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Japan Country Report

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Country Report (Japan)

I. Overview

The Japanese economy has been in recovery trend since FY 2002 and recorded successive years of 2% economic growth from FY2003 to 2007. However, due to the effects of the global economic chaos triggered by the American subprime loan crisis last summer, as well as high resource prices, the economy seems to be slowing this year.

Japan's construction investment, which has been decreasing since the mid-1990s, was valued at ¥48.7 trillion yen in FY2007 (¥17.9 trillion in government spending, ¥30.8 trillion in private spending), about half of the value of the peak year (FY1992). Government investment has consistently declined in the 2000s, and private investment began falling in FY2007.

The current condition of the Japanese construction industry can be summarized as follows:

- (1) Small and medium-sized companies with fewer than 100 employees account for 97.5% of the industry, and their share of the market has been rising in recent years.
- (2) The numbers of construction industry workers by trade/field show that a noticeable decline in the number of employees in "general contracting company" in the last ten years,
- (3) Trend of declining labor productivity in the construction industry is continuing. The reasons should be the decreased construction investment, redundant workers, various productivity impediments at construction sites or in construction companies,
- (4) The cost of materials has risen in recent years due to high steel and natural resource prices worldwide. On the other hand, wages of construction workers are below the average for workers in all industries and in the manufacturing industry.
- (5) Orders volume of construction works overseas was increased since FY2006 and valued at ¥1,681.3 billion in FY2007. A breakdown shows that Asia (¥861.6 billion) and the Middle East (¥472.7 billion) accounted for a large percentage.

II. Macro Economic Review and Future Projections

1. Overview of the Japanese Economy

The Japanese economy has grown by 2% annually since 2003, continuing on a path of moderate recovery. Nonetheless, the effects of the global economic chaos triggered by the American subprime loan crisis last summer, combined with high resource prices, ended the longest economic recovery in the postwar period, which had been ongoing since February 2002. The economy has now begun to show signs of decline. The Cabinet Office revised, in its monthly economic report issued in August 2008, the expression of the overall economic assessment to "weakening" which has not been used since May 2001. The Bank of Japan also indicated its awareness in a public statement made after the August Monetary Policy Meeting, that "there is a strong possibility that the economic slowdown will be prolonged."

Given the low level of recent indicators, such as the Trade Statistics of June of 2007 indicated that total exports dip into the negative for the first time in 55 months, there is growing concern that the economic slowdown could be prolonged.

Fiscal year	1990	1995	2000	2003	2004	2005	2006	2007	2008
Real GDP	4,679,132	4,827,495	5,056,219	5,177,129	5,279,826	5,407,061	5,541,143	5,628,644	5,654,105
(year-on-year change)	6.0%	2.5%	2.6%	2.1%	2.0%	2.4%	2.5%	1.6%	0.5%
Real private final consumption expenditures	2,494,772	2,737,642	2,837,575	2,930,670	2,966,892	3,024,697	3,078,090	3,120,523	3,135,572
(y-o-y change)	4.8%	2.5%	0.7%	0.6%	1.2%	1.9%	1.8%	1.4%	0.5%
(contribution rate)	2.6	1.4	0.4	0.4	0.7	1.1	1.0	0.8	0.3
Real government final consumption expenditures	622,302	747,156	857,142	923,308	938,869	946,019	946,900	953,325	960,212
(y-o-y change)	2.9%	4.1%	4.3%	2.6%	1.7%	0.8%	0.1%	0.7%	0.7%
(contribution rate)	0.5	0.6	0.7	0.5	0.3	0.1	0	0.1	0.1
Real private housing	264,565	239,526	203,609	183,569	186,619	184,299	184,718	160,229	155,257
(y-o-y change)	6.0%	-5.6%	-0.1%	-0.2%	1.7%	-1.2%	0.2%	-13.3%	-3.1%
(contribution rate)	0.3	-0.3	0.0	0.0	0.1	0	0	-0.4	-0.1
Real private corporate facilities	904,887	678,691	729,631	733,157	783,254	835,762	882,951	882,225	880,897
(y-o-y change)	12.0%	3.1%	7.2%	6.1%	6.8%	6.7%	5.6%	-0.1%	-0.2%
(contribution rate)	2.2	0.5	1.0	0.8	1.0	1.0	0.9	0.0	0.0
Real public fixed asset formation	298,240	406,024	344,449	281,040	245,210	231,581	210,486	206,731	194,886
(y-o-y change)	4.1%	7.5%	-7.6%	-9.5%	-12.7%	-5.6%	-9.1%	-1.8%	-5.7%
(contribution rate)	0.3	0.6	-0.6	-0.6	-0.7	-0.3	-0.4	-0.1	-0.2
Real inventory increase	24,872	17,737	20,428	11,274	18,016	18,200	29,285	28,679	26,230
(y-o-y change)	-11.7%	15458.8%	192.2%	626.1%	59.8%	1.0%	60.9%	-2.1%	-8.5%
(contribution rate)	-0.1	0.4	0.9	0.3	0.1	0	0.2	0	0.0
Real financial services net exports	69,494	9,587	62,953	112,651	140,726	170,637	215,784	281,744	305,047
(y-o-y change)	11.8%	-79.2%	7.5%	57.0%	24.9%	21.3%	26.5%	30.6%	8.3%
(contribution rate)	0.2	-0.7	0.1	0.8	0.5	0.6	0.8	1.2	0.4
Nominal GDP	4,514,728	4,964,573	5,041,188	4,937,475	4,984,906	5,037,885	5,121,841	5,150,837	5,141,443
(y-o-y change)	8.5%	1.9%	0.9%	0.8%	1.0%	1.1%	1.7%	0.6%	-0.2%

