

The Analysis of the present condition of the Korean CM Market (Comparing the American CM Market)

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ABSTRACT: During the last ten years, there have been many studies related with settlement and reinvigoration of CM. These researches have shown that the application of CM has been not reinvigorated in Korean construction industry yet, because of some problems such as the insufficient application of the public sector, the policy matters and the CM fee estimates.

But the present condition data of the Korean CM Market shown in these studies was insufficient for the standpoint of Market itself. Also, some of these studies compared the Korean CM Market with The America CM Market, to study the foreign CM markets. However, because the Korea CM Market only has the CM for Fee Market but the American CM Market has the CM for Fee and the CM at Risk, the Korea CM Market must be not only compared with the America CM Market but also compared with the America CM for Fee Market.

Therefore, the purpose of this study is to determine the present condition of the Korea CM Market through the compare and contrast of the Korean CM Market, American CM Market and American CM for Fee Market, by the Market Growth rate and Market Share. This study further aims to verify whether Korean CM market was implemented.

Keywords: Construction Management(CM), Implementation, Analysis of the present condition.

1. INTRODUCTION

1.1 Background and Purpose of study

To strengthen the global competence and to improve the productivity in the Korean construction industry, the Korean construction industry judged that the existing production system was limited and the necessity of the new business management method was requested. Hereupon, the Construction Management (CM) was introduced by the law, amending the basic Regulation on Construction Industry in 1996, 12.

The CM's the number of contract for the last ten years in the Korean construction industry, was 121 (2004), 206 (2005) and 219 (2006). Also, Many studies have been worked by groups related the CM to expand the CM application in the Korean construction industry. The present condition data of the Korean CM Market shown in these studies was insufficient for the standpoint of the market and some of these studies compared the Korean CM market with the American CM market, to understand the foreign CM markets.

However, while the Korean CM market only has the CM for Fee Market, because the American CM market has the CM for Fee and the CM at Risk, the Korean CM market must be not only compared with the American CM market but also compared with CM for Fee market.

Therefore this study sets its goal as to study the present condition of the Korean CM market through the analysis and comparison of the Korea CM Market, American CM market and America CM for Fee Market, by the Market Growth rate and Market Share. Also this study aims to verify whether Korean CM market was implemented.

1.2 Method and Extent of Study

- 1) To define the CM and to introduce the background of the CM.
- 2) To study preliminary study related in the present condition of the Korean CM market.
- 3) To analyze the American CM, CM for fee and CM at risk market by market growth rate and market share, using ENR(2008).
- 4) To analyze the Korean CM market by market growth rate and market share, using public announcement of CM ability valuation's data.
- 5) To compare by market share and to see the present condition of the Korean CM market.

2. The definition of the CM and the background of the CM introduction

2.1 The definition of the CM

The definition of the CM is various. The obvious fact is that the CM is a system made for the owner's profit. The CM manages professionally the entire process from a planning stage to a maintenance stage in a project and is the service to provide a good quality project to owner in the contractual budget and the terms of projects. (Hanmiparsons 2006). Also, the CM is one of the Project Delivery System. Through the contract with the owner, after the owner delegates the entire or partial power to the CM, the CM plays a management role as an agent and a coordinator. Based on these concepts of the CM, Construction Management Association of America (CMAA) says "the process for professional management applied to a construction project from project inception to completion for the purpose of controlling time, cost, scope, and quality."

2.2 The background of the CM

The background of the history of CM in Korea is as follows (Hanmiparsons 2007).

1) In the economic point of view, Korean construction industry that is occupying 15~20% in Korean GDP is taking a large possession and having influence on the Korean economy. As the construction projects are becoming more complex and specialized, the new system is needed to synthetically, effectively, and professionally manage the quality, the cost, and the terms of work.

2) In the social point of view, the present model of DBB (Design-Bid-Build) is limited such as the In-cheon International Airport project, the Rapid-Transit Railway project. Therefore, the new suitable system is necessary for Project Delivery System as a construction character.

3) In the technical point of view, the present product system is limited to strengthen the international competitiveness and raise the productivity. Hereupon, the new business management system is demanded to improve the management ability of the construction business, to strengthen the global competence and to raise the productivity.

4) In addition, the demand for a new system to resolve communication difficulties among groups related in construction projects and to manage all process of construction projects.

3. Preliminary Study related in the present condition of The Korea CM Market

Previous investigation on the present condition of Korea CM Market is tried to see the analysis method.

