

# MULTINATIONAL CONTRACTING INTO AUSTRALIA: DEVELOPING DUNNING'S THEORY AND CASE STUDY DESIGN

Azmeri Rahman<sup>1</sup>, Adrian J. Bridge<sup>1</sup>, Steve Rowlinson<sup>2</sup> and Tom Kwok<sup>1</sup>

<sup>1</sup>*Civil Engineering and Built Environment School; Queensland University of Technology, GPO Box 2434, Brisbane, Queensland, 4001, Australia*

<sup>2</sup>*Department of Real Estate and Construction, The University of Hong Kong, Hong Kong*

In response to the need to leverage private finance and the lack of competition in some parts of the Australian public sector infrastructure market, the Australian Federal government has demonstrated its desire to attract new sources of in-bound foreign direct investment (FDI) by multinational contractors. This study aims to update progress towards an investigation into the determinants of multinational contractors' willingness to bid for Australian public sector major road and bridges. This research deploys Dunning's eclectic theory for the first time in terms of in-bound FDI by multinational contractors into Australia. Elsewhere, the authors have developed Dunning's principal hypothesis to suit the context of this research and to address a weakness arising in this hypothesis that is based on a nominal (yes or no) approach to the ownership, location and internalisation (OLI) factors in Dunning's eclectic framework and which fails to speak to the relative explanatory power of these factors. The authors have completed a first stage test of this development of Dunning's hypothesis based on publically available secondary data, in which it was concluded tentatively that the location factor appears to have the greatest explanatory power. This paper aims to present, for the first time, a further and novel development of the operation of Dunning's OLI factors within the context of multinational contracting, as well as a preview of the design and planned analysis of the next empirical stage in this research concerning case studies. Finally, and beyond the theoretical contributions expected, other expected contributions are mentioned concerning research method and practical implications.

Keywords: case study design, Dunning's eclectic paradigm, multinational contracting.

## INTRODUCTION

In Australia and amidst concerns on the issue of a lack of competition, the Federal government has noted its desire to see new foreign construction entrants into the Australian public sector major infrastructure market (Infrastructure Australia 2011).

---

<sup>1</sup> [azmeri.rahman@student.qut.edu.au](mailto:azmeri.rahman@student.qut.edu.au)

On this basis, an investigation into the determinants of multinational contractors' willingness to bid for Australian public sector infrastructure projects appears important from both the perspectives of government and contractors with an interest in the Australian market - both contractors contemplating Foreign Direct Investment (FDI) into Australia and those contractors domiciled in Australia. More fundamentally, this investigation is of value to any multinational contractor contemplating FDI into any location.

In pursuance of explaining the determinants of multinational contractors' willingness to bid for Australian public sector infrastructure projects, the authors summarize the relevance of Dunning's eclectic paradigm of internationalisation (Rahman, Bridge and Rowlinson 2010; Rahman *et al.* 2011a; Rahman *et al.* 2011b; Rahman *et al.* 2012). In brief, Dunning's eclectic paradigm has prevailed as the dominant analytical framework concerning the determinants of FDI and multinational enterprise for over two decades to date. Although Dunning's eclectic paradigm is the dominant theory of internationalization, it has received little attention and testing in the context of multinational contracting. Dunning's principal hypothesis that is based on four conditions (ownership "O" advantages; location "L" advantages; internalisation "I" advantages; and a condition concerning the firm's business motivation) and which are all considered in nominal terms (satisfied or not satisfied) in determining the likelihood of FDI in a multinational contracting context. The authors translate Dunning's corresponding generalised predications within the context of this paper to reflect a lack of in-bound FDI by multinational contractors into Australia (reverse of Dunning's original stated hypothesis and predications) as follows: the more Australian-based multinational contractors relative to other multinational contractors possess desirable O advantages, the lesser the incentive other multinational contractors have to internalise (I advantages) rather than externalise their O advantages, the less other multinational contractors find it in their interest to access or exploit them in Australia (L disadvantages), then the less Australia is likely to attract in-bound investment by multinational contractors. This paper aims firstly, to present a further development of the operation of Dunning's OLI factors or framework within the context of multinational contracting and secondly, to preview the design and planned analysis of the next empirical stage in this research concerning case studies.

