

**Development Bank of Japan  
Research Report  
No. 2**

**Survey on Planned Capital Spending  
for Fiscal Years 1998, 1999 and 2000  
(Conducted in August 1999)**

**November 1999**

**Economic and Industrial Research Department  
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# I Outline

## Objectives

This survey has been conducted annually since FY 1956 by the Japan Development Bank to assess major trends in the capital spending of Japanese industry.

## Target Firms and Survey Methods

This survey covers all private firms in Japan's major industries capitalized at ¥1 billion or more (excluding agriculture, forestry, finance and insurance, medicine, etc. Specifically the survey targets the industries listed in the reference, "Table of Industrial Classifications in The Japan Development Bank's Survey on Planned Capital Investment" that is appended at the end of Volume I). In addition, the Teito Rapid Transit Authority has been included in the survey despite the fact that it is classified as a (non-financial) public corporation under the new System of National Accounts (SNA).

The survey was conducted by means of questionnaire (sent to and completed by individual firms).

## Contents of the Survey

The main issues addressed by the survey were as follows: (i) Actual capital spending in FY 1998 and planned capital spending in FY 1999 and FY 2000, (ii) Details of individual construction projects in each of the above years, (iii) Anticipated revenue and expenditure in FY 1998 and FY 1999, (iv) Investment motives in FY 1998 and FY 1999, (v) Trends in land investment in FY 1998, FY 1999 and FY 2000, (vi) Foreign direct investment and capital spending abroad in FY 1998 and FY 1999.

Capital spending has been calculated on a construction basis. In general, it is calculated as the sum total of tangible fixed assets including the construction in progress account (without subtracting resale value, depreciation and loss).

## The Scope of Capital Spending

In this survey, capital spending refers to domestic investment in the tangible fixed assets of one's own corporation; they include buildings, structures and equipment (including ships, aircraft, rolling stock, tools and furnishings), as well as the purchase and development of land (excluding the purchase of land for subdivision in the real estate industry). Accordingly, intangible fixed assets are excluded, as are capital spending abroad and investment in subsidiaries/affiliated firms (with the exception of that shown under 'Foreign direct investment and capital spending abroad').

## Date of Survey

August 10, 1999

## Responses

The responses to the survey are shown below:

	No. of Firms Targeted	No. of Firms Giving Valid Responses	Proportion of Valid Responses
Principle Business Classification	3,302	2,923	88.5%
Investment Specific Classification	4,005	3,580	89.4%

### **Industrial Classification for the Totals**

As a rule, the totals for the various industrial sectors have been formed after classifying the amount of investment for each business department in a company's response according to industrial sector (**Investment Specific Classification**). In some parts of the analysis, however, classification and totaling of the companies' responses have been carried out based on the main business interest of each company (**Principle Business Classification**).

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# Controls on Capital Spending Continue

## Small Decrease in Capital Spending Seen for the Third Consecutive Year

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### II Summary

#### 1. Overall Condition

Overall actual capital spending for all industries in FY 1998 was down 8.0%, the second consecutive year of decline. (All figures are on a construction basis; the rate of growth or decline is compared with the previous year.) Looking at planned capital spending for FY 1999, both the manufacturing sector (down 10.1%) and the non-manufacturing sector (down 0.7%) will continue to curtail investment, meaning an overall drop (3.7%) for all industries for the third straight year.

#### 2. Actual Capital Spending for FY 1998

Looking at actual capital spending for FY 1998, there were downward revisions in most industrial sectors after the last survey (February 99), with the overall figure down 8.0%, the second consecutive year of decline.

#### 3. Planned Capital Spending for FY 1999

Planned capital spending for FY 1999 will decline in both the manufacturing sector and the non-manufacturing sector. The overall planned decrease is 3.7%, the third consecutive year of decline.

In the manufacturing sector (down 10.1%), investment will increase in the food & beverages industry for new factory construction for beer, alcoholic beverages and other food products, and the rate of decline in electric machinery investment will slow. But in most industries, the size of investment cuts will increase, mainly because of cutbacks in automobiles for investment into new models and continued curbs on investment in organic chemicals. The result will be a double-digit fall in investment spending for manufacturing as a whole. In the non-manufacturing sector (down 0.7%), increases in spending are planned in electric power thanks to progress being made in atomic power plant construction projects, in the leasing industry where the capital procurement environment continues to improve. Transportation will benefit from spending for construction of new rail lines or expansion of existing lines in the Tokyo metropolitan area and for new airport construction. Services investment will grow due to theme park construction. On the other hand, telecommunications & information technology spending will fall due to the improved efficiency of telecommunications investment and reactionary cuts in information services. Taken as a whole, these factors will lead to an overall slight drop in capital spending in the non-manufacturing sector.

