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# Part 1: Country Report Korean Economy and Construction Industry

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#### 1. Executive summary

The Korean economy recently showed a rapid and strong recovery in domestic demand and exports after successfully weathering the global financial and economic crisis. The upward momentum of the Korean economy is expected to continue, but its pace might slow down.

During the first half of 2010, construction industry has seen a slight fall in activity owing to the sluggishness in civil (infrastructure) construction and residential buildings. But, the number of employees in construction has increased slightly because of an increase in the economically active population. Total exports in construction, though a relatively fast recovery, set the historic record since construction export started. Thus, Construction investment is expected to grow in 2010 at a similar pace of the previous year. Meanwhile, Korea economy is projected to record around 5.9% with economic activity increasingly in 2010.

#### 2. Macro Economic Review and Outlook

#### 2.1 Overview of National Economy

The Korean economy recently showed a rapid and strong recovery in domestic demand and exports after successfully weathering the global financial and economic 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. The improvement in the economy possibly contributed to the ripple effect of the expanded government expenditure since 2008, 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 a little uncertainties such as the narrowing of the government budget deficit in major advanced countries and a possible instability in global raw material prices including oil prices

#### 2.2 Main Economic Indicator

Korean economy posted a better-than-expected 0.2 percent growth in 2009 but the momentum is losing steam. Then, it is estimated to have grown 7.2 percent year-on-year in the first half of 2010, riding on brisk exports and recovering domestic demand, which means that The Korean economy has been in spirits of rapid recovery.

In the first half of 2010, overall consumption has continued to improve, and private consumption also increased on the strength of smart phone and automobile demand. Exports, which account for about 50 percent of GDP, jumped and private spending was on the rise.

On the production side, the manufacturing sector increased 18.0 percent, which was mainly due to the sharp increase of exports including electric and electronics manufacturing and transport equipment manufacturing. The construction sector was increased by 3.6 percent in the second quarter of 2010 compared with 1.9% in 2009.

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. Labour force growth rate is increasing to 1.2% in the second quarter of 2010 from -0.3% in 2009, and the number of persons in employment climbed from 150,000 over the same period of the last year to 140,000.

Some of economic indicators are still at considerably low levels, thus, it is too difficult to say that economic has been completely recovered. However, the Korean economy is expected to show a more conspicuous recovery and the global trade to grow faster led by advanced economies.

Table 2.1: M	ain Economic	Indicator
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	2004	2005	2006	2007	2008	2009	2010.2Q		
GDP and Components									
GDP at real price (bill. Won, base year 2005)	832,305	865,241	910,049	956,515	978,499	980,413	504,174		
GDP at current market price(bill. Won)	826,893	865,241	908,744	975,013	1,025,452	1,063,059	556,441		
GDP growth (%)	4.6	4.0	5.2	5.1	2.3	0.2	7.2		
GDP growth (%) for agriculture, forestry and fishery sector	9.1	1.3	1.5	4.0	5.5	1.6	-2.2		
GDP growth (%) for manufacturing sector	10.0	6.2	8.1	7.2	2.9	-1.6	18.0		
GDP growth (%) for services sector	2.3	3.5	4.4	5.1	2.8	1.0	3.6		
GDP growth (%) for mining sector	-0.4	-0.4	-0.1	-4.1	1.3	-1.6	17.7		
GDP growth (%) for construction sector	2.0	-0.3	2.2	2.6	-2.5	1.9	3.6		
	•	Demographie	c Indicator		•	•			
Population (1000 people)	48,039	48,138	48,297	48,456	48,607	48,747	48,874		
Population growth rate (%)	0.38	0.21	0.33	0.33	0.31	0.28	0.26		
Labour force (1000 people)	22,557	22,856	23,151	23,433	23,577	23,506	23,603		
Labour force growth rate (%)	1.89	1.33	1.29	1.22	0.61	-0.3	1.2		
Unemployment rate	3.7	3.7	3.5	3.2	3.2	3.6	3.3		
Inflation rate (CPI)	3.59	2.75	2.20	2.54	4.68	2.8	2.6		
		Financial I	ndicator						
Inter bank interest rate	3.66	3.35	4.14	4.65	4.77	1.92	1.90		
Short term loan interest rate (Yields on CD(91- day))	3.79	3.65	4.48	5.16	5.49	2.63	2.47		
Long term loan interest rate (Yields of Treasury Bonds(3-year))	4.11	4.27	4.83	5.23	5.27	4.04	3.74		
Average change against USD\$	1,144	1,024	955	929	1,102	1,276	1,212		

#### **3. Trading Country**

#### 3.1 Value of Import and Export

Goods account was recorded a surplus of \$40.3 billion in 2009, and \$17.4 billion in the second quarter of 2010. The trade surplus in 2009 was due to the sharp drop of import exceeding the decrease of export. During the first half of 2010, export grew by 34.4%, and import increased of 40.3% compared to the same period last year. The goods export in 2010 is being forecasted to increase about 26% growth due to the base effect of the global economic recovery and strengthen the competitiveness in key industries. Also import is expected to growth in 2010, supported by increases in the price of raw materials and recovery in domestic demand.