## **OLI FACTORS IN MULTINATIONAL CONTRACTING**

This study is delimited to contractors bidding and delivering projects as head contractors as a single entity bid or as co-head contractor in a collaborative bid. As a result of this delimitation, the further development of the operation of Dunning's OLI factors is based on the practical exclusion of the conventional alternatives to FDI namely pure export and licence. These alternatives become muted in light of the fundamental peculiarity in multinational contracting and which concerns the imperative for the multinational contractor to establish a physical presence in the host location, in this case Australia. That is, the multinational contractor is required to commit some degree of internalization and FDI (concerning the contractor's core activity of planning, procurement and coordination of on-site construction) if this firm is to bid and deliver a major public sector road and bridge construction project in Australia. This situation arises mainly out of geographical specificity/the immobile nature of construction works. This study is also delimited to FDI comprising entry modes that involve some degree of equity participation on the part of the multinational contractors and in new entities designed to bid and deliver projects, for example, sole or joint venture projects or companies, as well as the entry mode of acquiring more

than 50 percent of the shares of a local contractor. Beyond explaining the actual and observed level of FDI, the OLI framework can be deployed to explain the level of the attractiveness of the host location and as an upstream proxy of FDI as indicated in Figure 1. This is particularly useful in cases like Australia with very low level of incidence of multinational contractors and FDI. That is, a focus on the level of the attractiveness of the Australian market instead of a focus on actual FDI is a more realistic approach to the dependant variable for the vast majority of multinational contractors not committing FDI in the Australian market and offers a more sophisticated analysis of the relationship between the OLI factors and the dependant variable.

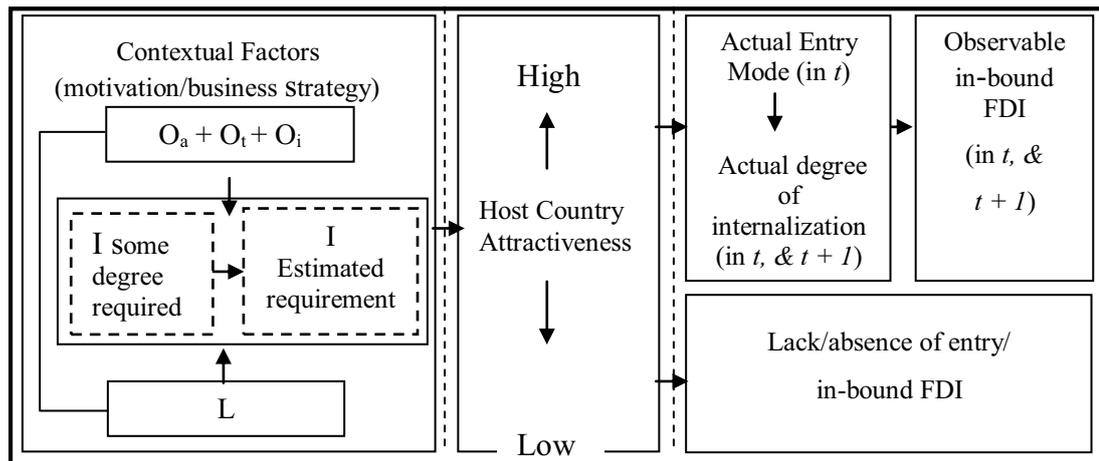


Figure 1. OLI framework in multinational contracting

In Figure 1, the I factor is taken as a given or constant as some degree of internalisation and FDI is required. Thus, Figure 1 shows that the I factor occupies a central occupation in the mindset of the multinational contractor and in terms of the role it plays in contributing towards determining the attractiveness of the host location. More specifically, the multinational contractor needs to initially estimate its preferred and/or acceptable level of internalisation required to enter the host market and on this basis whether or not it then wishes to proceed into the host market and commit FDI. In order to do this, the multinational contractor needs to consider the operation of the O and L factors. In summary, Figure 1 depicts a number of key moves undertaken by the multinational contractor to determine whether or not it enters a host market and if so, the level of internalisation and which is based on its assessment of the corresponding O and L factors.