A comparison of each half of FY 1999 with the corresponding period in the previous year for all industries predicts an overall decrease of 2.1% in the first half of FY 1999, and a decline of 5.1% in the second half.

In comparison to the previous survey (February 1999), investment was revised downwards in both the manufacturing sector (down 5.2%) and the non-manufacturing sector (down 2.7%).

This means an overall downward revision of 3.4%. The decline in both the manufacturing sector and the non-manufacturing sector in the August survey marked the second consecutive year, the first time this has occurred since the survey method was changed in FY 1971 to the method now used.

Looking at the respective shares of different investment motives for manufacturing, there is a decrease in “expansion of production capacity” for both the materials industry and the processing & assembly industry. This is the result of a remarkable decline in the materials industry, where there are strong concerns about excess manufacturing capacity in sectors such as paper & pulp, chemicals and non-ferrous metals, plus a decline in all the processing & assembly industry with the exception of electric machinery. On the other hand, “rationalization and labor saving” and “maintenance” increased in many sectors in the materials industry. Also “product development and upgrading” rose in industries such as general machinery and non-ferrous metals, and “research & development” also increased as a motive in many industries including electric machinery, automobiles and chemicals. Despite the decline in spending overall, this would appear to indicate the companies are maintaining posture that is focusing on the future industrial sectors.

Land investment shows a big drop of 54.6% from the previous year, with double-figure reductions planned in both the manufacturing and non-manufacturing sectors. As a result, the share of land investment in total capital spending will drop from 8.6% to 4.1%.

The ratio of capital spending to cash flow (net profit/loss plus depreciation expenses) will fall in both the manufacturing sector and the non-manufacturing sector. This is because a large number of firms that project improvements in their profit picture are reducing capital spending.

Looking at foreign direct investment (based on figures for the 1,246 firms responding to both FY 1998 and FY 1999 surveys) and capital spending abroad (based on figures for 1,174 companies in both surveys), in the manufacturing sector (up 8.0%), which accounts for the majority of foreign direct investment in the survey responses, there is a double-digit decline for the processing & assembly industry (down 32.9%), in particular for non-ferrous metals and for chemicals. Despite this decline, the total for all manufacturing will rise because of an increase in the processing & assembly industry, which will receive a boost from a huge jump in large-scale investment in food & beverages (up 70.2%).

Turning to capital spending abroad (down 11.3%), there is a large decline in the materials industry (down 47.6%) that account for the largest share of the investment amounts in the responses to the questionnaire, particularly non-ferrous metals and textiles, plus a decline in the processing & assembly industry (down 4.6%) centered on general machinery. As a result, in the manufacturing sector the ratio of capital spending abroad to domestic capital spending will fall by approximately two percentage points from 33.3% in FY 1998 to 31.2% in FY 1999.

The domestic capital spending of foreign-affiliated firms (firms with over one-third foreign ownership; 142 respondents) shows an increase of 9.5% to ¥539.2 billion thanks to large scale investment in services. Foreign-affiliated firms now account for 2.1% of total capital spending in Japan.

#### **4. Features of Planned Capital Spending for FY 1999**

Planned capital spending for FY 1999 was largely revised downward from the previous survey (February 1999), particularly in the manufacturing industry. Firms have further tightened capital spending controls, which will reduce spending to a level 70% of the past peak year (FY 1991). Looking at the respective shares of different motives for capital spending, in both the manufacturing and the non-manufacturing sectors there is a reduction in “expansion of production capacity” and a decrease in the ratio of capital spending to cash flow that reflects a heightened negative spending posture. It is worth noting, however, that with regard to future

expansion, business reorganization in selected manufacturing industries is showing itself in the form of future-oriented capital spending.