Figure 1 Macroeconomic Trends (FY)

Source: Research Institute of Construction and Economy (RICE)

(Unit: ¥100 million. Real values reflect 2000 prices.)

2. Major Economic Indicators

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	2002	2003	2004	2005	2006	2007
GDP (real, FY)	5,070,149	5,177,129	5,279,826	5,407,061	5,541,245	5,630,471
GDP growth (%, FY)	1.1%	2.1%	2.0%	2.4%	2.5%	1.6%
GDP (nominal, FY)	4,898,752	4,937,475	4,984,906	5,037,885	5,021,987	5,152,928
GDP (nominal, calendar year)	4,913,122	4,902,940	4,983,284	5,017,344	5,089,251	5,155,811
Agriculture, forestry and fishing total output	90,134	88,437	85,338	81,165	79,422	-
% growth	-0.9%	-1.9%	-3.5%	-4.9%	-2.1%	-
Manufacturing total output	1,012,715	1,027,566	1,054,101	1,078,765	1,086,028	-
% growth	-2.7%	1.5%	2.6%	2.3%	0.7%	-
Construction total output	338,930	323,328	329,538	318,614	321,480	-
% growth	-4.6%	-4.6%	1.9%	-3.3%	0.9%	-
Service industry	3,471,343	3,463,609	3,514,307	3,538,800	3,602,321	-
% growth	-0.5%	-0.2%	1.5%	0.7%	1.8%	-
		Demogra	aphic Indicato	ors		
Population (thousands)	127,486	127,694	127,787	127,768	127,770	127,771
Population growth rate (%)	0.13%	0.16%	0.07%	-0.01%	0.00%	-0.03%
Total labor force (thousands)	6,689	6,666	6,642	6,650	6,657	6,669
Labor force growth rate (%)	-0.93%	-0.34%	-0.36%	0.12%	0.11%	0.18%
Unemployment rate (%)	5.4%	5.3%	4.7%	4.4%	4.1%	3.9%
		Finan	cial Indicator			
Short-term interest rate (%)	0.10	0.05	0.03	0.04	0.26	0.63
Long-term interest rate (%)	1.007	1.380	1.445	1.456	1.634	1.478
Changes in consumer price (%)	100.6	100.3	100.3	100.0	100.3	100.3
Short-term prime rate (%)	1.375	1.375	1.375	1.375	1.625	1.875
Long-term prime rate (%)	1.65	1.7	1.55	1.85	2.35	2.3
Exchange rate against US\$	125.31	115.93	108.19	110.22	116.30	117.75

Figure 2 List of Major Economic Indicators

Source: Annual Report on National Accounts (Cabinet Office, June 2008), Website of Ministry of Internal Affairs and Communications and the Bank of Japan, Financial Economic Statistics Monthly (Bank of Japan, August 2008).