The first move concerns the O factor. Having assessed its ownership strengths, relative to rival home contractors vis-à-vis the host country/Australia and relative to potential rivals from other competing home counties vis-à-vis the host country/Australia, as well as relative to rivals already established in the host country/Australia, if the prospective multinational contractor feels it can win a contract to construct a major road and bridge in Australia, some further analysis of the costs and benefits of doing business in the host location/Australia is warranted. In the second move, the focus is broadened to incorporate the L factor. That is, a further analysis of the costs and benefits of doing business in the host location/Australia and which comprises an assessment of institutional distance including the affect of home-host induced distances and in particular cultural; administrative; geographic and economic distances. These distances of various kinds affect the level of investment

and set-up costs in melding the prospective multinational contractor's ownership advantages and capabilities and particularly its institutional advantage ( $O_i$ ) with the host location. On the face of it, and if the host location/Australia continues to remain attractive, then at this point a much deeper exploration concerning a detailed estimate of the degree of vertical integration required (mix of internalization and coordination of supply chain – subcontractors and suppliers) is justified.

This detailed estimated of internalisation and FDI required in the host market is unique to each prospective multinational contractor and represents the level of control and internalization the prospective multinational feels it would need to ensure the delivery of the project(s) whilst maintaining its reputation and retaining a level of returns it would normally set for a major road and bridge project in its home country. This detailed estimate may involve a greater degree of internalisation than the multinational contractor deploys in its home market and/or greater than the host market norm if the multinational contractors assesses the risk of hold-up by local subcontractors and suppliers as significant and in conjunction with its initial lack of familiarity with the local market and initial lack of a pipeline of work to check opportunistic behaviour by subcontractors and suppliers. As Coase (1937) anticipated though, too much internalization can lead to inefficiencies arising out of bureaucracy costs and low power incentives. These internal/management transaction costs are crystallized in the prospective multinational contractor's internalised activities and the greater the prospect of these internal/management transaction costs, then the reduced attractiveness of the host location (Dunning and Lundan 2008). The key issue to highlight here is that *ex ante*, or before the multinational contractor actually commits any FDI, the research question amounts to one of horizontal integration in which the prospect of transaction costs arising internally, or hierarchical failure, acts to deter horizontal integration or internalisation and FDI in the host market.

In the instance of an unfavourable analysis of the costs of doing business in the host country and on the basis of the prospective multinational contractor's detailed estimate of internalisation and FDI associated with bidding for projects as head contractor, this host market may still be attractive by virtue of a favourable analysis of the benefits of entering the host country. That is, the prospective multinational contractor may consider a third move concerning alternative initial entry modes (in time "t") that do not involve the prospective multinational contractor bidding as lead/head contractor and which mitigate the costs and risks of doing business in the host market in order to pursue, in due course (time "t + 1"), a desirable level of demand and/or level of profits/returns in the host market relative to the prospective multinational contractor's home market and other possible competing host markets. More specifically, these alternative initial entry modes offer an interim step and period in which the prospective multinational contractor is able to develop its management capability internally, as well as externally in coordinating the supply chain (and eventually shaping the supply chain itself) whilst being protected from unacceptable levels of risk of investment losses. Here, the role of competent counterparts is crucial and in terms of sharing the responsibilities of the lead/head contractor role. For example, a partnership/joint venture mode with an already established local contractor, such that the prospective multinational contractor is bidding as a co-lead contractor, as opposed to a single entity wholly responsible for the outcomes, may be considered. Extending out this third move, "t + 1" envisages the situation in which the multinational contractor after entering a host market develops familiarly with the host market and

may well develop beyond its initial entry mode and/or shed some of its initial internalised activities, as it begins to fashion and shape the local market.