In manufacturing, an attitude of strict control that has pared planned capital spending to a little more than 50% of the past peak is striking. In the materials industry in particular, remarkable declines of “expansion of production capacity” as an investment motive and in the ratio of capital spending to cash flow are obvious, providing evidence of just how strong are the feelings that the industry has excess capacity. Reductions in planned investment are continuing in most industry sectors of the processing & assembly industry as well. But despite the tight rein on spending, in some sectors such as food & beverages, transportation and electric machinery, aggressive investment aimed at business reorganizations is also apparent, such as plans to concentrate on manufacturing in strong areas that should be strengthened.

In non-manufacturing, many industries including the large sectors such as telecommunications & information technology will reduce spending. Despite the increase in scheduled investment based upon long-term plans, such as in the transportation industry where spending will increase for both new airport construction and construction/expansion of new high-speed rail lines, and in services which will be boosted by large-scale theme park construction, in many instances in recent years the level of spending in sectors that plan to increase spending, such as electric power or leasing, was revised downward. Spending efficiency is being closely scrutinized and the overall tone is one of weakness.

#### **5. Planned Capital Spending for FY 2000**

Planned capital spending for FY 2000 shows an overall decrease of 5.0%. In both the manufacturing sector (down 10.9%) and the non-manufacturing sector (down 4.0%), however, there are a large number of decisions that still have not been made. Furthermore, the size of this drop is larger than those seen in the recent August surveys.

## Trends in Capital Spending for FY 1998 through FY 2000

(Units: 100 million yen, %)

	FY 1998 Survey (Actual) (2,709 firms)			FY 1999 Survey (Planned) (2,923 firms)			FY 2000 Survey (Planned) (1,505 firms)		
	FY 1997 (Actual)	FY 1998 (Actual)	Growth rate 98/97	FY 1998 (Actual)	FY 1999 (Planned)	Growth rate 99/98	FY 1999 (Planned)	FY 2000 (Planned)	Growth rate 2000/99
Total	284,065	261,288	-8.0	267,436	257,583	-3.7	110,482	104,945	-5.0
<i>(except Electric Power)</i>	<i>(239,692)</i>	<i>(220,444)</i>	<i>(-8.0)</i>	<i>(226,332)</i>	<i>(213,593)</i>	<i>(-5.6)</i>	<i>(72,325)</i>	<i>(66,229)</i>	<i>(-8.4)</i>
Manufacturing	93,364	81,237	-13.0	84,466	75,945	-10.1	15,588	13,882	-10.9
Non-Manufacturing	190,701	180,051	-5.6	182,970	181,638	-0.7	94,894	91,064	-4.0
<i>(except Electric Power)</i>	<i>(146,327)</i>	<i>(139,207)</i>	<i>(-4.9)</i>	<i>(141,867)</i>	<i>(137,648)</i>	<i>(-3.0)</i>	<i>(56,737)</i>	<i>(52,347)</i>	<i>(-7.7)</i>
<i>(Electric Power)</i>	<i>(44,374)</i>	<i>(40,844)</i>	<i>(-8.0)</i>	<i>(41,104)</i>	<i>(43,990)</i>	<i>(7.0)</i>	<i>(38,157)</i>	<i>(38,716)</i>	<i>(1.5)</i>

## Comparison with the February 1999 Survey (Revision Rates for Companies in Both Surveys)

(Units: %)

	FY 1998 (Actual)	FY 1999 (Planned)
Total	-5.0	-3.4
<i>(except Electric Power)</i>	<i>(-3.1)</i>	<i>(-1.6)</i>
Manufacturing	-4.4	-5.2
Non-Manufacturing	-5.2	-2.7
<i>(except Electric Power)</i>	<i>(-2.2)</i>	<i>(0.5)</i>
<i>(Electric Power)</i>	<i>(-14.1)</i>	<i>(-11.1)</i>

Note: Revision rate =  $\left\{ \frac{\text{This survey (Aug. 99)}}{\text{Previous survey (Feb. 99)}} - 1 \right\} \times 100$

