

INTERNATIONALISATION: THE REPOSITIONING OF THE JAPANESE CONSTRUCTION INDUSTRY

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Positioning is of great strategic importance to large construction firms operating in major international markets. Many global companies have revised their strategies in order to increase their international revenues. Japanese construction firms, while generating large total turnover, do not appear to have followed this trend and whereas they dominate their large domestic market, they appear to be under-represented, relative to their size, in international markets. This paper aims firstly, to consider relevant theory of internationalisation applied to construction, in particular two models devised by Seymour (1987), based on Dunning (1974,1977) and Sugimoto (1990) on the globalisation of construction. Secondly, the paper seeks to establish the current extent of internationalisation of Japanese construction firms. Here, the study will refer to work by Siehler (1999), who developed a global index for UK contractors, and make appropriate comparisons for the Japanese industry. Finally, the paper considers Japanese contractors position, relative to international competitors and domestic economics, and posits strategies which may increase their global activities.

Keywords: business strategy, globalisation, international comparison, international markets, Japanese construction firms, positioning.

INTRODUCTION

According to ENR (August 2001), the five biggest Japanese construction firms account for 5 places among the world's 10 largest contractors (Taisei at no. 2, Kajima at no. 6, Shimizu at no. 7, Obayashi at no. 8, and Takenaka at no.9). In contrast to this, the contribution of their international revenue to total revenue is relatively low, compared to Western construction firms. While several Western contractors generate approximately 40-60% of their turnover internationally (e.g. Hochtief's international turnover is ca. 80%), Japanese contractors' international turnover accounts for 5-10%. However, the current economic situation in Japan may provide a good opportunity for Japanese contractors to examine their market position.

BACKGROUND

Relatively little research has been carried out on construction as a service industry, from a marketing perspective. However, some researchers have dedicated their attention to different aspects of international construction. Seymour (1987) made one of the first systematic attempts to apply an economic theory to construction firms operating in international markets. He investigated the pattern of internationalisation of twenty British contractors¹ and his work provides interesting insights into this process. He describes and explains the different aspects involved in international

¹ The terms construction firm and contractor will be used as synonyms in this study

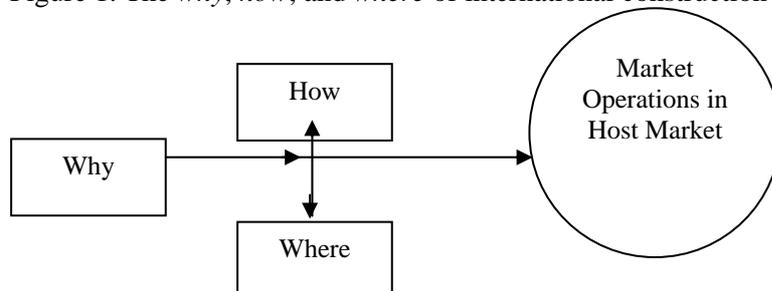
construction in accordance with the OLI-structure (Ownership, Location and Internalisation) of Dunning (1974, 1977) that is described later in this paper. Seymour's (1987) work, while making an important contribution to the field, leaves some aspects unresolved.

A further extensive study referring to the globalisation of engineering and construction firms is that of Sugimoto (1990). He investigated 51 international firms with respect to their degree of globalisation. This work, however, only partly addresses firm-specific advantages and does not include location factors, which finally determine where construction activities are carried out and where construction firms seek to expand their business platform. Although further work exists on the internationalisation of construction firms (Casson 1985, Enderwick 1989), the authors either focus on particular aspects of the business, such as labour supply (Buckley 1985b), or the studies are of a more general nature (Enderwick 1989). Siehler (2000), however, has studied from a UK perspective, the globalisation of contractors and has produced a model (a global index) of contractors which is a function of turnover, geographical spread and committed resources (employees).

One of the few works dealing with Japanese contractors' overseas operations is that of Okamoto and Preece (1998). They provide a valuable analysis of the marketing approach of major Japanese contractors however, their focus is on project export, and does not include FDI (Foreign Direct Investment) as a strategic option.

