

The Impacts of FOREX Fluctuations on Construction Business Performance: An Organisational Capabilities Perspective

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Abstract

Construction projects are a high risk business activity. When undertaking projects in an international context, it is further complicated by the risk of fluctuations in the foreign exchange rates (FOREX). Construction business performance is affected by these fluctuations. They affect progress and cause delays, which in turn create problems for subcontractors, namely cost overruns, disputes, arbitration, total abandonment and litigation. FOREX fluctuations also cause the price of raw materials to increase, leading the cost overruns. Managing FOREX risk is critical and past research have focused on the need for adequate insurance, careful planning and management, and foreign exchange futures hedging to overcome issues that have been caused by the FOREX risk. Analysis of FOREX risk in international construction business usually focused only on issues at the project level. There is currently lack of understanding of Organisational Capabilities (OC) to manage the impacts of FOREX risk, which when examined, are seen in isolation. This paper attempts to bridge the gap by discussing the impacts of FOREX fluctuations on the international construction business. The focus is on the OC

perspective and the need to develop OC framework to mitigate the risk in sustaining construction business performance.

Key words:

Foreign Exchange Rate (FOREX), Organisational Capabilities (OC), Business Performance, Construction Business

1.0 Introduction

Implementing construction projects in a foreign country is a high risk business activity (Zhang, 2011). Foreign exchange rate (FOREX) risk is considered as significant challenge in the international construction business, as business is strongly affected by these fluctuations (Dikmen et al., 2007; Han et al., 2010; Kim et al., 2009; Ling and Hoi, 2006).

When undertaking international projects, construction organisations must take into account the substantial risks related to FOREX fluctuations that affect their business performances. The financial situation of construction organisations can be adversely affected when the currency of exchange rates fluctuate (Ling and Hoi, 2006). It was found that one of the predominant causes of delay for international construction projects is financial difficulties experienced by the construction organizations (Ismail et al., 2012), which were caused by fluctuations in FOREX. This in turn created some other problems, namely cost overrun, disputes, arbitration, total abandonment and litigation. Not only fluctuations in FOREX cause the price of raw materials to increase but they are also the important cause of cost overruns in projects (Fidan and Dikmen, 2011). Therefore, fluctuations of FOREX is a real challenge for construction organisations doing business in overseas markets (Ofori, 2000).

However, the impacts of FOREX risk on the construction business are still not well managed (Ehrlich et al., 2012). A literature review has shown that most attempts to analyse the risks to the construction business due to FOREX fluctuations has focused mainly on issues at the project level, rather than at the organisation level (Yee and Cheah, 2006). When the focus was on the latter, it was in terms of only one capability either financial capability, procurement capability, marketing capability, operational capability or technological capability. Past studies (Bing & Tiong, 1999; Dobrzykowski, 2012; Morgan, 2009; Nath et al., 2010; Wang et al., 2006; Zou et al., 2009) reflect this tendency. It means that the focus should go beyond mitigation itself: it should also ask whether organisations have relevant capabilities to implement the mitigation measures required across related areas of Organisational Capabilities (OC).

This paper aims to better understand the relationship between the impacts of FOREX fluctuations and construction business performance, and also to identify the OC that are required to manage the risk. This is a part of study to develop a framework of OC and business performance to mitigate the impact of FOREX fluctuations.

Based on the previous research, the discussion in this paper has been divided into three main sections: (1) international construction business; (2) impacts of FOREX and; (3) organisational capabilities.

2.0 International Construction Business

Nowadays, the international construction market is worth an estimating at US\$7.5 trillion. By 2020, it is estimated to be US\$12.7 trillion that is an increasing of 70% of growth. Global Construction Perspectives and Oxford Economics reported that emerging construction markets in the Asia Pacific will grow by an estimated 125% by 2020.