## Capital Spending by Industry for Fiscal Years 1998-2000

	Capital Spending (hundred million yen)				Growth Rate (%)			Component Rate (%)	
	FY1998	FY1999	FY1999	FY2000	98/97	99/98	2000/99	FY1998	FY1999
	(Actual)	(Planned)	(Planned)	(Planned)				(Actual)	(Planned)
	(2,923 firms)	(2,923 firms)	(1,505 firms)	(1,505 firms)				(2,923 firms)	(2,923 firms)
Total	267,436	257,583	110,482	104,945	-8.0	-3.7	-5.0	100.0	100.0
<i>except Electric Power</i>	<i>226,332</i>	<i>213,593</i>	<i>72,325</i>	<i>66,229</i>	<i>-8.0</i>	<i>-5.6</i>	<i>-8.4</i>	<i>84.6</i>	<i>82.9</i>
Manufacturing	84,466	75,945	15,588	13,882	-13.0	-10.1	-10.9	31.6	29.5
Food & Beverages	5,792	5,930	728	663	-12.1	2.4	-8.9	2.2	2.3
Textiles	970	811	125	64	-5.4	-16.4	-48.8	0.4	0.3
Paper & Pulp	2,555	1,760	397	471	-33.8	-31.1	18.8	1.0	0.7
Chemicals	11,618	10,243	2,711	2,735	-10.2	-11.8	0.9	4.3	4.0
<i>Organic Chemicals</i>	<i>5,206</i>	<i>4,533</i>	<i>1,066</i>	<i>965</i>	<i>-18.4</i>	<i>-12.9</i>	<i>-9.5</i>	<i>1.9</i>	<i>1.8</i>
<i>Pharmaceuticals</i>	<i>2,643</i>	<i>2,387</i>	<i>906</i>	<i>1,034</i>	<i>0.4</i>	<i>-9.7</i>	<i>14.0</i>	<i>1.0</i>	<i>0.9</i>
Petroleum	2,124	1,671	669	599	-32.5	-21.3	-10.4	0.8	0.6
Cement, Ceramics & Glass	2,454	1,889	474	541	-9.5	-23.0	14.1	0.9	0.7
Iron & Steel	5,804	5,289	2,097	1,379	0.3	-8.9	-34.2	2.2	2.1
<i>Ordinary Steel</i>	<i>4,696</i>	<i>4,455</i>	<i>1,925</i>	<i>1,198</i>	<i>5.0</i>	<i>-5.1</i>	<i>-37.8</i>	<i>1.8</i>	<i>1.7</i>
Non-Ferrous Metals	2,666	1,973	1,009	958	-25.4	-26.0	-5.1	1.0	0.8
General Machinery	6,396	5,403	833	739	-6.9	-15.5	-11.3	2.4	2.1
Electric Machinery	19,235	18,882	3,810	3,306	-21.9	-1.8	-13.2	7.2	7.3
<i>Electric Devices, etc</i>	<i>11,953</i>	<i>11,366</i>	<i>2,393</i>	<i>2,201</i>	<i>-23.6</i>	<i>-4.9</i>	<i>-8.0</i>	<i>4.5</i>	<i>4.4</i>
Precision Machinery	1,434	1,235	77	83	-3.3	-13.9	7.7	0.5	0.5
Transportation	16,888	15,306	1,797	1,698	-2.9	-9.4	-5.5	6.3	5.9
<i>Automobiles</i>	<i>15,760</i>	<i>14,469</i>	<i>1,610</i>	<i>1,584</i>	<i>-4.2</i>	<i>-8.2</i>	<i>-1.6</i>	<i>5.9</i>	<i>5.6</i>
Other Manufacturing	6,530	5,552	860	646	-9.1	-15.0	-24.9	2.4	2.2
Non-Manufacturing	182,970	181,638	94,894	91,064	-5.6	-0.7	-4.0	68.4	70.5
<i>except Electric Power</i>	<i>141,867</i>	<i>137,648</i>	<i>56,737</i>	<i>52,347</i>	<i>-4.9</i>	<i>-3.0</i>	<i>-7.7</i>	<i>53.0</i>	<i>53.4</i>
Construction	3,125	2,073	581	514	-16.6	-33.7	-11.5	1.2	0.8
Wholesale & Retail	12,793	11,313	5,040	4,325	-1.7	-11.6	-14.2	4.8	4.4
<i>Retail</i>	<i>9,714</i>	<i>8,949</i>	<i>3,454</i>	<i>3,236</i>	<i>-3.9</i>	<i>-7.9</i>	<i>-6.3</i>	<i>3.6</i>	<i>3.5</i>
Real Estate	11,502	8,054	4,114	3,541	-19.2	-30.0	-13.9	4.3	3.1
Transportation	18,804	20,878	10,408	8,985	-8.8	11.0	-13.7	7.0	8.1
<i>Railways</i>	<i>12,416</i>	<i>14,706</i>	<i>6,183</i>	<i>5,405</i>	<i>1.3</i>	<i>18.4</i>	<i>-12.6</i>	<i>4.6</i>	<i>5.7</i>
<i>Marine Transport</i>	<i>1,042</i>	<i>622</i>	<i>577</i>	<i>260</i>	<i>-14.3</i>	<i>-40.3</i>	<i>-55.0</i>	<i>0.4</i>	<i>0.2</i>
<i>Airlines</i>	<i>1,915</i>	<i>1,923</i>	<i>1,780</i>	<i>1,378</i>	<i>-44.0</i>	<i>0.4</i>	<i>-22.6</i>	<i>0.7</i>	<i>0.7</i>
<i>Warehousing etc</i>	<i>1,526</i>	<i>2,259</i>	<i>1,345</i>	<i>1,450</i>	<i>-19.7</i>	<i>48.0</i>	<i>7.9</i>	<i>0.6</i>	<i>0.9</i>
Electric Power & City Gas	44,843	47,607	41,710	42,511	-7.6	6.2	1.9	16.8	18.5
<i>Electric Power</i>	<i>41,104</i>	<i>43,990</i>	<i>38,157</i>	<i>38,716</i>	<i>-8.0</i>	<i>7.0</i>	<i>1.5</i>	<i>15.4</i>	<i>17.1</i>
<i>City Gas</i>	<i>3,740</i>	<i>3,617</i>	<i>3,553</i>	<i>3,795</i>	<i>-3.7</i>	<i>-3.3</i>	<i>6.8</i>	<i>1.4</i>	<i>1.4</i>
Telecom. & Information	43,984	39,020	11,476	9,043	3.7	-11.3	-21.2	16.4	15.1
Leasing	44,046	47,277	19,960	20,967	-6.5	7.3	5.0	16.5	18.4
Services	3,463	4,999	1,464	1,031	-7.1	44.3	-29.6	1.3	1.9
Other Non-Manufacturing	409	417	139	146	-25.5	1.9	5.0	0.2	0.2