*1: GDP figures for 2007 are from the Secondary Preliminary Figures (published June 11, 2008). Real values: 2000 prices.

*2: Total output figures are nominal figures for the calendar year.

*3: Population figures are estimates as of October each year.

*4: Consumer price index uses 2005 as 100.

*5: Short-term interest rates are calculated using the average published interest rate for domestic commercial paper.

*6: Long-term interest rates are the rates on 10-year government bonds.

III. Overview of the Construction Industry

1.Construction Investment

Construction investment in FY2007 was valued at ¥48.7 trillion yen, including ¥17.9 trillion in government spending and ¥30.8 trillion in private spending. Total construction investment is down 42.0% from the peak FY1992, while government investment is down 49.1% from the peak FY1995 and private investment is down 44.7% from the peak FY1990.

Recent trends in construction investment show that government investment has been declining continuously, and private investment also started to decline in 2007.





Government Construction Investment Private Construction Investment Source: "2008 Construction Investment Forecast," Ministry of Land, Infrastructure and Transportation (MLIT).

RICE's FY2008-2009 Construction Investment Forecast published July 2008. It indicated that construction investment, which had fallen considerably in FY2007 as to dip beneath the ¥50 trillion threshold, would be at about the ¥48 trillion level in both FY2008 and 2009. The amount of FY2008 is expected to decrease by 0.4% from FY2007 year to ¥48.85 trillion. Government

construction investment is expected to continue to decline for the tenth successive year, down by 7.6% from FY2007, while private residential construction investment is expected to rise, by 4.1%. Private non-residential construction investment is expected to increase 6.2%, reflecting a 2.4% increase in private civil engineering and an 8.4% increase in private non-residential construction investment.

Construction investment in FY2009 is expected to decrease 0.2% from FY2008 to ¥48.96 trillion. Government construction investment is expected to continue its decline, falling 5.9% year-on-year (y-o-y). Growth in private residential construction investment is expected to slow from the previous year, but is still expected to rise by 3.7%. Private non-residential construction investment is expected to continue to show positive growth, increasing 2.8%, reflecting a 3.2% increase in private civil engineering and a 2.2% increase in private non-residential.

Please note that the forecast did not include the effect of world-wide economic turmoil of last several months.

FY	1990	1995	2000	2004	2005	2006 (Estimated)	2007 (Estimated)	2008 (Projected)	
Nominal construction investment	814,395	790,169	661,948	528,246	515,676	518,600	486,700	488,500	
(Y-o-Y growth rate)	11.4%	0.3%	-3.4%	-1.6%	-2.4%	0.6%	-6.2%	0.4%	
Nominal government construction									
investment	257,480	351,986	299,601	208,282	189,738	182,900	179,000	165,400	
(Y-o-Y growth rate)	6.0%	5.8%	-6.2%	-11.2%	-8.9%	-3.6%	-2.1%	-7.6%	
(Contribution to GDP)	2.0	2.5	-2.9	-4.9	-3.5	-1.3	-0.8	-2.8	
Nominal private residential									
construction	257,217	243,129	202,756	183,748	184,258	191,000	172,100	179,100	
(Y-o-Y growth rate)	9.3%	-5.2%	-2.2%	2.6%	0.3%	3.7%	-9.9%	4.1%	
(Contribution to GDP)	3.0	-1.7	-0.7	0.9	0.1	1.3	-3.6	1.4	
Nominal private non-residential									
construction	299,698	195,053	159,591	136,216	141,680	144,700	135,600	144,000	
(Y-o-Y growth rate)	18.4%	-1.8%	0.7%	10.4%	4.0%	2.1%	-6.3%	6.2%	
(Contribution to GDP)	6.4	-0.4	0.2	2.4	1.0	0.6	-1.8	1.7	
Real construction investment	840,446	777,268	661,947	533,340	514,784	507,781	467,334	461,500	
(Y-o-Y growth rate)	7.6%	0.2%	-3.6%	-2.7%	-3.5%	-1.4%	-8.0%	-1.2%	
(Unit: ¥100 million, Real values reflect 2000 prices.)									