The fully established multinational contractor's presence and its degree of internalization and FDI now become fully observable and measurable. An I factor analysis can now be effectively conducted to explain the degree of internalization and the extent to which this is attributed to market failure (potential affect of hold-up) including the deployment of independent variables pertaining to Transaction Cost Economics (Dunning and Lundan 2008). In other words and ex post, the question is now one of vertical integration. And in contrast to the question of horizontal integration above, this time transactions costs act to encourage internalisation and not discourage internalisation. This further promotes the rationale for using market attractiveness as the dependent variable instead of actual FDI in this study and in conjunction with a focus on the explanatory power of the O and L factors. That is, there is a severe lack of multinational contractors in the Australian market upon which to observe a range of actual FDI and conduct a range of full internalisation or I factor analyses.

On the explanatory power of the O and L factors, the authors have developed the notion that the O and L factors can display differential explanatory power - as depicted in Table 1.

*Table 1: Propositions 1 and 2*

| Roads and Bridges in Australia (AUD>50million)    | Home country<br>A | Home country<br>B | Home country<br>C | Home country<br>D |
|---|-------------------|-------------------|-------------------|-------------------|
| Operating/expressing an interest in Australia     |                   |                   |                   |                   |
| Group 1   | ☺                 | ☺                 | ☺                 | ☺                 |
| Not Operating/expressing an interest in Australia |                   |                   |                   |                   |
| Group 2   | ☹                 | ☹                 | ☹                 | ☹                 |
| Not Operating/expressing an interest in Australia |                   |                   |                   |                   |
| Group 3   | ☹                 | ☹                 | ☹                 | ☹                 |

*Key: ☺ = O advantages in comparison to contractors of other nationalities/local contractors in serving the Australian market; ☹ = O advantages and disadvantages in comparison to contractors of other nationalities/local contractors in serving the Australian market; ☹ = O disadvantages in comparison to contractors of other nationalities/local contractors in serving the Australian market*

In doing so, the authors seek to address a weakness in Dunning's principal hypothesis that takes a nominal approach (Rahman, Bridge and Rowlinson 2010; Rahman *et al.* 2011a; Rahman *et al.* 2011b; Rahman *et al.* 2012). Table 1 uses a facial symbol to reflect similarities/differences in O attributes and illustrates the outcomes from two propositions. That is, by adopting extreme positions and observing differences in the range of the reported level of overall attractiveness in the host market Australia down the four columns of multinational contractors with different O attributes in the same home country/location (Proposition 1) and in contrast to the range of the reported level of overall attractiveness in the host market Australia across each of the three

rows/groups of multinational contractors with similar O attributes but in different home countries/locations (Proposition 2), evidence is generated to indicate the relative importance of O and L factors vis-à-vis roads and bridges in Australia. Such that, if a greater range in the reported level of overall attractiveness in the host market is observed across the rows than down the columns, then this indicates that the L factor is more important and has more explanatory power than the O factor and vice versa. In terms of helping to reveal the relative importance of O and L factors, it is expected that the relative strength of the correlation/level of statistical significance of the O and/or L factors/dimensions generated from a final Proposition 3 will be consistent with the outcomes from Propositions 1 and 2, again vis-à-vis roads and bridges in Australia. In the next section, the attention turns to the research approach and which begins with a brief overview of the entire research plan designed to test the above three propositions above and which comprises multiple methods of data collection and analysis. The focus in the next section, however, is on a preview of the next stage in the empirical work in this study concerning case studies.