Note: Other Manufacturing Industries includes Publishing & Printing, Rubber, Metal Products and Others.

Other Non-Manufacturing Industries includes Fishing, Mining and Others.

### III Survey Results

#### 1. Actual Capital Spending for FY 1998

##### Outline

Overall actual capital spending for FY 1998 was down 8.0% from the previous year, the second consecutive year of decline. The size of the decline increased. In the manufacturing sector (down 13.0%), despite a small increase in spending in the iron & steel industry, spending fell in almost all industries including decreases in chemicals, paper & pulp, automobiles, non-ferrous metals, food & beverages and other manufacturing. Following a broadened decline in electric machinery because of controls on spending into semiconductors, this resulted in the first decrease in total manufacturing spending in four years. In the non-manufacturing sector (down 5.6%), spending rose in the telecommunications & information technology industry to respond to demand for new types of cellular telephones. Nevertheless, controls on spending in electric power resulted in cuts in investment for the fifth straight year. There were also drops in spending in leasing, where investment was cut for the first time in four years in response to a severe financing environment, and in real estate which witnessed a double-digit drop in spending. These factors resulted in an overall reduction in capital spending in the non-manufacturing sector for the second year running.

##### Trends by Industrial Sector

The trends in actual capital spending for FY 1998, classified according to industrial sector, are as follows. Numbers in curly brackets { } show the percentage of total capital spending accounted for by each sector.

##### Materials (down 12.8%) {9.5%}

There was a small increase in the level of total spending in iron & steel. Total spending in the materials sector declined for the first time in four years, however, reflecting broad cuts in paper & pulp and in non-ferrous metals in addition to reductions in chemicals, which represents a large portion of materials sector spending.

Looking more closely at iron & steel, this sector increased total spending for equipment conversions and repairs at large blast furnace steel makers, despite spending controls.

On the other hand, in chemicals there was an increase in investment into pharmaceuticals that focused on increasing capacity, while in inorganic chemicals there was increased investment into high value-added products. But overall spending in this industry fell because of spending controls. In addition, the paper & pulp industry spending fell broadly as spending to expand continuous paper manufacturing machinery was completed. Capital spending in non-ferrous metals also declined because of spending controls related to semiconductor wafer manufacture, which has been hit by the slow-down in semiconductors, as well as lower cable-related spending. The size of spending cuts in the cement, ceramics and glass industry increased as a result of reductions in investments to increase efficiency in sectors such as glass, while the textiles industry also reduced spending mainly in its rationalization.