The underlying model often used in research of internationalisation of firms is Dunning's model, often referred to as the OLI-paradigm, based on three different strands of theory: ownership-specific advantages (O-advantages), location-specific advantages (L-advantages) and internalisation-specific advantages (I-advantages). This framework provides a good platform to investigate internationalisation from different viewpoints and, moreover, it allows comparison with previous studies, which are also based on Dunning's OLI-paradigm. While O-advantages may explain *why* the construction firm is able to operate beyond its domestic boundaries, the external environment should explain *where* the value-added activities will be located (L-advantages). But the *why* and the *where* do not, however, provide sufficient explanation as to *how* the foreign activity is organised from an ownership perspective (I-advantages). Two options are common in construction, FDI and export, and due to the nature of the business care is needed when categorising operations. The *why*, the *where* and the *how* are the key questions in international construction.

Figure 1. The *why*, *how*, and *where* of international construction



Based on the OLI-paradigm, which was also used by Seymour (1987) and Enderwick (1989, 1992), the frame of reference, as illustrated in Figure 2 below, was developed by Ziouziou (2001) as a result of a study of German contractors' market operations in China (PRC) and it was slightly modified for the purpose of this paper.

This model may be appropriate to investigate the internationalisation of Japanese contractors for the following reasons: firstly, the results can be compared with previous studies; secondly, the different factors within this framework are flexible enough to be applied to Japanese construction firms. Thirdly, the model partly relates to other concepts used to explain international marketing activities e.g. Porter's competitive-advantage approach modified by Okamoto and Preece (1998).

