

An analysis on the International Construction Market and the Business Performance of Top Contractors after the Global Financial Crisis

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Abstract: In these days, international construction market including construction companies has much grown due to globalization and economic boom in the mid 2000's. The size of international construction market, measured with overseas revenue of 225 construction firms, has expanded 2.7 times from 2003 to 2008 according to the ENR. However, after the global financial crisis of 2008 it has faced condition of low growth. In this research, major changes of international construction market and top contractors have been studied. In this study, changes of international construction market have been analyzed in the aspect of region and product including general buildings, transportation, petroleum, etc. Then, in order to find the changes of top contractors which obtained good accomplishment, business performance of companies have been examined by the compound annual growth rate, profit margin and international revenue by comparing the data before 2008 and after. The purpose of the study is to understand major changes of international construction market. Also, strategy changes of top contractors against market stagnation, profit depreciation, high competition have been inferred through the study. The result of the study would contribute to analyzing the strategies of construction companies in international market.

Keywords: international construction market, ENR top 225 international contractors, business performance, global financial crisis

I. INTRODUCTION

Following the economic boom worldwide and the globalization of the construction industry in the mid-2000s, the international construction market experienced rapid growth. However, after the 2008 global financial crisis, this market experienced another phase. This study examines the construction market before and after the financial crisis and analyzes changes in the international construction market as well as the business performance of prestigious construction companies using the ENR(Engineering News Records) data. It provides a comprehensive account of the recent environmental changes in this international market.

First, the study examines the size of this market and changes that occurred each year. Next, it classifies the international construction market on the basis of construction products, major regions, nationality of the construction companies, and the compound annual growth rate (CAGR) in each category. Finally, it analyzes the business performance of the top 9 contractors in terms of CAGR and profit margin.

II. ANALYSIS OF THE INTERNATIONAL CONSTRUCTION MARKET

The CAGR of the international construction market prior to the financial crisis was 20%, which plummeted to 7% after 2008. The impact of the financial crisis was indiscriminately reflected in the sales figures of 2009 and 2010, in Particular (see Figure I).

Figure I. INTERNATIONAL REVENUE AND GROWTH RATE OF ENR 225 INTERNATIONAL CONTRACTORS (2003~2013)

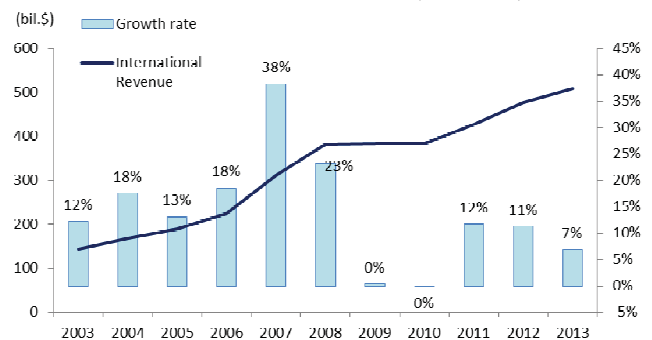
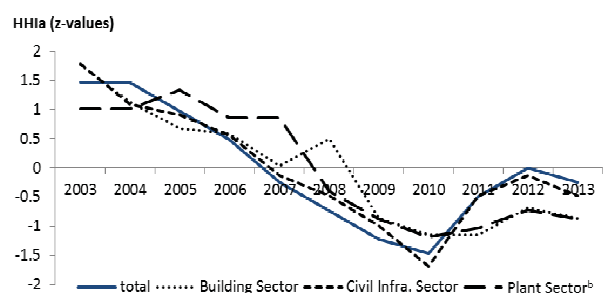


Figure II. INTERNATIONAL MARKET COMPETITIVENESS (2003-2013)



^a HHI : Herfindahl-Hirschman Index

^b Building sector: General Buildings, Manufacturing; Civil Infrastructure sector: Transportation, Water Supply, Sewerage/Solid Waste; Plant sector: Industrial Process/Petroleum, Power

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Meanwhile, the study also analyzes the level of market competitiveness since the declining market growth was considered to intensify competition among corporations. The results of the analysis show that market competitiveness continued to increase prior to the financial crisis; in 2009, when the market was affected by the financial crisis, competition was most intense and it subsequently decreased marginally in Figure II.

With regard to the characteristics of specific changes in the construction market, this study conducts a comparative analysis of CAGR prior to and after the financial crisis (see Table I). Among construction products, the growth rate of plant sector was high, while that of general buildings construction was relatively low. By region, a high growth rate was seen in Africa prior to the financial crisis and in Asia, after the financial crisis. On the other hand, Europe suffered the most from the financial crisis and showed a negative growth rate. By nationality, the growth rate of Korean corporations was the highest after the financial crisis, followed by Spanish and Chinese corporations.