### **Processing & Assembly (down 12.1%) {20.8%}**

Spending in the processing & assembly sector turned down for the first time in four years following substantial spending reductions in electric machinery, which represents a large portion of this sector, along with spending declines in automobiles and food & beverages.

In electric machinery, broad spending cutbacks in electronic parts following restraints on investment into semiconductors and a pause in investment in liquid crystals, and reactionary cutbacks in spending for information transmission in electronic devices resulted in a broad decrease in spending. Spending in automobiles turned down following controls on spending for four-wheel vehicles, and spending for parts and vehicle bodies remained flat. In food & beverages, capital spending declined by double digit as investment into construction to increase and improve the efficiency of facilities for the production of beer and alcoholic beverages and processed meat products has passed its peak.

In general machinery, spending was curtailed in response to considerable earlier investment for construction of new buildings in office & household machinery. In precision machinery as well, where capital spending to strengthen production of high value-added products such as medical-related devices and watches and measuring instruments continued, overall spending fell as a result of curbs on investment in semiconductor manufacturing equipment.

### **Energy (down 9.2%) {17.9%}**

The energy sector recorded a decrease in capital spending for the fifth consecutive year.

In the electric power industry, an underlying tone of curbs on investment at Japan's nine electric power companies has resulted in large downward revisions for the fifth year running, despite growth in wholesale electric power providers. In the gas industry as well, investment in production and distribution facilities was revised downward and spending decreased. There have also been large cutbacks in petroleum, due to controls on spending into refining and distribution facilities.

### **Non-Manufacturing, excluding Energy (down 4.8%) {51.8%}**

Despite higher capital spending in the telecommunications & information industry, total spending into the non-manufacturing excluding energy fell for the second year running, reflecting cutbacks in industries such as leasing, real estate, and transportation.

Despite the completion of digitalization in equipment exchange and of investment into the Personal Handy-phone Systems (PHS), telecommunication & information technology recorded an increase in capital spending, due to response to the new forms of cellular telephones and head office-related spending on information services. Wholesale & retail industry, capital spending fell for the second straight year due to a pause in investment into remodeling of large department stores, controls on new supermarket construction and cautious expansion at convenience store chains. In transportation, although there was a small increase in railway investment into construction projects to build new lines in the Tokyo metropolitan area, total industry spending fell as airlines reduced investment into planes owned and investment was reduced in warehousing. In leasing, a tough financial climate resulted in the first spending decline in four years. The real estate industry and the construction industry both experienced double-digit decreases in spending.

