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Part 1: Country Report

Korean Economy and Construction Industry

Prepared By

Hong-Ki Ahn

Kyung-Whan Sohn



1591-6 Kwanyang-Dong, Dongan-Gu
Anyang-Shi, Kyounggi-Do 431-712, Korea
hkahn@krihs.re.kr ; khson@krihs.re.kr

Korea Research Institute for Human Settlements

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1. Executive summary

Korean economy is starting to bottom out from the worst recession caused by global financial crisis. Amid a continued stabilization in the domestic and global financial markets, the Korean economy showed a rapid improvement in domestic demand helped by improving terms of trade and stabilizing inflation. Over 2009, Korea Development Institute expects Korea economy to contract 1.0 percent from a year earlier. Though there are reports that Korean economy had already escaped the grip of recession, but there are also several arguments worrying the double-dip recession. Government is planning to continue expansionary fiscal stimulus regardless of a recovery by end of this year.

Construction investment, though a relatively fast recovery in public works is expected with most of the increased government expenditure being assigned to infrastructure investment, is forecasted to remain at around 2% growth rate as the sluggishness in building construction of private sectors continues.

2. Macro Economic Review and Outlook¹

2.1 Overview of National Economy

The Korean economy recently showed a rapid recovery in domestic demand and exports, bottoming out from the recessionary phase caused by the global financial crisis. Amid a continued stabilization in the domestic and global financial markets, the Korean economy showed a rapid improvement in domestic demand helped by improving terms of trade and stabilizing inflation. Led by China, economies of major trading partners of Korea have improved, alleviating the decline of exports and increasing industrial production continuously. The improvement in the economy possibly contributed to the ripple effect of the expanded government expenditure since the second half of last year, as its consequences emerged relatively fast. The upward momentum of the Korean economy is expected to continue, but its pace might possibly slow down. Economic indicators may show temporary fluctuations due to remaining uncertainties caused by foreign factors such as the instability of global financial markets and the possibility of delayed recovery of the global economy.

¹Source: Korea Development Institute, Monthly Economic Trends, 2009.8

2.2 Main Economic Indicator

Korean economy recorded 3.4% year on year contraction in the fourth quarter of 2008, the first decrease since financial crisis of 1998, following 4.2% decrease in the first quarter of 2009. But in the second quarter of 2009, GDP grows at a rapid rate 2.6 per cent from the previous quarter, though it is 2.2 per cent year on year decrease. Overall consumption has continued to improve, although the recent rise in private consumption seems in large part attributable to temporary factors such as tax reduction for new car purchases. The month-on-month growth rate of equipment investment recorded a continued rise since April. The decline in Korea's exports to China has moderated fast led by the IT sector. With inventory adjustment almost coming to an end, the rising demand at home and abroad seems to lead to the rise in production. The expansionary monetary policy pursued along with the expansion of government expenditure seems to help improve economic conditions.

On the production side, the manufacturing sector decreased 7.3 percent, which was mainly due to the sharp decrease of exports including electric and electronics manufacturing and transport equipment manufacturing. The construction sector was increased by 2.2 percent in the second quarter of 2009 compared with - 2.4% in 2008, helped by the huge fiscal stimulus.

The upward momentum of the Korean economy is expected to continue, but there are several arguments for V-shaped recovery with a rapid return to growth. Unemployment is still increasing to 3.8% in the second quarter of 2009 from 3.2% in 2008. Korea Economic indicators may show temporary fluctuations due to remaining uncertainties caused by foreign factors such as the instability of global financial markets and the possibility of delayed recovery of the global economy, in addition to the base effect of high growth rate for the second quarter. Yet, most economic indicators are still at considerably low levels, thus, it is too early to say that overall economy is starting to pull out of the recession.