TABLE I. CAGR AND PROPORTION OF INTERNATIONAL SUB-MARKET

Market Sectors		CAGR(%)		Proportion of Market Sector (%)	
		2003-2008	2008-2013	2003	2013
Total International revenue		21.8	5.9	100	100
Market	General Buildings	21.1	3.6	25.2	22.0
	Transportation	21.3	5.9	27.1	26.5
	Industrial & Petroleum	25.7	7.1	25.4	31.6
	Power	22.0	16.6	6.9	11.3
Region	Europe	19.6	-0.4	33.4	20.6
	United States	12.9	3.0	16.3	8.9
	Asia	21.4	16.4	18.6	26.9
	Africa	32.1	4.1	9.1	11.4
	Meddle East	36.3	1.7	11.8	15.5
	Latin America	19.3	18.8	7.1	10.4
Nationality	American	13.9	6.8	19.1	13.0
	Chinese	39.0	12.8	6.0	14.5
	Spanish	35.9	22.9	4.4	14.7
	Korean	33.5	30.0	1.9	7.8
	Japanese	14.5	-2.0	8.9	4.1
	British	10.3	-16.7	6.5	1.1
	Italian	38.0	-1.6	4.5	5.3
	French	17.4	1.8	14.9	9.3

III. ANALYSIS OF TOP 9 INTERNATIONAL CONTRACTORS

This study elects the top 9 international contractors based on sales for analyzing business performance in Figure III and Figure IV. We exclude Bechtel, as they did not post their financial achievements. We observe that the CAGR of corporations decreased after the financial crisis. However, some contractors dealt with environmental changes successfully, and we categorize these into growth-pursuant and profit-pursuant groups. The growth-pursuant group includes Grupo ACS, a Spanish corporation, which is actively expanding its firm size through M&As, and the profit-pursuant group includes Vinci, a French corporation,

whose return rates increased unexpectedly after the financial crisis.

Figure III. INTERNATIONAL PERFORMANCE OF TOP 9 CONTRACTORS BEFORE GLOBAL FINANCIAL CRISIS (2003~2008)

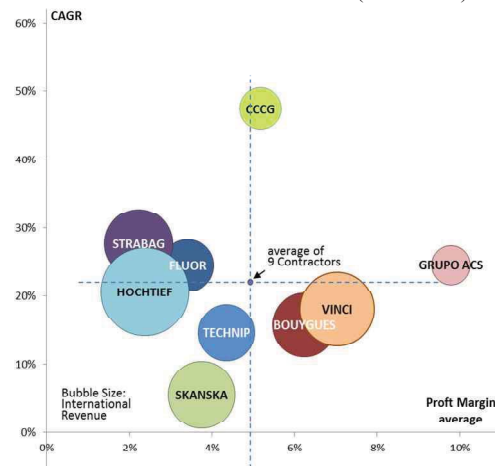
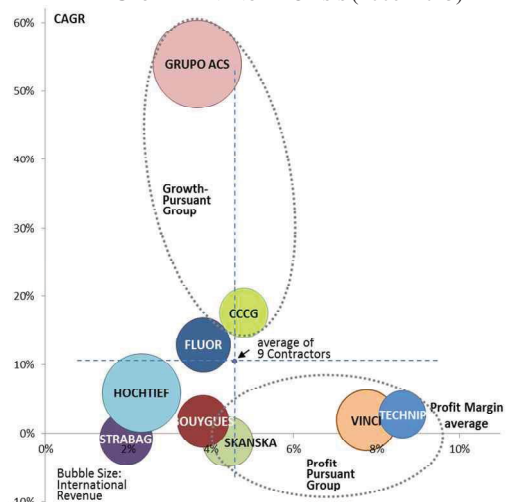


Figure IV. INTERNATIONAL PERFORMANCE OF TOP 9 CONTRACTORS AFTER GLOBAL FINANCIAL CRISIS (2008~2013)



IV. CONCLUSION

Owing to the global financial crisis, the international construction market experienced challenges such as drastic changes in sales and a decline in return rates. Nevertheless, a few corporations improved their business performance in terms of return rates. Although this crisis accelerated changes in this market, these changes were characterized by the growth of this market in developing countries and the declining market size in advanced countries. It appears that the top construction corporations that had prepared for such environmental changes from the onset of the crisis could ensure business stability.

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