## Trends in Capital Spending by Industry Sector

	Growth Rate (%)					Share (%)			
	FY1996	FY1997	FY1998	FY1999	FY2000	FY1996	FY1997	FY1998	FY1999
Materials	1.0	3.6	-12.8	-15.7	-9.8	9.4	10.0	9.7	8.5
<i>Paper &amp; Pulp</i>	36.1	4.8	-33.8	-31.1	18.8	1.2	1.3	1.0	0.7
<i>Chemicals</i>	8.9	14.5	-10.2	-11.8	0.9	3.7	4.3	4.3	4.0
<i>Iron &amp; Steel</i>	-19.1	-12.0	0.3	-8.9	-34.2	2.2	2.0	2.2	2.1
Processing & Assembly	10.0	7.3	-12.1	-7.0	-12.0	20.3	21.7	21.0	20.3
<i>Food &amp; Beverages</i>	-1.1	13.5	-12.1	2.4	-8.9	2.0	2.2	2.2	2.3
<i>Electric Machinery</i>	2.0	-1.1	-21.9	-1.8	-13.2	8.2	8.0	7.2	7.3
<i>Automobiles</i>	22.4	17.0	-4.2	-8.2	-1.6	4.8	5.6	5.9	5.6
Energy	-5.4	-9.4	-9.2	5.0	1.7	19.8	17.8	17.6	19.2
<i>Petroleum</i>	-22.0	-32.2	-32.5	-21.3	-10.4	1.7	1.1	0.8	0.6
<i>Electric Power</i>	-2.2	-7.9	-8.0	7.0	1.5	16.7	15.3	15.4	17.1
Non-Manufacturing excluding Energy	10.7	-2.8	-4.8	-3.0	-8.7	50.4	50.5	51.6	51.9
<i>Construction</i>	-8.8	-10.5	-16.6	-33.7	-11.5	1.4	1.3	1.2	0.8
<i>Wholesale &amp; Retail</i>	10.5	-7.0	-1.7	-11.6	-14.2	4.9	4.4	4.8	4.4
<i>Real Estate</i>	-18.3	2.0	-19.2	-30.0	-13.9	3.2	4.6	4.3	3.1
<i>Transportation</i>	12.4	-10.2	-8.8	11.0	-13.7	8.5	7.2	7.0	8.1
<i>Telecom. &amp; Information</i>	28.0	-6.1	3.7	-11.3	-21.2	15.2	14.5	16.4	15.1
<i>Leasing</i>	7.8	5.1	-6.5	7.3	5.0	16.0	17.3	16.5	18.4
<i>Services</i>	-17.8	-5.3	-7.1	44.3	-29.6	1.1	1.2	1.3	1.9
All Industries	6.0	-1.5	-8.0	-3.7	-5.0	100.0	100.0	100.0	100.0
<i>excluding Electric Power</i>	7.8	-0.2	-8.0	-5.6	-8.4	83.3	84.7	84.6	82.9
Manufacturing	4.8	4.1	-13.0	-10.1	-10.9	31.4	32.8	31.6	29.5
Non-Manufacturing <i>excluding Electric Power</i>	6.5	-4.0	-5.6	-0.7	-4.0	68.6	67.2	68.4	70.5
<i>excluding Electric Power</i>	9.7	-2.8	-4.9	-3.0	-7.7	51.9	51.9	53.0	53.4

Note 1: Materials: textiles; paper & pulp; chemicals; cement, ceramics & glass; iron & steel; non-ferrous metals

Processing & assembly: food & beverages; general machinery; electric machinery; precision machinery; transportation; other manufacturing

Energy: petroleum; electric power; city gas and coal; crude oil & natural gas

Non-manufacturing, excluding energy: Non-manufacturing industries excluding those industries mentioned in 'energy' above

Note 2: Share % for FY 1998 and FY 1999 are based upon 2,923 companies that responded to the survey in both years

## **2. Planned Capital Spending for FY 1999**

### **Outline**

Taking a look at planned capital spending for FY 1999, both the manufacturing sector and the non-manufacturing sector are expected to remain in decline, meaning an overall drop (3.7%) for the third year running.

In the manufacturing sector (down 10.1%), the food & beverage industry will return to increased spending as a result of construction for new factories for beer and other alcoholic beverages and other food products. Research and development spending for electronic devices will increase in the electric machinery industry. Although this spending will help limit the size of the total spending decline, spending decreases will be broadened in most industries, such as the automobile industry where investment into new models are cut and chemicals where spending controls remain in place in the organic chemicals segment. As a result total investment will fall by double digit.

In the non-manufacturing sector (down 0.7%), increases in investment are planned in electric power for the first time in six years as atomic power plant construction projects continue making good headway. Spending will also increase in leasing, where the financing environment continues to improve, in transportation for construction of new railways and extensions of existing lines in the Tokyo metropolitan area, and in services, where spending will grow for large-scale theme park construction. Nevertheless, capital spending overall will decline slightly because of reactionary cutbacks in telecommunications & information technology from improved spending efficiency for transmission technology and systems-related investment in the information services field, and planned decreases in spending in real estate.

### **Trends by Industrial Sector**

The trends in planned capital spending for FY 1999, classified according to industrial sector, are as follows. Numbers in curly brackets { } show the percentage of total planned capital spending accounted for by each sector.

#### **Materials (down 15.7%) {8.5%}**

The materials sector will record a double-digit drop in capital spending for the second year running, due in part to decreases in all industries, such as the heavily-weighted chemicals industry, as well as increases in the size of spending cutbacks in most industries.

In chemical industry, restraints on investment are expected to continue, although investment in high added-value products continues in organic chemicals, and in pharmaceuticals investment into construction for expansion of production capacity will fall. In addition, in paper & pulp large double-digit spending cuts will continue as investment into increased continuous paper manufacturing capacity was completed in the prior fiscal year, and in non-ferrous metals semiconductor wafer-related investment and cable-related investment are both expected to continue to fall. Cuts are also planned in the cement, ceramics & glass, iron & steel, and textiles industries, as spending controls continue in the wake of weak demand.