Figure 4 Construction Investment Forecast

*1: Figures for FY 2007 are from the FY 2008 Construction Investment Forecast issued by the Ministry of Land, Infrastructure and Transportation. *2: Private non-residential construction investment = private non-residential construction investment plus private civil engineering investment.

Source: Research Institute of Construction and Economy (RICE)

2. Construction Companies

There were 507,528 licensed construction companies in Japan as of the end of March 2008, down 16,745 (3.2%) from the same month the previous year. Compared with the end of March 2000, when the number of licensed construction companies was at its peak, there are 93,452 fewer (a 15.5% decrease).

A breakdown of the number of licensed construction companies shows that "corporations with ¥3 million up to ¥10 million in capital" account for the highest percentage (36.4%), followed by "corporations with ¥10 million up to ¥20 million in capital" (25.9%) and "sole proprietors" (20.9%).

Capital classification	No. of	Composition	Cumulative
Capital classification	licensed	ratio	composition
Sole proprietor	106,064	20.9%	20.9%
Corporation with less than ¥3 million in capital	3,091	0.6%	21.5%
Corporation with ¥3 million up to ¥10 million in capital	184,769	36.4%	57.9%
Corporation with ¥10 million up to ¥20 million in capital	131,483	25.9%	83.8%
Corporation with ¥20 million up to ¥100 million in capit	75,970	15.0%	98.8%
Corporation with ¥100 million up to ¥1billion in capital	4,592	0.9%	99.7%
Corporation with ¥1 billion up to ¥10 billion in capital	1,151	0.2%	99.9%
Corporation with ¥10 billion or more in capital	408	0.1%	100.0%
	507,528	-	-

Figure 5 No. of Licensed Companies, Composition Ratio, and Cumulative Composition Ratio by Capital Classification

Source: "Results of the Survey of on the Number of Licensed Construction Companies," MLIT.

A breakdown by the number of employees is as follows; among the 232,362 companies with projects valued at ¥1 million or more yearly, 59.3% of them have fewer than 10 employees. This highlights the weight of small and medium-sized companies in the market. Compared with 1996, the number of companies has fallen by 63,879 (down 21.7%). The share of companies with 10-99 employees has decrease, while the share of companies with 9 or fewer employees has grown over the past decade. This shows the weight of small and medium-sized companies has been increasing.

		1996		2006			
No. of employees	No. of companies	Composition ratio	Cumulative composition ratio	No. of companies	Composition ratio	Cumulative composition ratio	
9 or fewer	164,731	55.6%	55.6%	137,752	59.3%	59.3%	
10-99	124,482	42.0%	97.6%	88,768	38.2%	97.5%	
100-999	6,345	2.1%	99.8%	5,316	2.3%	99.8%	
1000 or more	683	0.2%	100.0%	527	0.2%	100.0%	
Total	296,241	-	-	232,362	-	-	

Figure 6 Number of Construction Companies by Size (No. of Employees) in 1996, 2006

Source: Statistics on Construction Undertaken¹ (March 2007), MLIT.

¹ In the Statistics on Construction Undertaken, some inconsistencies in the coefficients may emerge due to rounding because the figures are obtained by applying the extraction rate of each survey subject to the survey data submitted, multiplying the inverse, and restoring the number of licensed construction companies nationwide, which is the parent population.

3. Employees and Construction Labor

The numbers of construction industry employees by trade/field shows that 1,722,758 (52.3%) work for "general contractors," 677,342 (20.5%) work for "specialized trade contractors," and 896,776 (27.2%) work for "equipment work contractors," for a total of 3,296,876 employees. This total is down 1.36 million from 1996, reflecting a particularly large decrease in the number of general contractors.



Figure 7 Number of Construction Industry Employees by Occupation in 1996 and 2006

Source: Statistics on Construction Projects Implemented (March 2007), MLIT.