As some domestic market shrink, the growth of international construction has created many opportunities for construction organisations. These organisations are increasingly looking for opportunities to have international projects as it helps to further expand their business and in the same

time challenge themselves in the international construction markets. As the opportunities are increased, the risk in international construction are also increased significantly (Han et al.). This business is influenced by different kind of risks such as economic, politic, society, legal and culture (Gunhan and Arditi, 2005; Han et al., 2007). In international construction business, economic risks can be classified as any circumstances that relate to materials supply, labour supply, equipment availability, inflations, tariffs, fiscal policies and FOREX (Wang et al., 2000). Ling and Hoi (2006) mentioned that FOREX fluctuations are a part of specific examples of unique risks beside the other typical risks faced by the contractors who undertook projects in India. Ling and Lim (2007) further suggest that out of the nine identified economic and financial risks; fluctuations in FOREX is one of the most significant risks that affect foreign construction organisations operating in China's construction industry.

These situations mentioned are examples that show FOREX fluctuations are significant risks that give impacts to the construction business performance (Gunhan and Arditi, 2005).

3.0 Impacts of FOREX Fluctuations on the Construction Business

Fluctuations in FOREX impact construction organisations directly in their foreign exchange exposure. To illustrate, when an organisation is involved in international construction business, not only the FOREX fluctuations are likely to jeopardize the project's finances, but at the same time, they affect the organisation's financial situation. This happens because the overall expenses and income for a particular project is payable in the local currency, whereas, the loan repayments may be made in a foreign currency. This means that a fall in exchange rates could be very dangerous for the project as well as for the construction organisations.

This in turn has a significant effect on the organisations' fundamental financial structure, reducing its market value or profit margins, or potentially disrupting any ongoing and future project (Eiteman et al., 2006). Fluctuation in FOREX modifies the profitability of trade and investment deals (Kapila and Hendrickson, 2001). In contrast, Ling and Lim (2007) state that risks arising from fluctuations in FOREX are not likely to occur and are not severe. In their study, experts representing Singapore's construction organisations that conduct construction business in China believed that their profits would not be drastically affected. However, these findings are mainly associated with the unique country, specific benefits of working on projects in China because of the China government's tight exchange rate controls.

Clearly, it is important to manage FOREX risks, as these risks may cause negative impacts on cash flow, endanger a project's viability and limit profitability, mainly for construction organisations which are involved in projects abroad (Xenidis and Angelides, 2005). However, a large number of construction organisations continue to underestimate the risks and neglect to put in place measures to manage the impacts of FOREX fluctuations (Ehrlich et al., 2012). In this case, the real barrier can be a lack of OC, because implementing the mitigation action to manage the impacts of FOREX fluctuations requires these OCs (Eiteman et al., 2006).

4.0 Organisational Capabilities

According to Day, (1994, p.37), "Capabilities are complex bundles of skills and accumulated knowledge, exercised through organisational processes that enable firms to coordinate activities and make use of their assets". Organisational Capabilities (OC) is also defined as "a firm's capacity to deploy resources, usually in combination, using organisational processes, to affect a desired end. They are information based, tangible or intangible processes that are firm, specific and developed over time through complex interactions among the firm's resources", (Amit & Schoemaker, 2006, p.35). More specifically, OC can be defined as an organisation's ability to manage its tangible and intangible assets systematically in order to carry out the tasks or activities in the firm as well. In this study, OC is referred to the abilities that construction organisations are required to have; to manage the impacts of FOREX fluctuations in sustaining the business performance.

Construction organisations have to be aware of the FOREX risk that they will face by undertaking projects abroad. This is important because the failure to understand the impacts of this risk can significantly affect the goals of organisations (Han et al., 2007), either creating economic value, maintaining competitive advantage, or gaining huge profitability (Day, 1994; Song, Benedetto & Nason, 2007). In the construction business, OC are necessary for construction organisations to withstand FOREX fluctuations (Kapila and Hendrickson, 2001; Wang and Tiong, 2000).

Mahdi and Riley (2002) classified five main capabilities for the organisations that are involved in the construction business, namely (1) financial stability (2) past performance (3) experience (4) current capabilities, and (5) work strategy. Wethyavorn (2009) in his study to survey the strategic asset of construction companies has established a group of organisational capabilities that consist of six capabilities, namely (1) financial, (2) construction, (3) marketing, (4) business management, (5) project procurement, and (6) learning and innovation.