### **Preview of Case study design and analysis**

The research plan comprises three stages. That is, secondary data; case studies; and a survey. The secondary data stage and the case study stage concern four home countries, namely China; Japan; Spain; and US vis-à-vis the infrastructure sector selected (roads and bridges over AUD50 million) in Australia - as the host market. These first two stages seek to surface corroborating evidence concerning ownership advantages and location advantages to test the first two propositions illustrated in Table 1. Whilst the survey stage is designed to assess the extent to which key findings from the secondary data and case studies are generalisable globally in pursuance of testing the third proposition mentioned above. Engineering News Record (ENR) is used as the basis of a sample frame for the survey and upon checking ENR (2010) listing of the world's top 225 contractors and in conjunction with visiting the websites of these contractors, where available, 181 contractors were identified as operating in the transport sector and will be invited to participate in the survey. In total, this approach harnesses the relative strengths of multiple methods of collecting and analysing data and answers Dunning and Lundan's call that "...the firm and national level analysis on the influence of institutions on MNE behaviour need to be linked and treated holistically." (2008: 142).

The first stage investigation concerning secondary data in the public domain has been completed and has started to speak to the relative importance of the O and L factors envisaged in Table 1, as reported by Rahman *et al.* (2012). On the O factor, it was noted that there are number of contractors from the home countries (for example, Acciona from Spain and Fluor from US), that have subsidiaries in the sector in Australia but which are not amongst the leading few contractors in their home country (ENR 2010). This suggests that there are other contractors from these home countries that are capable of winning road and bridge projects in Australia and that factors other than O advantages, could be more important. With regard to the L factor an analysis was conducted of its two dimensions concerning risk (home-host induced culture; administrative; geographic and economic distances and along with home-host induced distance concerning business uncertainty and sufficiency of demand to justify risk) and return (home-host distances pertaining to industry competitiveness as a proxy for profitability) and using Porter's (1985) five forces model. On the L factor, the secondary data provided sound evidence of these distances and this source of data displayed strength in assessing the L factor at a national level. In summary, the

secondary data provided strong evidence that China and US represent much greater distances than Japan and Spain with respect to Australia as the host country. As such, this suggests contractors from China and US may face higher country specific investments (risks) in setting-up operations and take a much dimmer view of these set-up costs/risks than contractors from Japan or Spain. This analysis of secondary data pertaining to the risk dimension in the L factor corroborated observations on the dependent variable (in this Stage 1 of this study the dependent variable is actual FDI). That is, there is a much lower incidence of Chinese and US contractors in the Australian roads and bridges market and especially as China and US account for largest number of contractors in the 181 contractors that make-up the previously mentioned sample frame in this study. Having reviewed the secondary data pertaining to O advantages and which comprise mainly contractors' websites and including company reports and financial statements, it was clear that this source of data is, on its own, is insufficient to develop an assessment of the facial symbols in Table 1 and as such insufficient to fully test the first two propositions. The conclusions from the secondary data are, therefore, tentative in suggesting that the L factor may have more explanatory power than the O factor. In contrast, it's anticipated that the relative strength of case studies in the next empirical stage of the study will be seen in terms of more clearly testing the explanatory power of O factor.

The case study approach comprises two questionnaire instruments to be administered face-to-face via interview and the collection of private secondary data/documents. The first questionnaire is designed for local contractors headquartered in Australia and the second of these questionnaires is designed for overseas contractors headquartered in China; Japan; Spain and US. At the time of writing, both questionnaires are in the process of being administered and it is planned to complete the collection of this case study data and analysis by end of November 2012. The essential purpose of the local questionnaire is to create reference points to facilitate the identification of the facial symbols shown in Table 1. That is, a number of local contractors are selected from Australia's National Prequalification System (NPS) and comprise three reference groups. That is, at least two or three contractors are selected from approximately the top-half of the NPS financial level ("F150 plus") to represent Group 1; at least two or three contractors are selected from approximately the bottom-half of the NPS financial level ("F-150 plus") to represent Group 2; and at least two or three contractors are selected from the NPS financial levels ("F150" and "F100") to represent Group 3.