						(un	it: bill. US\$)
	2004	2005	2006	2007	2008	2009	2010-2Q
Export	253.8	284.4	325.5	371.5	422.0	363.5	221.4
(increase rate)	(31.0)	(12.0)	(14.4)	(14.1)	(13.6)	(-13.9)	(34.4)
Import	224.5	261.2	309.4	356.8	435.3	323.1	204.0
(increase rate)	(25.5)	(16.4	(18.4)	(15.3)	(22.0)	(-25.8)	(40.3)
Balance of trade	29.4	23.2	16.1	14.6	-13.3	42.6	17.4

Table 3.1: Export and Import

#### 3.2 Five Major Trading Countries

The major trading countries of Korea in the first half of 2010 are China, Japan and America. Middle East Asia countries including Saudi Arabia 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 the first half of 2010. A share of Asian Countries in the trading to Korea has increased.

Table 3.2: Top 5 Major Trading Countries of Import and Export (1H, 2010)

1		1	1 ( ) /	(unit: mill. US\$)
Rank	Imp	port	Ex	port
Kälik	Country	Value	Country	Value
1	China	31,464	China	51,928
2	Japan	28,831	America	21,570
3	America	18,856	Japan	11,894
4	Saudi Arabia	11,901	Hong Kong	11,269
5	Australia	8,059	Singapore	6,965

About 40% of the exports came from ships, electronic IC(integrated circuit), automobile, liquid crystal device, petroleum products and Cordless Telephone. Import products of Korea is mainly consisted of oil that is about 15% of total import, and electronic IC, petroleum products, gas 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.

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 2009, residential building construction contract was recorded -12.5% year on year and non-residential building construction contract was shrunk by 25.4%.

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 2009, civil construction sector registered 31.2% increase, but total construction contract was decreased by 1.1% from the previous year on year, offset by a large fall of private projects.

In the first half of 2010, the construction contract showed negative growth of 0.2 percent, reaching a value of KRW 50.67 trillion (US\$45.50bn). Reasons for the low growth include the sluggishness in civil (infrastructure) construction and residential buildings following shrinking housing transactions. Fortunately, however, construction of residential and non-residential buildings recovered from negative growth, with the growth rate rising to 29.6% and 41.7% respectively from the same period a year earlier.

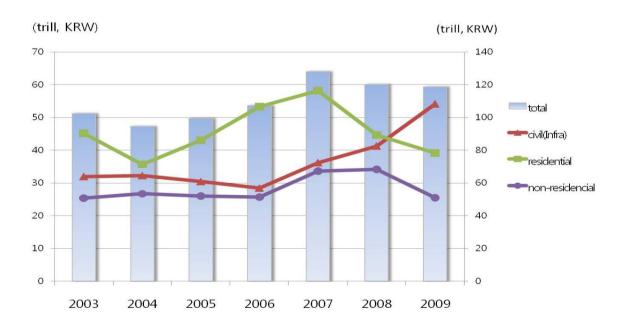


Figure 4.1: Value of Construction Contract(2003~2009)

			(Unit: %, compared with the same period)				
	total	civil(Infra)	residential	non-residential			
2003	23.2	10.5	44.6	10.1			
2004	-7.7	0.9	-21.0	5.2			
2005	5.1	-5.7	20.6	-2.6			
2006	8.0	-6.6	23.9	-1.2			
2007	19.2	27.5	9.1	30.8			
2008	-6.1	14.0	-23.2	1.8			
2009	-1.1	31.2	-12.5	-25.4			
1H, 2010	-0.2	-29.7	29.6	41.7			

#### Table 4.1: Growth rate of construction Contract

#### Table 4.2: Break Down of Construction Contract

(Unit: bill. Won, current price)											
Type of Contract	2004	2005	2006	2007	2008	2009	2010.6				
Public Project											
Residential building	3,172	3,853	5,122	7,570	9,346	7,378	2,448				
Non-residential building	7,332	7,001	5,755	7,587	9,149	8,327	3,794				
Infrastructure	23,261	20,972	18,643	21,932	23,354	42,782	13,782				
Sub-Total	33,765	31,826	29,519	37,089	41,849	58,487	20,024				
	Private Project										
Residential building	32,496	39,155	48,155	50,578	35,311	31,699	13,140				
Non-residential building	19,349	18,978	19,905	25,984	25,021	17,161	11,011				
Infrastructure	8,963	9,425	9,740	14,261	17,904	11,366	5,732				
Sub-Total	60,808	67,559	77,799	90,823	78,236	60,227	30,653				
			Total								
Residential building	35,668	43,009	53,276	58,148	44,657	39,078	15,588				
Non-residential building	26,680	25,979	25,660	33,571	34,170	25,488	15,575				
Infrastructure	32,224	30,396	28,383	36,193	41,258	54,149	19,514				
Total	94,572	99,384	107,318	127,912	120,085	118,714	50,677				