Table 2.1: Main Economic Indicator

	2004	2005	2006	2007	2008	2009 (Q2)
GDP and Components						
GDP at real price (bill. Won, base year 2005)	832,305	865,241	910,049	956,515	977,787	244457
GDP at current market price(bill. Won)	826,893	865,241	908,744	975,013	1,023,938	262,631
GDP growth (%)	4.6	4.0	5.2	5.1	2.2	-2.2
GDP growth (%) for agriculture, forestry and fishery sector	9.1	1.3	1.5	4.0	5.5	-1.2
GDP growth (%) for manufacturing sector	10.0	6.2	8.1	7.2	3.1	-7.3
GDP growth (%) for services sector	2.3	3.5	4.4	5.1	2.5	0.4
GDP growth (%) for mining sector	-0.4	-0.4	-0.1	-4.1	1.3	6.8
GDP growth (%) for construction sector	2.0	-0.3	2.2	2.6	-2.4	2.2
Demographic Indicator						
Population (1000 people)	48,039	48,138	48,297	48,456	48,607	n.a.
Population growth rate (%)	0.38	0.21	0.33	0.33	0.31	n.a.
Labour force (1000 people)	22,557	22,856	23,151	23,433	23,577	23737
Labour force growth rate (%)	1.89	1.33	1.29	1.22	0.61	0.68
Unemployment rate	3.7	3.7	3.5	3.2	3.2	3.8
Inflation rate (CPI)	3.59	2.75	2.20	2.54	4.68	2.73
Financial Indicator						
Inter bank interest rate	3.66	3.4	4.3	4.86	5.04	2.33
Short term loan interest rate (Yields on CD(91-day))	3.79	3.65	4.48	5.16	5.49	2.41
Long term loan interest rate (Yields of Treasury Bonds(3-year))	4.11	4.27	4.83	5.23	5.27	3.89
Average change against USD\$	1,144	1,024	956	929	1,102	1,285

3. Trading Country

3.1 Value of Import and Export

Goods account was recorded a surplus of \$17.7 billion in the second quarter of 2009 from the \$ 13.3 billion of deficit in 2008. It was mainly due to the sharp drop of import exceeding the decrease of export. During the first half of 2009, export was fallen about 20 per cent compared with 2008, but import was more dropped of 36%. The goods export in 2010 is forecasted to increase about 6% growth due to the base effect of the large fall in 2009 and the global economic recovery. Import in 2010 is expected to 8% growth, supported by the stabilization in the won value and recovery in domestic demand.

Table 3.1: Export and Import

(unit: bill. US\$)

	2004	2005	2006	2007	2008	2009-Q2
Export	253.8	284.4	325.5	371.5	422.0	91.1
(increase rate)	31.0	12.0	14.4	14.1	13.6	-20.5
Import	224.5	261.2	309.4	356.8	435.3	73.4
(increase rate)	25.5	16.4	18.4	15.3	22.0	-36.1
Balance of trade	29.4	23.2	16.1	14.6	-13.3	17.7

3.2 Top 5 Major Trading Countries

The top 3 major trading countries of Korea in 2008 are China, Japan and America. Middle East Asia countries including Saudi Arabia and U.A.E. are the major countries of import, as about 80% of oil import of Korea is from these Middle East countries. Hong Kong and Singapore are also included in the 5 major countries of export in 2008. A share of Asian Countries in the trading to Korea has increased.

Table 3.2: Top 5 Major Trading Countries of Import and Export in 2008

(unit: mill. US\$)

Rank	Import		Export	
	Country	Value	country	Value
1	China	76,930	China	91,389
2	Japan	60,956	America	46,377
3	America	38,365	Japan	28,252
4	Saudi Arabia	33,781	Hong Kong	19,772
5	U.A.E	19,248	Singapore	16,293

About 40% of the exports came from petroleum products, ships, Cordless Telephone, automobile, electronic and IC(integrated circuit). Import products of Korea is mainly consisted of oil that is about 20% of total import, and electronic IC, gas , petroleum products and unalloyed steel goods is major import products.