A set of objective measures are used to assess these contractors' attributes and which include attributes corresponding to criteria in the NPS, along with other attributes deemed important by contractors in terms of winning contracts and identified from the website search in the first stage investigation. On each attribute, an average of the responses from contractors within each group is taken to represent the group and the group average ranked either 7; 4; or 1. That is, 7 equates to the group that derives the greatest advantage from the attribute concerned and 1 equates to the group that derives the least advantage from the attribute concerned. On each attribute, a set of measurements can now be interpolated and to represent the remaining points 2; 3; 5; and 6. Such that entire 7-point scale is created on each attribute to compare the average score for each of the local groups with scores provided by case study contractors headquartered in the four home countries. A radar map is then planned to present these outcomes and for illustrative purposes and hypothetically only this is shown in Figure 2 in terms of the three local reference groups only. Given that all the attributes are either directly connected to the NPS criteria and/or derived from details

from contractors' websites, then all of the attributes are considered valuable in terms of contributing towards winning a contract. Beyond this valuable variable, the other Resource-Based Theory (RBT) variables concerning rarity and costly to imitate are used to assess the extent to which the different groups are leveraging certain attributes to attain either a possible temporary competitive advantage or a possible sustainable competitive advantage. That is, in addition to the objective measures on the attribute used to rank the three groups, each contractor in a group is asked to give perceptual responses on 7-point scales in terms of how rare amongst their main rivals and how costly to imitate by main rivals are their measurements on the attributes.