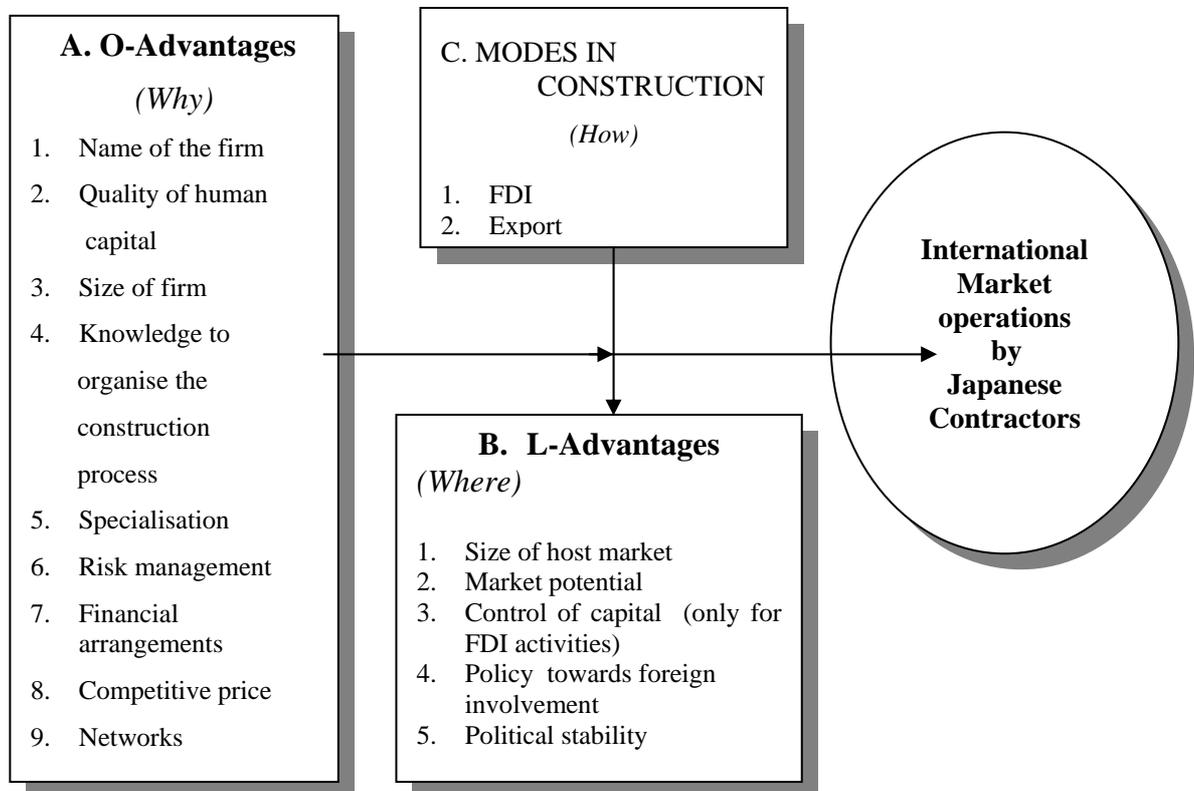


Figure 2: Adapted OLI-model of international construction

TRENDS IN INTERNATIONAL CONSTRUCTION

Construction has undergone major changes in recent years. Previously many construction markets were rather domestic affairs. However, embedded in the global economy, most of them faced an increasing pressure towards globalisation in various forms. Project export has increasingly been replaced by FDI (Foreign Direct Investment), and, as a result, many local construction firms have been acquired by foreign companies. Further, many international contractors from North America and Western Europe, having dominated the international construction scene in the past, have had to face severe competition from newly industrialised countries such as Brazil, Turkey, and Korea as well as from strong indigenous rival. These market dynamics have forced many international operating construction firms to reconsider their world-wide market strategies.

For example, the EU itself has shown enormous change in recent years. The political and economic transition of East European countries and the increasing integration within the EU, have created a new environment and new challenges. Many Western European construction firms opened subsidiaries in the former Eastern Block countries or bought previously state-owned enterprises while within Western Europe increasing M&A activities could be observed.

However, it is not only the globalisation that has changed the face of construction. The range of services offered by large construction firms has changed. Where previously construction firms were concerned with the physical aspects of building, now they are obliged to offer an extended scope of activities including project financing solutions for their clients. Construction firms have diversified into forward integrated value-added activities, such as operating the facilities they build (e.g. BOT-projects). Further, some contractors have entered client related business, such as telecommunications. Generally speaking, more and more contractors generate an increasing turnover from providing additional services to their clients.

Large contractors are active world-wide. The key areas in construction are the US, the European, and the Asian markets. In order to cope with demand fluctuations in one or other of the key regions (the US, the EU, and the Far East), international construction firms will have to operate in all these markets to maintain their international position.

METHODOLOGY

The data for this paper has been obtained either directly or derived from the following sources, expressed in the framework shown in Figure 1: (1) general literature of international business theories as well as the adaptations of these theories to international construction, (2) structured discussions with experts engaged in international markets, (3) published accounts and reports, (4) the researchers' own market research activities. The relevant firms were identified from recent ENR publications. Two of the five largest international Japanese construction firms were willing to be interviewed. The interviewees were experienced managers involved in the formulation and implementation of the international strategy. An additional interview with a major Japanese investment bank involved in construction activities provided further insight. Annual company accounts and reports were carefully evaluated to provide additional information.

DEVELOPMENT OF JAPANESE OVERSEAS CONSTRUCTION

According to Hippo and Tamura (1988; 59-85), Japanese international construction started at the beginning of the 20th century with a railway between Seoul and Incheon in Korea. From this time up to 1960s, overseas construction operations were dominated by colonial, government and military works. From 1973 onwards international contracts increased rapidly, due to the boom in the Middle East at the second half of the 1970s, and the boom in South East Asia in the early 1980s. Additionally, the Japanese government's export promotion policy helped contractors seek overseas projects. The Ministry of Construction established a system of subsidies for project exporters, including tax deductions from overseas works, lower rates of bond insurance and the provision of financing by Japan's Export-Import Bank and Overseas Economic Co-operation Funds (OECF). As the Japanese contractors increased their overseas business in the 1970s, they opened small subsidiaries in the US, Brazil, and Peru. They were also successful in exporting projects to Iraq. However, Table 1 shows, that Japanese construction exports in the 1970s was clearly dominated by two major host regions, the Middle East and South East Asia.