4. Overview of construction industry

4.1 Value of Construction Contract

Until 2007, construction business has risen helped by buoyant housing business, regardless of government's strong regulation of real estate market. And thus residential building construction was increased in the nation wide, especially apartments in local cites. It resulted in oversupply of housing construction and an unsold apartment has increased in local areas. With the spreading global financial crisis by sub-prime mortgage in America, domestic housing business was also greatly shrunken in the end of 2007. Fortunately, since October in 2003, Korean government regulated household's mortgage loan from commercial bank to stabilize the housing price in some speculative areas, and thus there was no commercial bank that received bailout.

Non-residential building and civil engineering business sectors rose owing to macro economic growth in 2007, but non-residential building sharp fell with economic recession affected by global financial crisis in 2008. In the first half of 2009, period of the deepest recession, residential building construction contract was recorded 49.1% year on year contraction and non-residential building construction contract was shrunk by 33.7%.

Since early 2008, the expansionary policy to economic recovery has led the government expenditure to rise rapidly, letting the investment in construction, mainly for infrastructure projects, to rise fast. Over the first half of 2009, civil construction sector registered 85.9% increase, but total construction contract was decreased by 7.9% from the previous year on year, offset by a large fall of private projects.

Figure 4.1: Growth rate of construction Contract

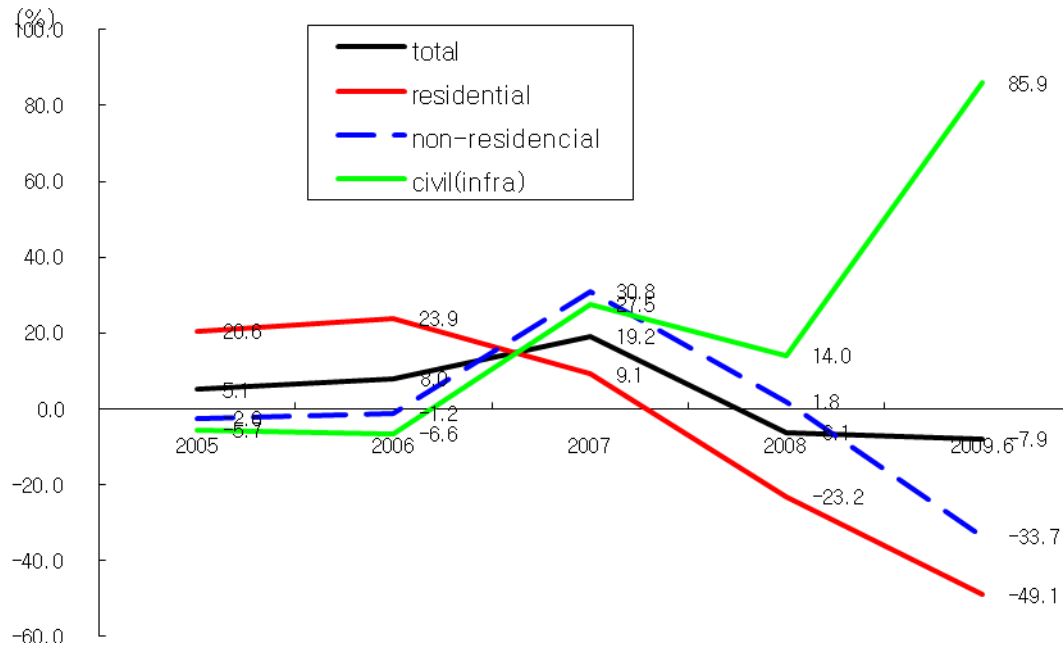


Table 4.1: Break Down of Construction Contract

Unit: bill. Won(current price).

Type of Contract	2004	2005	2006	2007	2008	2009.6
Public Project						
Residential building	3,172	3,853	5,122	7,570	9,346	3,262
Non-residential building	7,332	7,001	5,755	7,587	9,149	4,247
Infrastructure	23,261	20,972	18,643	21,932	23,354	24,278
Sub-Total	33,765	31,826	29,519	37,089	41,849	31,787
Private Project						
Residential building	32,496	39,155	48,155	50,578	35,311	8,762
Non-residential building	19,349	18,978	19,905	25,984	25,021	6,742
Infrastructure	8,963	9,425	9,740	14,261	17,904	3,480
Sub-Total	60,808	67,559	77,799	90,823	78,236	18,984
Total						
Residential building	35,668	43,009	53,276	58,148	44,657	12,024
Non-residential building	26,680	25,979	25,660	33,571	34,170	10,989
Infrastructure	32,224	30,396	28,383	36,193	41,258	27,758
Total	94,572	99,384	107,318	127,912	120,085	50,771