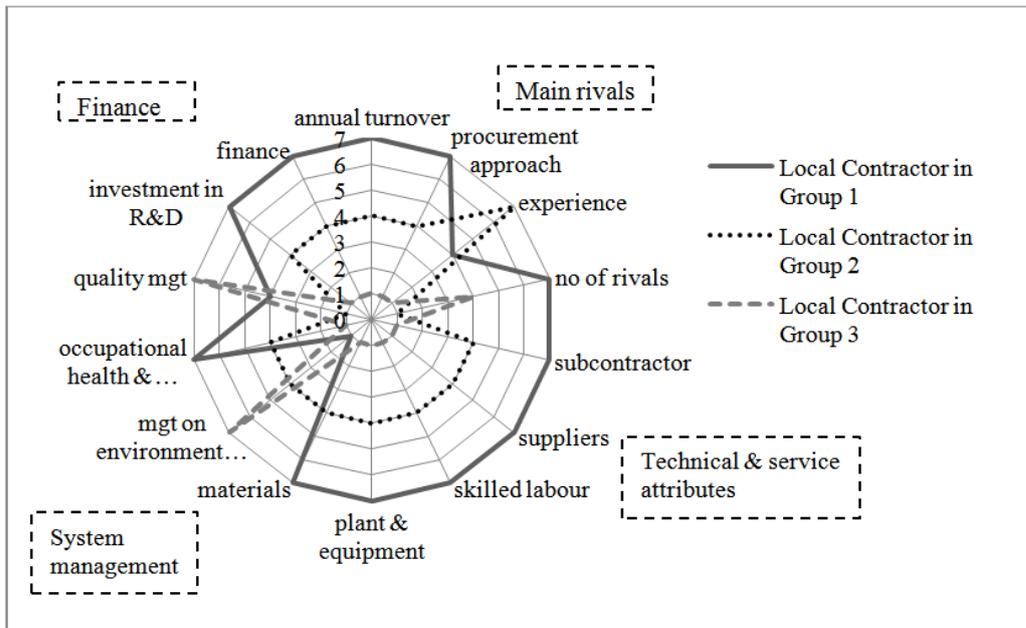


Figure 2. Reference radar map of local contractors

This assessment will be shown by colour coding either temporary competitive advantage (high rare score) or sustainable competitive advantage (high rare and high costly to imitate score) either on the portion of line from point 1 to 4 and/or point 4 to 7 on any of the attributes where one or two of the groups out of the three groups on the attribute concerned consider that they have a competitive advantage. Such that, this analysis will also show if and where/on what attribute(s) the competitive strength of the each group lies and how much this is specific to the local case study group or occurring in other contractors in that group. In the process of generating the three local reference groups on a radar map, the local questionnaire takes the opportunity to assess perceptions pertaining to Porter's five forces model to corroborate secondary data in Stage 1 concerning the risk dimension of the L factor. The local questionnaire also includes questions concerning internalisation in seeking to generate empirical evidence to test the notion that powerful local subcontractors and suppliers may be a source of competitive for locally established head/lead contractors and by inference a deterrent to entry/internalisation to a new multinational contractor (on the issue of horizontal integration). And at the same time, some critical subcontractors and suppliers may encourage internalisation by established local lead/head contractors (on the issue of vertical integration).

As mentioned, the second questionnaire is designed for overseas contractors. It is a non-probability or purposive approach to identifying the case studies and which deploys the logic in Table 1. In order to allow the effect of variations in location

advantages on the overall attractiveness of the Australian market to be most effectively observed (looking across the rows in the Table 1), two of the home countries with contrasting construction industries are selected from Australia's region (China and Japan), whilst the other two home countries are from outside Australia's region (Spain and US). In order to create the greatest opportunity to observe deviations in ownership advantages (denoted by the facial symbol) and to assess the effect of variations in ownership advantages on the overall attractiveness of the Australian market (looking down the columns in Table 1), three groups of contractors will be sought. The contractors in Group 1 (one from each home location) are selected on the basis of having the highest levels of overseas revenue in roads and bridges and the highest level of connection to Australia. In contrast, Groups 2 and 3 in Table 1 comprise the most successful (amongst the top half) and least successful (amongst the bottom half) of multinational contractors again with reference to overseas revenue in the sector in each of the four home locations but not operating in Australia. The same attributes targeted in the questionnaire for local contractors are also deployed in the overseas questionnaire. Such that a radar map for each overseas contractor can be plotted on the reference radar map comprising the three lines for the three groups of local contractors.

The symbol ☺ is given to an overseas contractor whose radar map falls mostly above the local Group 1 map and the symbol ☹ is assigned to a home contractor whose radar map falls mostly between the local Group 1 map and the local Group 2 map. The symbol ☹ is given to a home contractor who scores at Point-0 on any attribute pertaining to the NPS criteria. This contractor is effectively being assessed as unlikely to achieve prequalification and win any road and bridge project greater than \$50 million in Australia. Again, RBT variables concerning rarity and costly to imitate and included in the overseas questionnaire and designed to allow a more accurate assessment of the extent to which the overseas contractor is matching local contractors particular sources of competitive advantage and whether this is peculiar to the overseas contractor or whether there are other contractors in the overseas contractors home country that would similarly match local contractors' particular sources of competitive advantage. This questionnaire also seeks to surface indications of profitability in the overseas contractor's home market and this overseas contractor's perceptions of profitability of the Australian market using Porter's (1985) five forces model. A very broad question concerning the overseas contractor's perceptions of set-up costs or investment/risks is included and designed to provide corroborative evidence to more detailed assessment made previously in the first stage secondary data investigation. Again, questions are included concerning internalisation to explore the negative effect of transactions costs ex ante in terms of deterring FDI and in contrast to encouraging internalisation ex post and once the overseas contractor has committed to a market. Finally, a suite of questions are included to surface the overseas contractor's perceptions of the attractiveness of the Australian market relative to other overseas locations in which the overseas contractors is currently operating and all other competing locations worldwide, along with questions concerning the overseas contractor's international business motivation.