Table 1 Previous investigation on the present condition of Korea CM Market

Researcher	Analysis Method	Contents
Han, K.K (2007)	Market Share The Number of Contracts Contract Fees CM Fee Types of Construction Comparison with America	To conduct a comprehensive investigation of the environmental factors influencing Korean CM practice
Moon, H (2006)	The Number of Contracts Contract Fees Types of Delivery Method Types of Construction Types of Owner	Analysis and improving strategies on CM Service adoption in Public Sector Construction
Yoon, B.S (2007)	Market Share The Number of Contracts Contract Fee Types of Owner Growth rate	Analysis on the present condition of Korea CM
Kim, S.C (2007)	Contract Fees Comparison with America CM Company	Establishing the Education strategy in strengthening CM's ability in Large-scaled Construction Company

The Korean CM market only has the CM for Fee Market, but the American CM market has consisted of the CM for Fee Market and the CM at Risk Market.

K. K. Han (2007) analyzed the Korean CM market as a various methods. But Han (2007) didn't consider a composition difference of the Korean CM market and the American CM Market. Also B.S. Yoon (2007) analyzed the Korean CM Market as a various methods but because there was no comparison of the American CM market, the present condition analysis is insufficient. H. Moon (2006) only analyzed the Korean CM market around Public Sector. S.C. Kim (2007) did not analyze a various methods.

As stated above, because the purpose of this study is to analyze the Korean CM market around the market itself, this study will compare and contrast the American CM, CM for Fee and CM at Risk Marke using the method of growth rate and market share.

4. The analysis of the status of the American CM Market

4-1. The American Con's Market and CM Market

Table 2 is indicating an annual contract fee, the Market Growth rate (M/G) and the Market Share (M/S) of the American CM Market and Con's Market. Influenced by the American Con's industry prosperity, Both the Con's Market and the CM Market have been growing in the last six years.

The American CM Market has been holding 6~7 percent of M/G and is occupying a stable part of American Con's Market. Especially after 2005, the CM M/G has been bigger than the Con's M/G and it is known for the fact that the CM market is growing more quickly than the Con's market.

Table 2 The contract fee, M/G and M/S for a year in the American Con's and CM Market

Note: 1. The M/G is Market Growth Rate 2. The M/S is Market Share in the American Con' Market

Source: A-The Commerce Department of America, B- ENR June 18, 2008

Unit: A and B- \$ a Billion dollars C, D and E- percentage

	2001	2002	2003	2004	2005	2006	2007	Average
Cons' Market(A)	864	873	921	1023	1132	1192	1161	1023.71
CM Market(B)	52.15	52.8	56.5	61.1	70.5	82.8	101.85	68.24
CM M/S(C)	6.0%	6.0%	6.1%	6.0%	6.2%	6.9%	8.8%	6.6%
Cons' M/G(D)	-	1.0%	5.5%	11.1%	10.7%	5.3%	-2.6%	5.2%
CM M/G(E)	-	1.2%	7.0%	8.1%	15.4%	17.4%	23.0%	12.0%

4-2. The CM Market, CM for Fee Market and CM at Risk Market in America

Graph 1 Changes in Contract Fees in American CM, CM for Fee and CM at Risk Market (by year)