Source: Construction Association of Korea

4.2 Construction Companies

4.2.1 Number of Contractor by Type

Since 2006, the number of construction companies has slightly increased to 55,972 firms in May 2009. The number of General contractors is 12, 467 firms, 22.3% of total firms and 67.1% is Specialized trade contractors. During that period, the number of general contractor has kept steady decrease from 13,202 firms in 2005, to 12,467 in May 2009, by contrast, Specialized trade contractors and Equipment work contractors, which are mostly small and medium firms, saw a steady increase.

The reason why numbers of small and medium construction company has increased in the economic recession period is that competitive bidding is more severe in public project market. And this bidding system for small public project is insufficient to discriminate, more paper companies participated in that bidding.

Table4.2.1: Statistics of Construction Company

Classification \ Year	2004	2005	2006	2007	2008	2009.5
Number of general contractor	12,988	13,202	12,914	12,842	12,590	12,467
Specialized trade contractors	32,990	35,547	35,040	36,422	37,106	37,572
Equipment work contractors	5,338	5,505	5,387	5,478	5,768	5,933
Total	51,316	54,254	53,341	54,742	55,464	55,972

Source: Construction Association of Korea

4.2.2 Number of contractors by employment size

About 90% of Construction firms are small companies that employed below 50 workers, about 9% is construction firms hiring employee between 50 and 299, and large firms having 300 over of workers are just below 1%. Share of firms according to employment size has not changed apparently since 2003.

Table 4.2.2: Share of contractors by employment size(%)

Classification	Year	2004	2005	2006	2007
	Total	Total	100	100	100
1-49		89.0	90.2	90.5	89.7
50-300		10.3	9.1	8.6	9.4
300 over		0.7	0.7	0.9	0.8
Number of general contractor	Total	100	100	100	100
	1-49	98.6	98.7	98.5	98.8
	50-300	1.0	1.0	1.1	0.8
	300 over	0.4	0.3	0.4	0.4
Specialized trade Contractors	Total	100	100	100	100
	1-49	87.1	88.6	88.6	87.8
	50-300	12.1	10.7	10.4	11.3
	300 over	0.8	0.8	1.0	0.9

Source: Construction Association of Korea

4.3 Employees and Construction Labor

4.3.1 Number of construction worker by job type

The number of workers increased steadily in the construction industry. For the year of 2007, more than 1.8 million employees were working in the construction field, 7.9% of total employment. But the number of workers in 2008 decreased slightly compare to previous year with construction business slowdown, and sharp fall by 1.77 million workers in April 2009, when Korean economy was in the deepest recession affected by global financial crisis.

It is difficult to see the latest trend by job type, since the data about the number of construction workers by job type is only available till 2007, as below Table 4.3b shows. The number of building construction workers was increased amid buoyant housing and building business from 2004 to 2006.

Table 4.3a: Number of workers in Construction

Classification \ Year	2004	2005	2006	2007	2008	2009.4
Number of employee in construction (thousand person)	1,820	1,814	1,835	1,850	1,812	1,773

Source: Korea National Statistical Office

Table 4.3b: Number of Construction Worker by Job Type

Unit: thousand workers

	2003	2004	2005	2006	2007
Construction	1,719	1,737	1,718	1,717	1,728
General construction	589	562	571	579	576
Heavy construction	177	174	176	161	162
Building construction	412	389	395	417	414
Special trade construction	1,130	1,175	1,147	1,138	1,151
Engineering and building	485	504	475	482	477
Building installation	174	185	183	170	165
Electrical & communication works	255	256	252	246	265
Building completion	216	230	236	239	243

Source: Construction Association of Korea

4.3.2 Number of foreign construction worker by job type

There is little statistics about the number of foreign construction worker in Korea, because the foreign firms making business of construction in Korea is very few.