The outbreak of the Iraq-Iran war in 1980 resulted in severe losses for many international construction companies, including contractors from Japan. Many projects were stopped, because the investors were uncertain about the outcome of this war. Furthermore, following the high construction output of the 1970s Middle East markets

peaked in the early 1980s. As a result, the volume of construction works from this region dropped sharply, and contractors had to look for elsewhere.

Table 1: Contribution of Regional Business to Total Overseas Business in Percentage

Year	Middle East	South East Asia
1976	48.0	38.8
1979	55.0	32.0

Source : Hippo and Tamura (1988)

The increase in construction demand in the US and in Australia provided huge opportunities for Japanese international contractors. Table 2 clearly shows the regional shifts in project exports from the Middle East to the US and Australia in the 1980s. The development in the 1990s was very dynamic in some of the global construction markets. The transition of major economies in the former socialist countries to market driven economies led to massive demand for construction services, particularly in the expansion of the countries' infrastructure.

Furthermore, demand from commercial and industrial sectors increased significantly as a result of the FDI-inflows into these countries. While these forces mainly stimulated the demand side in the first stage, the integration of the economies within the EU also changed the supply side. Many European construction firms prepared themselves for the single market by mergers and acquisitions (M&A) with other European competitors. For example; Dutch HBG bought German Wayss & Freytag, AMEC (UK) acquired a stake in SPIE Batignolles (Fr), and German Hochtief bought Dutch Ballast Nedam. The Asian markets in the 1990s showed an impressive increase in demand, at least until the so-called Asia Crisis in 1997. Table 3 shows the development of project export of Japanese construction firms in the 1990s.

Table 2: Construction Exports of Japanese Contractors(100 m YEN)

Country	1969	1977	1979	1983	1985
USA	9	-	-	780	1,988
Australia	-	-	-	540	1,763
Iraq	242	206	3,362	-	-
Iran	-	601	-	-	-
Saudi-Arabia	31	359	561	438	-
Singapore	30	191	214	2,643	865
Malaysia	21	-	227	1,625	390

Source: Ministry of Construction, Japan

Generally speaking Table 3 illustrates the trend of Japanese construction firms to be active in Asia, the US and Western Europe. However, it shows a further important trend of Japanese construction firms to serve host markets by project export while European and US firms increased their M&A activities in host markets. Table 4 illustrates the relative proportion of FDI in construction in Japan.

Table 4 shows that the Japanese construction industry, though contributing to approximately 7 % to domestic GDP, plays a relatively unimportant role in FDI. The internationalisation of Japanese construction was organised through export activity.

Siehler (2000), has studied the distribution of contractors' international revenues for the six specified global regions (and the European specific proportional shares.) He also identified the reduced level of Japanese activity outside its previously considered international markets of Asia, Australia and the Middle East. This relationship is inverted when considering European penetration of Asian markets but that

nevertheless in Africa and South America, European contractors are responsible for around half the total revenue generated.

Table 3: Project Export of Japanese Contractors according to Region in 1000YEN

Region	1993	1995	1997	1999	2000
Asia	615,570	944,298	892,429	483,500	694,700
M-East	7,272	5,337	15,398	10,700	7,500
Africa	22,640	16,600	23,709	24,400	18,200
N-America	116,947	190,450	211,986	138,100	184,200
S-America	9,923	22,945	34,911	17,500	29,300
W-Europe	61,475	48,879	49,039	33,500	47,700
O-Europe	944	366	12,318	3,900	7,700
Oceania & Others	25,289	54,327	36,716	18,100	10,700
Total	860,060	1,283,202	1,276,506	729,700	1,000,000

Source: OCAJI 2001

Table 4: FDI from different Industries in Japan in the 1990s

Industry	1993	1994	1995	1996	1997	1998	1999	2000
TI	2.6	5.0	3.9	8.1	5.4	3.9	7.2	6.5
CE	7.5	6.4	10.5	13.6	12.4	8.4	24.5	6.3
FI	2.3	3.1	1.6	1.5	1.1	3.1	22.4	0.5
PIT	30.1	33.7	36.8	42.2	35.8	30.1	63.4	24.0
EBI	17.5	16.	10.6	16.2	22.2	40.2	14.8	17.3
RE	17.0	12.6	11.7	12.9	10.3	6.9	3.2	0.8
CI	0.8	0.9	0.8	0.7	0.8	0.7	0.3	0.2

Source: Ministry of Finance, Japan

Legend: TI = Transport; CE = Consumer Electronics; FI = Food; PIT = Production Industry Total; EBI = Insurance and Banking; RE = Real Estate; CI = Construction

CURRENT POSITION

Following initial investigation, this study was extended in order to explain the motives for engaging in international markets. The previously suggested O-advantages and the L-advantages were confirmed, and Japanese overseas construction operations are export led.