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 56,815 firms in September 2010. The number of General contractors is 12,094 firms, 21.2% of total firms and 67.9% is Specialized trade contractors. During that period, the number of general contractor has kept steady decrease from 13,202 firms in 2005, to 12,094 in September 2010, by contrast, Specialized trade contractors and Equipment work contractors, which are mostly small and medium firms, increased steadily.

The reason why numbers of small and medium construction company has increased 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.

Year	2004	2005	2006	2007	2008	2009	2010.9
Number of general contractor	12,988	13,202	12,914	12,842	12,590	12,321	12,094
Specialized trade contractors	32,990	35,547	35,040	36,422	37,106	37,914	38,620
Equipment work contractors	5,338	5,505	5,387	5,478	5,768	5,994	6,101
Total	51,316	54,254	53,341	54,742	55,464	56,229	56,815

Table 4.2.1: Statistics of Construction Company

Source: Construction Association of Korea

#### 4.2.2 Number of contractors by employment size

About 92% of construction firms are small companies that employed below 50 workers, about 7% 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	2008
	Total	100	100	100	100	100
Total	1-49	89.0	90.2	90.5	89.7	91.8
Totai	50-300	10.3	9.1	8.6	9.4	7.4
	300 over	0.7	0.7	0.9	0.8	0.8
	Total	100	100	100	100	100
Number of	1-49	98.6	98.7	98.5	98.8	98.9
General Contractor	50-300	1.0	1.0	1.1	0.8	0.7
Contractor	300 over	0.4	0.3	0.4	0.4	0.4
	Total	100	100	100	100	100
Specialized Trade	1-49	87.1	88.6	88.6	87.8	92.3
Contractors	50-300	12.1	10.7	10.4	11.3	7.0
	300 over	0.8	0.8	1.0	0.9	0.7

#### 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 1.72 million workers in 2009, when Korean economy was in the deepest recession affected by global financial crisis. In 2010, the number employed in construction has increased slightly owing to an increase in the economically active population. However, it does not mean a recovery in the job market is losing momentum, citing seasonal factors.

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 2008, as below Table 4.3b shows. The number of building construction workers was increased amid buoyant housing and building business from 2004 to 2006.

Year	2004	2005	2006	2007	2008	2009	2010.8
Number of employee in construction (thousand person)	1,820	1,813	1,833	1,849	1,812	1,720	1,790

Source: Korea National Statistical Office

				71		Unit: thous	and workers
		2003	2004	2005	2006	2007	2008
Construction		1,719	1,737	1,718	1,717	1,728	1,657
	General construction	589	562	571	579	576	529
	Heavy construction	177	174	176	161	162	157
	Building construction	412	389	395	417	414	372
	Special trade construction	1,130	1,175	1,147	1,138	1,151	1,127
	Engineering and building	485	504	475	482	477	469
	Building installation	174	185	183	170	165	165
	Electrical & communication works	255	256	252	246	265	258
	Building completion	216	230	236	239	243	233

Table4.3.1b: Number of Construction Worker by Job Type

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.

(unit: mill. Won per person at 200										
	2004 2005 2006 2007									
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)					

#### Table 4.4.1: Value Added per Employee

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 , 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. The price of steel bar down to 741,000Won in 2009 from 888,500Won of average price in 2008, and it has turned around again and is rising in June 2010.

RMC * kg/cm <sup>3</sup> (won per m <sup>3</sup> )	Cement in bulk (won per 40kg)	RMC * kg/cm <sup>3</sup> (won per m <sup>3</sup> ))	Steel bars (won per ton)	20mm aggregates (won per m <sup>3</sup> )	Concreting sand (won per m <sup>3</sup> )	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	4,000	51,970	741,000	12,000	13,000	45,000
2010.6	3,800	54,670	811,000	12,000	13,000	50,000

Table 4.5.1 : Average Construction Material Price

\* 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 2010, the average wage per day for chief workers is 95,671 won (about 85.88 dollars), 89,835 won (about 80.6 dollars) for special daily wage, and 70,497 won (about 63.28dollars) for normal daily wage.