4.4 Productivity

4.4.1 Value added per employee

Value added product per employee in construction industry was gradually increased since 2004, even though dropped by 0.1 million Won from 33.6 million Won in 2008 to 33.5 million Won in 2007. But the relative Value added product per employee in construction compare to manufacturing sector has become smaller since 2004, registered by 52% in 2008 from 69.6% in 2004. This rate is disappointing, since service

sector industries showed gradual increase such as 2%p increase in 2008 from 36.1% in 2006.

Table 4.3.1: Value Added per Employee

(unit: mill. Won per person at 2005 price)

	2004	2005	2006	2007	2008
Construction	32.7	32.7	33.0	33.6	33.5
% of manufacturing	69.6	64.8	59.6	55.9	52.0
Manufacturing	46.9	50.5	55.4	60.1	64.3
% of manufacturing	100.0	100.0	100.0	100.0	100.0
Service	36.1	36.5	37.3	38.1	38.0
% of manufacturing	77.1	72.4	67.3	63.4	59.0
Primary sector	14.9	15.2	15.7	16.7	18.0
% of manufacturing	31.9	30.1	28.3	27.9	27.9

Source: Korea National Statistical Office

4.4.2 Physical measurement of construction productivity

We don't have the adequate data standing for physical measurement construction productivity, since there is no labor input data which is classified by construction types.

4.5 Construction Cost

4.5.1 Major construction material average price

The official prices of major construction materials are influenced by government guideline but actual transaction value changes according to the market conditions. The demand and supply of most of the construction materials more or less can be matched domestically. Shown as <table 4.5.1>, the price of the most construction materials is almost not changed since 2003, except Steel bars. In Jun 2008, the price of Steel bar rose to about one million (Korean won per ton), almost twice, from the previous year 526, 500 won. Because the raw material of Steel bar mainly depended by import, and so the price was influenced by international market situation. June 2009, the price of steel bar down to 741, 000 Won from 888,500Won of average price in 2008, is still high compare to previous year prices.

Table 4.5.1 : Average Construction Material Price

RMC * kg/cm ³ (won per m ³)	Cement in bulk (won per 40kg)	RMC * kg/cm ³ (won per m ³)	Steel bars (won per ton)	20mm aggregates (won per m ³)	Concreting sand (won per m ³)	Common Bricks (won per thousand pieces)
2003	3,333	55,543	382,750	11,000	12,000	48,000
2004	3,404	53,827	515,917	12,250	13,000	46,000
2005	3,387	51,708	498,583	14,167	13,083	46,000
2006	3,370	49,080	455,667	11,333	13,250	45,000
2007	3,370	49,080	526,500	11,500	13,083	45,000
2008	3,370	51,248	888,500	12,417	12,000	45,000
2009.6	4,000	51,970	741,000	12,000	13,000	45,000

* RMC: Ready Mix Concrete

Source: KPC (Korea Price Information Corp)

4.5.2 Construction industry salaries and wages

For chief workers, the salary and wage has mildly increased since 2003. But special daily workers experienced negative wage growth due to decreased construction demand during the years 2003~2004. In the first half of 2008, the average wage per day for chief workers is 85,203 won (about 83.7 dollars), 81,596 won (about 80.2 dollars) for special daily wage, and 63,530 won (about 62.4 dollars) for normal daily wage.

Table 4.5.2: Construction Industry Salaries and Wages (Korean Won)

	2003.	2004	2005	2006	2007	2008
Chief worker	69,644	70,184	73,402	78,124	81,700	85,203
Special daily wage	66,596	66,504	68,917	73,572	79,027	81,596
Normal daily wage	52,429	52,575	54,171	57,321	59,715	63,530

Source: CAK (Construction Association of Korea)

4.6 Import and Export of Construction Work

4.6.1 Annual export of construction work

Total exports in construction were 47,640 million dollars in 2008, the historic record since construction export started. Among them, industrial construction exports (Plant) occupied the largest portion recording 26,748 million dollars. The export of Civil engineering and Architecture construction sectors was recorded 9,364 million dollars and 9,192 million dollars respectively. But in 2009, total export in construction effected by global economic recession was sharply reduced to 20,900 million dollars till September 2009, which was just less than a half of previous year level.