The new frame of reference is as shown in Figure 3. The following O-advantages were identified as important i.e. they constituted the competitive edge with regard to rivals: reputation, construction management expertise, and risk management, while factors such as firm size, qualified personnel, specialisation, financial arrangements, pricing, and networks were of medium importance for the firms. In an interesting parallel study, Marshall and Murdoch (2001) identified key indicators of successful service provision to customers and users of consulting engineers lay in intangible dimensions of reliability, responsiveness, assurance and empathy of service provided. The underlying assumption of O-advantages refers to a competitive market approach and may explain why Japanese contractors are able to outperform foreign and indigenous rivals. However, although O-advantages explain why Japanese contractors export because of firm-specific advantages (FSAs), they often undertake project export under the umbrella of government support. In particular, the Japanese government export promotion policy and Japanese development aid programmes create incentives for the project exporters to supply foreign markets mainly for two reasons: firstly, there is no international competition, which reduces costs and risks and secondly, payment is relatively secure due to government insurance. The impact

on government intervention or export promotion schemes has not been incorporated in the previous model and therefore it has to be modified.

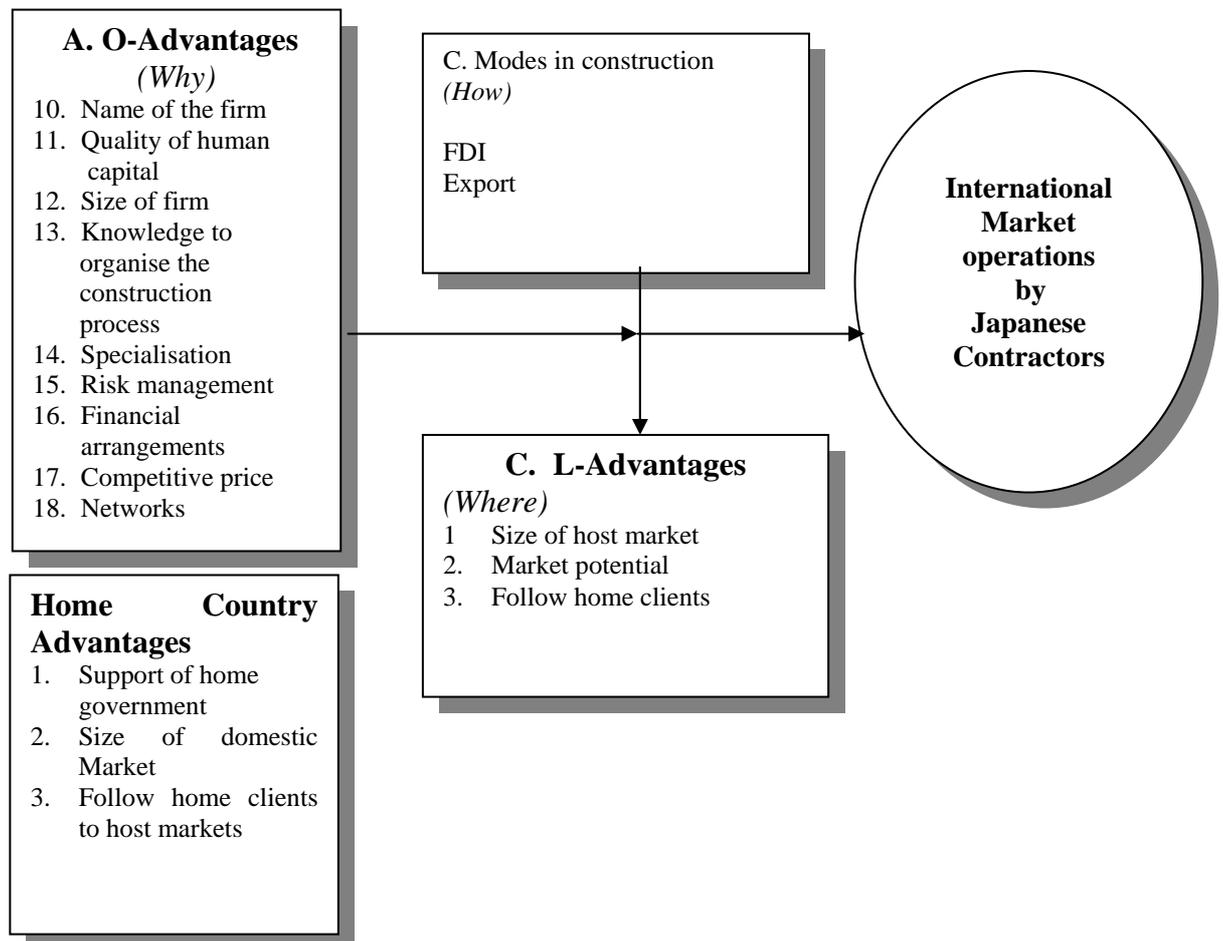


Figure 3: Modified Frame of Reference

Additionally, the decline of the domestic market has stimulated Japanese contractors to seek opportunities in overseas markets. As in many comparable cases, firms prefer to seek overseas market opportunities rather than to downsize their activities. This is a common approach where construction firms enter foreign markets in order to compensate for such demand fluctuations.

One of the key questions in this study is why Japanese contractors did not internationalise to the extent Western contractors did. Firstly, Japanese contractors focussed on the domestic market because it provided sufficient volume and profitability. The period of reconstruction and industrialisation during the post-war era generated a large domestic market.

Secondly, the demand in overseas market was artificially generated by the government, which created a subsidised demand through the intervention of export promotion schemes and development aid. In other words, most of the construction firms gained their overseas experience under the umbrella of the government, and were reluctant to compete against experienced market-oriented rivals.

