

Currency hedging provides a risk mitigation option to international participants in respect of a risk that is very difficult to estimate, but that has the capacity to erode the margin on the project. The commercial feasibility of comprehensive hedging can only be determined on a case-by-case basis, but on many projects, a commercial 'middle ground' may be necessary involving incomplete hedging or short-term coverage, so as to minimise the potential exposure to currency fluctuation, without assuming the significant costs of comprehensive hedging.

The active management and appropriate pricing of retained risks are perhaps the two most accessible risk mitigation strategies but are areas where international construction participants often fail. Vigilant supervision of subcontractors and the supply chain, effective programme management, submission of timely and accurate contractual notices, comprehensive document retention and management systems, and adequate resourcing of the contractor's contract management and site teams are all vital in the management of retained risks. While the desire to retain a positive and collaborative relationship with the employer and the engineer may engender a reluctance to submit formal notification and claims, such an election exposes the contractor to significant risk. It should always be borne in mind that decisions made when the relationship is amicable cannot be undone if

³⁵C. Hunt, *Political Risk Investment Insurance: Government-backed and private market*, American Law Institute—America Bar Association Program 'Going International: Fundamentals of International Business Transactions,' Washington D.C., (December 7–9, 2006).

the relationship subsequently sours and contemporaneous notices and correspondence cannot be created after the event. International construction participants should not consider the precise administration of the construction contract as an adversarial strategy but rather as a ‘continuous disclosure’ obligation, to ensure that the employer and engineer remain informed of any issues with a project. This type of contract administration will increase the likelihood that notification obligations are satisfied, in turn preserving the contractor’s rights, yet serving a valuable disclosure purpose for all parties.

As lawyers advising on international projects, it is easy to recommend that project delivery risks and jurisdictional risk be adequately factored into tenders submitted by international construction players, that is, that risk be priced. However, we recognise that commercial imperatives are not imposed on new enterprises to win work and justify the investment by the home company, and understand that pricing risk is not always commercially viable. It should be noted however that ‘buying’ a job involves much more risk than just the acceptance of a lower margin. Aggressively priced jobs typically require a squeezed supply chain to attempt to maximise the efficiency of every dollar spent in delivering the works. Extreme costs sensitivity can result in under-resourcing of the site and contract management team, as well as reluctance to engage external professional assistance early enough in order to maximise value. These factors combine to adversely affect the effectiveness of the contract administration and serve to increase the potential risk exposure of the contractor in delivering a project. In the event that the contractor does subsequently face delay risk and costs overruns, the aggressive pricing will inflict more pain than merely a thin margin.

RISK MITIGATION—JOINT VENTURING

As has been noted above, one of the major differences between the risk profile of international projects and domestic projects is the increase in jurisdictional risk. Identification of jurisdictional risks in new markets can be difficult, and mitigation options for international players can sometimes be limited. One strategy frequently used by international contractors to reduce jurisdictional risk is joint venturing with a local partner. Whether on a strategic or single project basis, teaming up with an established local company can yield genuine benefits.

Obviously, the international company will be able to call on some of the local company’s expertise and knowledge of the local market, and may be able to utilise the local company’s reputation when dealing with subcontractors, the procurer or government authorities. If undertaken in a strategic manner, there may also be opportunities for employees of the international company to integrate with the local company and absorb some of the jurisdictional lessons from an established participant. Another potentially significant benefit is that, assuming the terms of the joint venture agreement are appropriately drafted; the financial exposure of each party will be reduced as a function of the involvement of both parties.

Of course, joint venturing with a local party does not come without risk. The business custom issue and cultural and religious issues may be more apparent in the closer working environment created through the joint venture. The local participant’s desire to accept and proceed solely in accordance with ‘local custom’ may create difficulties with respect to corporate policies and due diligence of the international participant. While not a flawless solution, such joint venture arrangements may provide a way to reduce some jurisdictional risk when entering a new market.

RISK MITIGATION—LESSONS LEARNED

Irrespective of whether an international company makes its first move into a new jurisdiction in joint venture with a local partner or on its own and whether performing a major project or a smaller one, the lessons learned by the site, project and management teams on early projects will be invaluable for subsequent projects in that jurisdiction and potentially when moving into new markets. It is the harnessing and consolidation of the lessons learned on early projects that can expedite the success of an international organisation in a foreign jurisdiction and insulate the organisation from repeating the same mistakes.

In circumstances where an international company enjoys consistent employment of the same in-country team, a formal debriefing and information consolidation policy may be unnecessary, but it is the nature of developing markets that staff turnover is often higher than established markets and in-country teams are more likely to change from project-to-project. Unless the lessons learned from

early projects are formally consolidated within the organisation, there is a genuine risk of loss of vital intellectual capital upon the departure or transfer of early in-country employees to other jurisdictions.