Construction import has not been recorded yet.

Table 4.6.1: Annual Exports of Construction Services

year	Total	Contract Amount by work type(million US\$)					
		Civil	Architecture	Plant	Electric	Telecomm	Engineering
2009.9	20,900	3,591	5,252	11,281	231	20	525
2008	47,640	9,364	9,192	26,764	1,336	19	965
2007	39,788	5,232	8,177	25,268	690	41	381
2006	16,468	1,532	3,433	10,920	474	3	106
2005	10,859	836	1,226	8,263	374	13	147
2004	7,498	806	874	5,182	545	3	89
2003	3,668	402	532	2,491	192	8	43

Source: ICAK(the international Construction Association of Korea)

4.6.2 5 major foreign market by value

Middle-east Asian countries are usually included in top five countries for construction export of Korea. In 2008, Kuwait, U.A.E in 2007 and Saudi Arabia in 2006 are the highest country in construction exports. Singapore and Vietnam are occasionally included in 5 major export countries. The export of construction service to middle-east Asian countries is mainly plant construction sector and infrastructure construction or architecture construction sector to south-east Asian countries.

In 2008, Kuwait is the most important country in construction exports where 7,540 million dollars of construction service was exported. U.A.E.(4,841 dollars), Qatar (4,400 dollars) Saudi Arabia (4,122 dollars),and Singapore (2,917 dollars) followed.

Table 4.6.2: Top Five Countries for Construction Export

(unit : million US\$)

Rank	2006		2007		2008	
	Country	Value	Country	Value	Country	Value
1	Saudi Arabia	3,624	U.A.E	5,585	Kuwait	7540
2	Kuwait	1,982	Libya	5,450	U.A.E	4841
3	Qatar	1,314	Saudi Arabia	5,055	Qatar	4400
4	Oman	1,267	Singapore	3,178	Saudi Arabia	4122
5	Vietnam	1,153	Egypt	2,081	Singapore	2917

Source: ICAK(the international Construction Association of Korea)

5. Construction Outlook 2009 / 2010

Korea's GDP growth is projected to record around 4% in 2010, as the global economy is expected to enter the recovery phase. Private consumption is expected to recover to the level similar to the pace of the income growth as the economic conditions, including the exchange rate, inflation and employment is stabilized. Construction investment, while the current scale of infrastructure investment seems to be maintained, is expected to grow in 2010 at a similar pace of the previous year as the private construction sector starts to recover from its sluggish performance.

It is expected that the growth rate in construction investment in 2nd half of 2009 will reach 2.5%, which means 3.9% increase during the 2009. The investment in civil engineering will grow 20.4% in 2nd half and 29.8% annually, considering the exhaustion of the reserved power for a financial investment.

Table 5: Prospect of Construction Investment in 2009

(Unit: %, compared with the previous year)

Segment	1 st half of 2009	2 nd half of 2009	2009 annually
Construction Investment	5.3	2.5	3.9
- Civil Engineering	39.2	20.4	29.8
- Building	-14.7	-9.5	-12.1
Residential	-25.4	-10.2	-17.8
Non- Residential	-5.5	-4.3	-4.9

Source: KRIHS

The government decided to increase the budget for 2010 by 6 trillion won at the emergency economic meeting held in September 9. The decision was made so that all of budgets for social welfare, defense, and infrastructure section would increase. Thus, the finance investment spending on infrastructure sector is expected to increase approximately 2 trillion Korean Won.

But construction investment is forecasted to record around 2% growth rate in 2010, lower than the initial forecast (2.3%), as the sluggishness in building construction of private residential sector, even though the increase in investment in public works owing to the increased government expenditure²

² KDI, *Economic Outlook*, 2009.9.