				U				
	2003.	2004	2005	2006	2007	2008	2009	2010.6
Chief worker	69,644	70,184	73,402	78,124	81,700	85,203	90,889	95,671
Special daily wage	66,596	66,504	68,917	73,572	79,027	81,596	84,862	89,835
Normal daily wage	52,429	52,575	54,171	57,321	59,715	63,530	68,437	70,497

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 52,823 million dollars for the first nine months of 2010, the historic record since construction export started. Such tremendous increase in the amount because the United Arab Emirates (UAE) nuclear power plant contract signed at the end of 2009 was brought into this year's calculation. The 18.6 billion dollar UAE project accounted for most of the increase in the amount.

Among them, industrial construction exports (Plant) occupied the largest portion recording 42,813 million dollars, which is much higher than any other country. The export of Civil engineering and Architecture construction sectors was recorded 2,789 million dollars and 5,023 million dollars respectively.

Construction import has not been recorded yet.

year Tota	T a 4 a 1	Contract Amount by work type(million US\$)							
	Total	Civil	Architecture	Plant	Electric	Telecomm	Engineering		
2010.9	52,823	2,789	5,023	42,813	599	446	1,152		
2009	49,147	5,746	6,273	35,692	756	20	660		
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		

Table 4.6.1: Annual Exports of Construction Services

Source: ICAK(the international Construction Association of Korea)

#### 4.6.2 Five major foreign markets by value

Middle-east Asian countries are usually included in top five countries for construction export of Korea. In 2009, the U.A.E and Kuwait in 2008 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 2009, the U.A.E is the most important country in construction exports where 15,860 million dollars of construction service was exported. Saudi Arabia (7,203 dollars), Algeria (3,727 dollars) Libya (3,134 dollars) and Iran (2,492 dollars) followed.

(unit : million US\$								llion US\$)
Daula	2006		2007		2008		2009	
Rank	Country	Value	Country	Value	Country	Value	Country	Value
1	Saudi Arabia	3,624	U.A.E	5,585	Kuwait	7,540	U.A.E	15,860
2	Kuwait	1,982	Libya	5,450	U.A.E	4,841	Saudi Arabia	7,203
3	Qatar	1,314	Saudi Arabia	5,055	Qatar	4,400	Algeria	3,727
4	Oman	1,267	Singapore	3,178	Saudi Arabia	4,122	Libya	3,134
5	Vietnam	1,153	Egypt	2,081	Singapore	2,917	Iran	2,492

Table 4.6.2: Top Five Countries for Construction Export

Source: ICAK(the international Construction Association of Korea)

#### 5. Construction Outlook 2010 / 2011

During the recent financial crisis, Korea's GDP growth fell, and the rate is only 0.2 percent in 2009. In 2010, the growth rate is projected to record around 5.9% with economic activity increasingly led by the private sector. The recovery is expected to be led by the rebound in fixed investment and the turning of the inventory cycle. However, the forecast of economic outlook for 2011 will be reduced to the mid 4 percent level. The stronger growth this year will make it hard for next year's growth rate to reach the 5 percent level as previously forecast, because a gain in gross domestic product is calculated year-on-year.

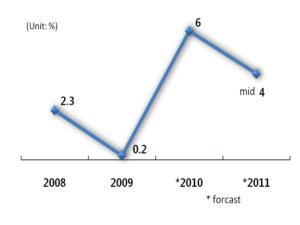


Figure 5 : Korea's GDP growth

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 2010 will reach 1.4%, which means 1.4% increase during the 2010. The investment in civil engineering will grow 2.7% in 2nd half and 2.3% annularly, considering the exhaustion of the reserved power for a financial investment in 2009.

		(Unit: %, compared	l with the same period)
Segment	1 <sup>st</sup> half of 2010	2 <sup>nd</sup> half of 2010	2010 annually
Construction Investment	1.4	1.4	1.4
- Civil Engineering	1.9	2.7	2.3
- Building	1.3	0.8	1.0
Residential	0.8	0.1	0.4
Non- Residential	1.7	1.2	1.4

Table 5: Prospect of Construction Investment in 2009

Source: Construction Economy Research Institute of Korea

The government of Korea plans to strengthen its investment for healthcare, welfare and the research of new growth engines, while cutting the budget for social overhead capital including road construction in 2011. Budget spending for the healthcare, welfare and labor sector was raised by 5.1 trillion won from this year to 86.3 trillion won, the biggest increase by amount, but social overhead investment was cut by 3.2% (800 billion won) to 24.3 trillion won.

Construction investment is forecasted to record around -0.3% growth rate in 2011. Public construction projects is expected to drop about 4% due to next year's smaller budgets, and private sector also is projected to decrease.