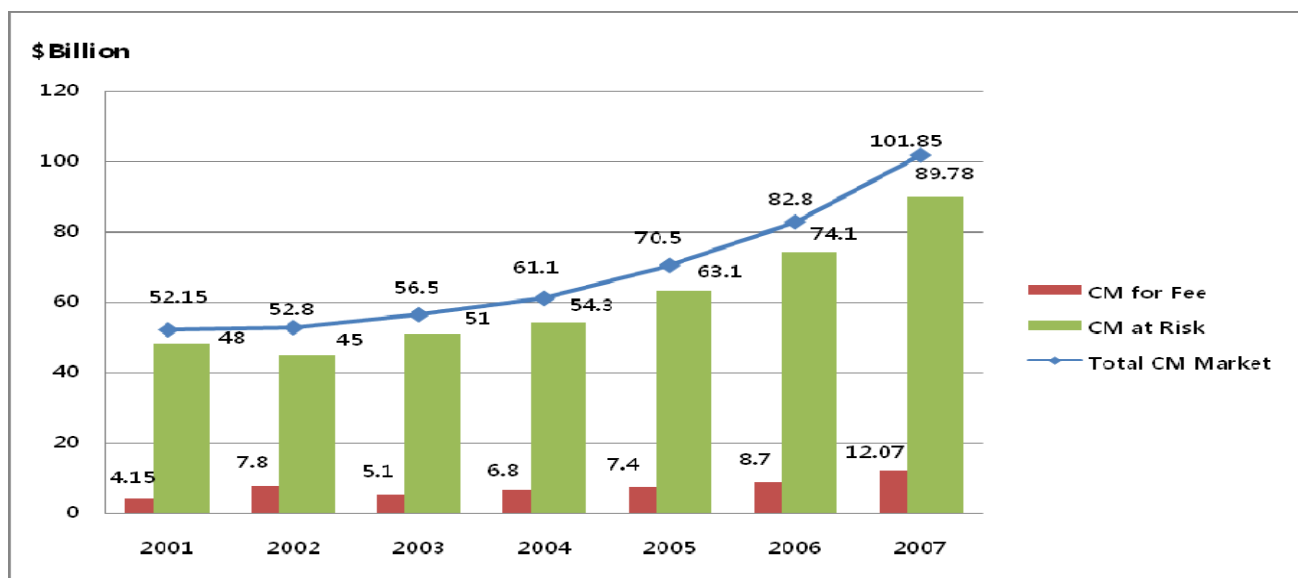


Table 3 The contract fee, the Market Growth rate (M/G) and the Market Share (M/S) for a year in the American CM Market, the CM for Fee Market and the CM at Risk Market.

Source: A- America Commerce Department, B and C- ENR June 18, 2008.

Unit: A, B and C- \$ Billion dollar D, E, F and G- percentage

	2001	2002	2003	2004	2005	2006	2007	Average
The CM Market(A)	52.15	52.8	56.5	61.1	70.5	82.8	101.85	68.24
CM for Fee(B)	4.15	7.8	5.1	6.8	7.4	8.7	12.07	7.43
CM at Risk(C)	48	45	51	54.3	63.1	74.1	89.78	60.75
CM for Fee M/G(D)		88.0%	-34.6%	33.3%	8.8%	17.6%	38.7%	25.3%
CM at Risk M/G(E)		-6.3%	13.3%	6.5%	16.2%	17.4%	21.2%	11.4%
CM for Fee M/S(F)	8.0%	14.8%	9.0%	11.1%	10.5%	10.5%	11.9%	10.8%
CM at Risk M/S(G)	92.0%	85.2%	91.0%	88.9%	89.5%	89.5%	88.1%	89.2%

First of all, because the American CM Market consists of the CM for Fee Market and the CM at Risk Market, this paper divided the CM Market into two markets, respectively. Figure 1 and Table 3 are indicating contract fees, the market growth rate (M/G) and the market share (M/S) of in the American CM market, CM for fee market and CM at risk market. As the CM market has been growing, two markets—the CM for Fee and the CM at

Risk—have also been growing in every year. The CM for Fee Market's M/S is holding about 10.8 percent average and this shows that the CM for Fee Market keeps a stable size in the CM Market, unrelated to Market Size. The CM at Risk Market's M/S is holding about 89.2 percent average M/S and is bigger in scale than CM for Fee Market.

5. The analysis of the status of the Korean CM Market

5-1. The Con's Market and the CM Market in Korea, as the number of contract

Table 4 is indicating the Market Growth rate (M/G) and the Market Share (M/S) in Korean Con's and CM Market, as the number of contract a year in Korea. Annual the number of contract of Korea Con's Market, have been decreasing and Con's Market's M/G have also been decreasing.

But, annual the number of contract of Korea CM Market, have been increasing and CM Market's M/G have been increasing, too. So, Korean CM market's M/S is increasing as 3.3 percent (2005), 4.0 percent (2006) and it indicates the fact that CM application in Korean Con's Market have expanded. CM market is quantitatively growing bigger from Table 4.