4. Productivity

The low level of labor productivity in the construction industry versus manufacturing and other industries is largely attributed to macro factors such as declining construction investment and the superfluous workers. However, micro level impediments to productivity also exist at work sites and in companies. The major factors involved are as follows:

(1)Construction works are outdoor production, single item production and made-to-order.

Therefore, productivity improvement in workplace that would bring about major reforms in the production system has not been adequately developed.

(2)The ratio of employees in back-office section is increasing caused by the decline of order volume for each construction company..

(3) The state of "too many layers of subcontractors" leads to increase the overhead costs.



Figure 8 Trends in Real Labor Productivity in the Construction Industry

Source: Annual Report on National Accounts (FY 2008), real prices, base year: 2000, fixed standard year method. Note: Real labor productivity = GDP by economic activity / no. of employees engaged in each economic activity





Source: Corporate statistics.

Note: Value added = operating income + personnel expenses + interest expenses/discount expenses + taxes and public fees, etc.

5. Construction Costs

(1) Average Construction Material Prices

Figure 10 shows the trends in prices of major materials in the form of an index based on the average prices in 2000 (construction materials price index). The nationwide index combining building and civil engineering has been increasing since 2003. This is largely due to the steep rise of steel product prices. Worldwide increase of demand for steel product caused the sharp gain of the price in 2003-04. In 2007-2008, rising shipping costs resulting from recent natural resource price hikes caused the next sharp rise. In light of this serious problem in 2007-2008, the MLIT decided to activate the "special clause for sliding contract sum by the steep price change of each item" in June 2008, for the first time in 28 years.





Source: Economic Research Association.

(2)Construction Industry Wages

Until the early 1990s, wages of production workers in the construction industry had been rising alongside of workers in other industries. However, the decrease of wage began in 1995, earlier than other industries, and this drop caused the widening of gap between the construction industry and other industries. Since then wages increased, and in FY2006 ¥210,000 (5.5% increase from previous year), but fell again in 2007. As a result, annual wages are about ¥1.5 million (27.0%) lower than the average for male production workers in all industries and about ¥750,000 (15.5%) lower than the average for male production workers in the manufacturing industry.



Figure 11 Trends in Total Annual Wages of Production Workers

Source: Basic Survey of Wage Structures, Ministry of Health, Labor, and Welfare. Note: Total annual wages = fixed monthly salary ×12 (months) + annual bonus and other special pay

The wage curve for production workers by age in the construction industry shows that wage increases level off at 40-50 year olds and older when workers likely own homes and have a burden of payment for their children's education. A large gap between this curve and that of manufacturing industry is highly visible.



Figure 12 Annual Wages for Male Production Workers in Construction and Manufacturing

Source: Basic Statistical Survey of Wage Structures, Ministry of Health, Labour, and Welfare. Note: Total annual wages = Total fixed monthly salary x 12 (months) + annual bonus and other bonuses

6. Overseas Operation of the Japanese Construction Industry

Construction orders of Japanese companies from overseas trended at about the ¥1 trillion level for more than 20 years since first crossing the ¥1 trillion threshold in FY1983. While orders received in 2007 set a new record of ¥1,681.3 billion, up ¥32.9 billion from the previous peak figure of the FY2006. The ratio of overseas order volume to domestic construction investment is also increasing, and rose 3.5% in 2007.

Order acceptance by region in FY2007 shows that orders from Asia (up ¥184.4 billion) and Oceania (up ¥4.5 billion) increased, while orders from other areas decreased. There was a decline in orders from the Middle East, in reaction to the large increase of FY2006, nevertheless, the amount remained very high, at ¥472.7 billion.



Figure 13 Overseas Construction Orders Received in 2003-2007 (by Region)

(Unit: ¥100 million)

	2003	2004	2005	2006	2007
Asia	6,106	5,885	6,304	6,772	8,616
Middle East	109	1,170	1,943	5,143	4,727
Africa	229	113	298	243	117
North America	1,417	2,100	2,093	2,994	2,273
Central and South America	63	202	160	238	201
Europe	475	316	333	126	122
Eastern Europe	390	765	505	917	661
Oceania	154	67	75	51	96
Total	8,942	10,617	11,710	16,484	16,813

Source: Overseas Construction Association of Japan.