## CONCLUSIONS

This paper has presented for the first in Figure 1 a novel operation of the OLI framework in multinational construction. Additionally, an overview of the entire research plan designed to test Figure 1 was given before previewing the next and second stage of empirical investigation concerning case studies. Harnessing the

relative strengths of the completed analysis of secondary data and planned case studies and survey and then triangulating the outcomes these methods, will provide strong evidence upon which to conclude the relative of importance of O advantages versus L advantages in the context of this research and which is progress that Seymour (1987) indicated would be very valuable and difficult to achieve. The research will also contribute to method. To the authors' knowledge, this will be the first operationalisation, in this context, of the RBT in terms of O advantages in the planned case studies and TCE on the issue of risk as part of the L factor in the review of secondary data mentioned in this paper. Furthermore, the research will yield some very important practical contributions including a global map of the relative attractiveness of the Australian market. This map is useful to Australian government and also to local contractors. That is, this map allows local contractors the opportunity to help display their relative competitiveness and productivity and may help form the basis of future business strategy. The research will also identify aspects of the location factor that can be influenced by government, as well as surfacing any misconceptions of the Australian market. Finally and more fundamentally, this research and its approach to articulating the overseas bidding decision is of value to any multinational contractor headquartered within or outside of Australia.

## ACKNOWLEDGEMENTS

This research was supported under Australian Research Council's Linkage Projects funding scheme (project number LP0989743).

## REFERENCES

- Coase, R H (1937) The nature of the firm. "Economica", 4, 386-405.
- Dunning, J H and Lundan, S M (2008) "Multinational Enterprises and the Global Economy". 2ed. Cheltenham: Edward Elgar.
- ENR (2010) Chinese firms jump to top. "Engineering News record", 265(6), 58.
- Infrastructure Australia (2011) Communicating the Imperative for Action. "A report to the Australian Government". Infrastructure Australia. [www.infrastructutreaustralia.gov.au](http://www.infrastructutreaustralia.gov.au)
- Porter, M (1985) "Competitive Advantages: Creating and Sustaining Superior Performance". Free Press.
- Rahman, A, Bridge, A J and Rowlinson, S (2010) The determinants of multinational contractors' willingness to bid for Australian public sector major infrastructure projects: Towards deploying the eclectic paradigm of internationalization. In: Y. Wang, J. Yang, G.Q.O. Shen and J. Wong (eds.), "Proceedings of 2010 International Conference on Construction & Real Estate Management", 1-3rd December, Brisbane, Australia. [Available at: <http://eprints.qut.edu.au/39459/>].
- Rahman, A, Bridge, A J, Rowlinson, S and Kwok, T (2011a) Developing the eclectic paradigm of internationalization on the issue of multinational contractors bidding for Australian infrastructure. In: R. Best and C. Langston (eds.), "Proceedings of 36th Australasian University Building Educators Association (AUBEA) Conference", 27-29th April, Gold Coast, Australia. [Available at: <http://eprints.qut.edu.au/42515/>].
- Rahman, A, Bridge, A J, Rowlinson, S and Kwok, T (2011b) Towards testing the eclectic paradigm on multinational contracting: An approach to reviewing and analysing secondary data. In: Y. Wang, Y. Pang, and G.Q.O. Shen (eds.), "Proceedings of 2011 International Conference on Construction & Real Estate Management", 19-20th November, Guangzhou, China. [Available at: <http://eprints.qut.edu.au/46432/>].

- Rahman, A, Bridge, A J, Rowlinson, S and Kwok, T (2012) A first stage test of Dunning's framework on multinational contracting into Australia: Reviewing secondary data. In: K. Michell, P. Bowen, K. Cattell. (eds.), "Proceedings of Joint CIB W070, W092 & TG72 International Conference on Facilities Management, Procurement Systems and Public Private Partnerships", 23-25th January 2012, Cape Town, South Africa.  
[Available at: <http://eprints.qut.edu.au/48427/>]
- Rugman, A M and Verbeke, A (2005) Towards a theory of regional multinationals: A transaction cost economics approach. "Journal of Management International Review", 1 (Special Issue), 5-17.
- Seymour, H (1987) "The Multinational construction industry". Croom Helm.