Based on these types of capabilities presented, it seems that some of the capabilities proposed by the previous researchers can be combined as one main capability. This study will be focused on the three OC named as: (1) financial capability; (2) technical capability – which takes in past performance, experiences and work strategy; and (3) business management capability – which subsumes marketing, business management and procurement.

4.1 Financial Capability in Construction Business

There are some important elements in finance that need consideration by construction organisations that involve in the international construction business, such as bonds, securities, contingencies, cash flow, and transaction costs of remittance (Jung et al., 2012). These elements are very significant to the FOREX fluctuations. This situation requires a strong financial capability among the construction organisations as Dikmen et al. (2005) in their research also include financial capability as a variable to develop a conceptual framework of organisational effectiveness. Having this capability illustrates how financial of construction organisations can be used to add value to a current business and at the same time mitigate the impacts of FOREX fluctuations ((Bender & Ward, 2008).

The financial capability assessment of organisations can be carried out based on banking arrangements and cash flow. Construction organisations with better management for both are considered capable of being involved in the international construction business. This can be an indicator that they are strongly equipped in managing FOREX risk. Financial capability is a critical source in the international construction business, where it allows construction organisations to maintain the cash flows and profit margins as expected at the bid stage (Ahn et al., 2009).

4.2 Technical Capability in Construction Business

Technical capability is one of the necessary factors for construction organisations to be successful in the construction business. It is embedded under firms' experiences and key personnel (Wethyavorn, 2009). This capability is referred to as the ability of a company to undertake and perform a variety of direct activities in construction by defining the type, size and complexity for completing projects (Warszawski, 1996; Wethyavorn, 2009). Construction organisations with varieties of this capability are able to compete in a broader spectrum of markets, especially in large scale and high technology markets, where there is less competition and higher profit margins.

Two strategic assets found to enhance this construction capability are professional project management and efficient construction technology (Wethyavorn, 2009). Construction organisations must be able to plan, coordinate, monitor, direct and control the project. This capability is very important in preventing a construction project from being abandoned mainly if there is a FOREX fluctuation. Since each construction project is unique, specific capabilities are needed in order to achieve the project completion according to its requirements. Dikmen et al. (2005) also studied the

different sources of competitive advantage and identified technical capability as the top priority for construction organisations.

4.3 Business Management Capability in Construction Business

Holt et al. (1994) found that criteria such as management qualifications are important for construction organisations. Their findings recommended selection criteria that measures capabilities in terms of organisational structure, management skills and management qualifications based on previous performance. This includes the capability of construction organisation to manage their resources; either direct or indirect resources (Warszawski, 1996).

These resources are needed to be managed in an effective way so that they contribute to the ability of construction organisations to sustain the business performance during the occurrence of FOREX fluctuations. Providing statistical analysis results, Aje et al. (2009) proved that construction organisations that have business management capability not only perform well during prequalification and tender evaluation, but surprisingly that this capability is an asset for construction organisations where it is shown that the organisations can successfully manage the project's cost and time performance.

Hence, based on the discussion on these three capabilities, this shows that OC play an important role in the effectiveness of mitigating the impacts of FOREX fluctuations and sustaining construction business performance. It can be seen that even though many mitigation actions are recommended, organisations which do not have relevant capabilities to the subject matter will still be affected by FOREX risk.

5.0 Concluding Remarks

Most of the previous research only focused on the competitive advantages and recommending the mitigation actions on the impacts of FOREX fluctuation but lack of understanding on OC's role to manage the risk. This study is to fill the gaps by focusing on the necessary OC for international construction business to withstand the FOREX fluctuations. This will contribute to enhancing the theoretical understanding of OC; and providing a mechanism for construction organisations – enabling these organisations to recognize their OC, which are relevant to and can be implemented in order to mitigate the impacts of FOREX fluctuations in sustaining their business performances.

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