Table 4 The number of contract, M/G and M/S for a year in Con's and CM Market of Korea

Source: A- Korean National Statistics office, Public announcement of CM ability valuation's data

Unit: A and B- The number of contract C, D and E- percentage

	2001	2002	2003	2004	2005	2006	Average
Con's Market(A)	6660	11915	8465	7291	6197	5453	7663.50
CM Market(B)	27	86	135	121	206	219	132.33
Con's M/G(C)	-	78.9%	-29.0%	-13.9%	-15.0%	-12.0%	1.8%
CM M/G(D)	-	218.5%	57.0%	-10.4%	70.2%	6.3%	68.3%
CM M/S(E)	0.4%	0.7%	1.6%	1.7%	3.3%	4.0%	2.0%

5-2. The Con's Market and the CM Market in Korea, as a contract fee

Table 5 indicates an annual contract fee, the Market Growth rate (M/G) and the Market Share (M/S) of Korean Con's Market and CM Market, as annual contract fees. The annual contract fee of Korea Con's Market, have almost been increasing and the Con's Market's M/G have also been showing (+) M/S- except 2004 year. The annual contract fees of Korea CM market have been mostly increasing as well—except in 2004. Although the CM Market's M/G has been somewhat of a fluctuation, the growth flow of CM market is becoming bigger.

However, even though the growth flow of CM Market is bigger, the CM Market's M/S is quite different from the contract fees and the number/frequency of deals. As stated above, the CM market's M/S (Table 4, as the number of contract average) has been increasing but the CM Market's M/S (Table 5, as the contract fee average) is not highly fluctuation about 0.1 percent average. This is because CM Fee is estimated so low and the CM Market is quantitatively growing a bigger but not comparatively growing in quality

Table 5 A contract fee, the Market Growth rate and the Market Share in the Con's and CM Market of Korea
Source: A- Korean National Statistics office, B- Public announcement of CM ability valuation's data.
Unit: A and B- \ a hundred million won. C, D and E- percentage.

	2001	2002	2003	2004	2005	2006	Average
Con's Market(A)	509949	678337	808973	777744	834894	910011	753318.00
CM Market(B)	146	660	1008	775	1973	1331	982.17
Con's M/G(C)	-	33.0%	19.3%	-3.9%	7.3%	9.0%	13.0%
CM M/G(D)	-	352.1%	52.7%	-23.1%	154.6%	-32.5%	100.7%
CM M/S(E)	0.03%	0.10%	0.12%	0.10%	0.24%	0.15%	0.1%

6. The analysis of the Korean CM Market and the American CM Market and CM for Fee

Other papers related with the CM status of Korea, compared Korean CM Market with the American CM Market.

However, the Korean CM Market has been different from the American CM Market. This difference is because of Composition, Environment and Size of Con's Market in Korea and America. The Korean CM Market only has the CM for Fee Market, but the American CM Market have consisted of the CM for Fee Market and the CM at Risk Market.

To solve this difference rationally and to compare two Markets equally, this paper has used Market Share (M/S) in each nation Con's Market, have compared the Korean

CM Market with the American CM for Fee Market. The CM for Fee Market and the CM Market in America are occupying a regular Market Size (Table 6. average 0.72 percent, 6.59 percent) in Con's Market. Although the Korean CM M/S is also occupying a regular Market Volume (Table-5, average 0.12 percent), the absolute Market Volume is bigger than that of the America by six fold.

But considering how the Korean CM' history is shorter than the American CM history and Korean CM Market is in the positive (+) Growth rate, the Korean CM Market could continue to grow in the future.

Table 6 The Korean CM M/S and the American CM M/S, The American CM for Fee M/S

	2001	2002	2003	2004	2005	2006	2007	Average
CM M/S of America(A)	6.04%	6.05%	6.13%	5.97%	6.23%	6.95%	8.77%	6.59%
CM for Fee M/S of America(B)	0.48%	0.89%	0.55%	0.66%	0.65%	0.73%	1.04%	0.72%
CM M/S of Korea(C)	0.03%	0.10%	0.12%	0.10%	0.24%	0.15%	-	0.12%

7. Conclusion

This study analyzes the Korean CM Market, throughout comparing the American CM Market and CM for Fee Market. The Korean CM Market doesn't balance the CM's number of contract and contract fee.

The Korean CM Market is accomplishing a quantitative activation, not a qualitative activation. And, such as the American CM for Fee Market, the Korea CM Market needs not only to reinvigorate Market but also to stabilize Market. Especially, if considering the American CM Market structure- CM for Fee and CM at Risk- and the Korean CM Market structure- only CM for Fee, the Korean CM Method must be diversified- the introduction CM at Risk Method- to expand the Korean CM Market. So Owners could choice various Delivery Systems related in the CM Method. In future, the study related in the CM's a qualitative activation is needed in Korea.

ACKNOWLEDGMENT

The author would like to thank Korea's Ministry of Construction and Transportation for supporting this research (Reserch Project 05 CIT D05-01)

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