There are of course a myriad of different strategies that can be used by companies to consolidate the lessons learned in foreign jurisdictions, from informal 'question and answer' sessions to wholly outsourced, due diligence procedures. As a minimum, we would recommend that an individual within an organisation be charged with managing the process and prepare a detailed report for management identifying the top 10 risk issues that affected the project, the steps that were taken to mitigate these issues, the relative success or otherwise of these steps, things that would be done differently in hindsight and the changes that should be made on the next project. It is also advisable that the individual conducting the risk analysis should not be from within the site or project team, so as to minimise the likelihood of politics or agendas coming into play. A brief questionnaire should be disseminated amongst the project team to consolidate input from a number of sources and this should be managed on a confidential basis to encourage full and frank disclosure.

A 'lessons learned' report of this nature may enable an international company to develop a better picture of a new market over time, which will highlight the issues that were addressed successfully and areas for improvement. This will enable the allocation of resources in an efficient manner, facilitate more accurate pricing and encourage the implementation of appropriate risk mitigation strategies. The lessons learned process may also help in determining the value of remaining investments in the relevant jurisdiction.

RISK MITIGATION—LEGAL COUNSEL

The role of legal counsel in established markets is often limited to document drafting and advice at the commencement of the project and formal dispute resolution at the end. Given the expertise of contract managers and project managers, as well as in-house legal teams, there is often minimal recourse to external legal providers during the delivery phase of a domestic project. In our view, international legal counsel in foreign markets can and should play a much more involved role.

At the outset, legal counsel practicing in a foreign jurisdiction have a wealth of knowledge with respect to legal establishment issues, forms of contract and risk allocation, dispute resolution and enforcement issues and general market issues, business practices and customs that can be extremely valuable to international companies looking to enter a new country or region. This knowledge can be very useful during the initial risk identification and business case stage.

Legal counsel can also assist in assessing and ranking risks, primarily due to their significantly greater experience in the jurisdiction than the foreign company in-house contracts team. Such a task cannot, of course, be completely outsourced to external legal providers as some elements of assessment and ranking demand organisation-wide consideration, but the input of legal counsel can nonetheless be very useful.

It is, however, in respect of mitigation that legal counsel can add the greatest value. Legal counsel can ensure that, to the extent possible, the appropriate risks are transferred from the main contractor to subcontractors, suppliers and the designer, and can also identify the residual risks that will require careful management. Legal counsel can also perform an invaluable task in managing contractual risks and supporting the in-house contract management and legal teams. Tasks such as contractual notice vetting, correspondence drafting and strategic contractual advice performed by legal counsel during the construction phase can significantly reduce the likelihood of an international contractor breaching its contractual obligations or failing to secure an otherwise valid contractual entitlement, as a result of time bars or other formalistic failures. Of course, legal counsel can assist international contractors without being visible to the employer or engineer, by assisting in structuring a legally appropriate strategy without adversely affecting the relationship between the parties.

Not only can legal counsel in the country policies steer in respect of legal and cultural issues, but they can also assist in supplementing the international company's in-country team. Whether through a secondment of a legal advisor or a hotline type arrangement, there can be significant value in having a trusted advisor on call to smooth the transition into a new market.

CONCLUSION

Over the last ten years the construction sector has become increasingly international, with major projects around the world frequently involving multiple participants from different jurisdictions. With the likelihood of major construction projects being concentrated outside of the traditionally strong

construction markets of Western Europe and North America for the foreseeable future, it is likely that more construction industry participants will be looking to grow businesses and win projects in foreign markets.

These projects will, in all likelihood, involve similar project delivery risks to major domestic construction projects, however, the international component will increase the jurisdictional risks faced by all foreign participants. The increase in jurisdictional risk exposure should not necessarily discourage international expansion, but similarly, the desire for such expansion should not blind participants to the often significant jurisdictional risks faced on projects in foreign countries.

The identification of jurisdictional risks is a vital step in international projects and can be a difficult task to successfully accomplish. Jurisdictional risks change from market to market, and accurate identification can be significantly improved by recourse to local market expertise. The procurement of a detailed jurisdictional risk analysis by a professional firm based in the country is a useful strategy for securing local expertise. Similarly, the use of a generic risk identification tool such as the Construction Industry Institute's IPRA, can assist in the risk identification process.

Identification is the start of the process, but mitigation is the end game. Common strategies such as transfer of risk by contract, purchasing protection through insurance and hedging, and managing and pricing retained risks, should of course be applied on international projects. Other ideas such as joint venturing, adopting a 'lessons learned' policy and utilising local legal counsel should also be considered.

There is no doubt that international construction projects bring with them more risks than domestic projects. They do, however, also offer greater potential rewards. The key, as in all of commerce, is to mitigate and manage the risks while remaining exposed to the potential rewards. For international construction projects to be worthwhile for all participants, rigorous risk identification, assessment, ranking and mitigation strategies must be implemented.