Thirdly, many of the contractors followed their home clients into foreign markets. Although the construction firms delivered projects in host markets, often production facilities or office buildings, these construction works were not subject to international

competition. Japanese industry had invested heavily in overseas markets and used partners from their domestic market.

OPPORTUNITIES FOR JAPANESE CONTRACTORS

The current crisis of the domestic economy has significantly reduced the demand for domestic construction. Government spending was greatly reduced. This in turn led to major losses for Japanese contractors who, however, did not reduce their capacity proportionately. Consequently, gearing increased dramatically. Currently, many Japanese construction giants suffer from these liabilities, and bankruptcies must threaten. Firms seek desperately for ways out of the crisis look to international markets and experienced partners.

The government identified the need for the industry to be restructured and supported this process by several measures. In particular, the government supports joint ventures with local or international firms in order to enable the firms to survive. Furthermore, the government deregulated construction law in order to help construction firms to restructure their operations. Domestically, the fragile state of Japan's debt-burdened construction sector has been underlined by the recently proposed merger of Mitsui and Sumitomo. Hijino (2002) reports that share price falls of 51.8% and 28.0% respectively since October 2001 indicate that mergers between two weak players result more in repackaging overcapacity rather than streamlining to reduce bad debts.

It would appear to be mutually beneficial for Japanese contractors to enter into joint ventures and gain more international experience while their partners gain from the technical expertise and network of the Japanese. Japanese firms should expand from an export-oriented to a mixed form of business, export and FDI.

CONCLUSION

Japanese contractors suffer from being focused on the domestic market and on traditional construction market segments. The volume generated from international operations is still relatively low compared to their total turnover and relative to Western construction firms. Thus, firms have to find appropriate strategies to arrive at an internationally competitive position and one such strategy may be to partner internationally experienced contractors who have the ability to transfer this knowledge. Whatever, companies have to become more flexible and pro-active to anticipate these market trends.

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