### **Processing & Assembly (down 7.0%) {20.3%}**

Capital spending in the processing & assembly sector is expected to drop for the second consecutive year despite a return to higher spending in the food & beverages industry, due to the continuation of spending cutbacks in most industries such as the electric machinery industry.

Looking in more detail at the food & beverages industry, spending will increase on the strength of new factory investment into beer and alcoholic beverages and other food products. In the electric machinery industry, spending will decline only slightly, even though overall restraints on investment will remain in place, as the result of increases in areas such as research and development for electronic devices.

In the automobile industry on the other hand, investment cutbacks will increase sharply as the industry curtails investment into new models both in four-wheel vehicles and parts/bodies. In the general machinery industry, large spending cutbacks for machinery such as boilers and motors will result in a double-digit decline, despite smaller spending declines due to investment into new machinery products for office & household use. In the precision machinery industry as well, spending will continue to fall, although steady investment into medical apparatus will continue.

### **Energy (up 5.0%) {19.2%}**

The energy sector is expected to show growth for the first time in six years.

In the electric power industry, despite the continuing underlying tone of squeezes on investment, an overall increase in capital spending is planned due to the good progress being made in construction related to the development of power sources such as atomic power stations. In the gas industry, investment into city gas will increase, but overall capital spending is expected to fall because of decreased investment into construction of LNG bases and maturity of the sources of supply. The petroleum industry plans overall cuts despite investment into environmental measures such as reducing the amount of benzene in gasoline, as restraints on spending at refineries are continued.

### **Non-Manufacturing, excluding Energy (down 3.0%) {51.9%}**

Looking at the non-manufacturing sector excluding energy, increases in spending are planned in the leasing, transportation and service industries. But total spending in this sector will decrease for the third year running because spending will be cut in the telecommunications & information technology industry and reductions will continue in the real estate, construction, and wholesale & retail industries.

Capital spending in leasing will increase as the result of improvement in the fund procurement environment and asset replacements by small and medium-sized leasing companies. In transportation, capital spending will rise thanks to the construction of new lines and extension of existing lines in the Tokyo metropolitan area and the new airport construction. Services investment will increase substantially thanks to the construction of large theme parks on the waterfront areas.

Looking more closely at the telecommunications & information technology industry, despite the continuation of high spending levels to meet the increase in demand for cellular telephones, the increase in investment efficiency, declining demand for PHS and completion of information services systems-related investment mean an overall reduction in capital spending. In real estate, capital spending will decline substantially, despite the redevelopment in the metropolitan areas, because of the completion of regional projects. In the construction industry, the major construction companies are planning to curtail investment and this causes a big overall drop. In the wholesale & retail industry, there will be selected investments by some department stores and

supermarkets for new stores and expansion of existing facilities, but overall the lid has been clamped on spending. Convenience stores as well will continue their cautious attitude towards new store investment. As the result of these factors, continued overall cuts are expected in wholesale & retail.

### **Trends and Features of Capital Spending by Industry**

Trends and features of capital spending for main industries are shown below. The figures in parentheses ( ) indicate the rate of growth in capital spending for the industry in question (FY 1998 - FY 1999). The figures in curly brackets { } show each industry's share of planned spending for FY 1999 as a percentage of the total value for all industries.

#### **Materials**

*Chemicals: (-10.2% -11.8%) {4.0%}*

For organic chemicals, which accounts for the majority of the chemical industry, restraints on spending will continue despite investment into high added-value products. For pharmaceuticals, spending on construction to increase production capacity has peaked and will decline. Spending for inorganic chemicals and other chemicals will continue to decrease. Combining all of these factors, capital spending in the chemical industry as a whole is expected to decline for the second year running.

*Iron & Steel: (0.3% -8.9%) {2.1%}*

Despite some investment to update and modify facilities, most blast furnace and electric furnace producers are tightening their investment controls against a background of concerns over excess capacity. The industry will once again see an overall decline in total spending.

*Non-Ferrous Metals: (-25.4% -26.0%) {0.8%}*

In addition to the continuing pause in investment related to cables, the companies will also pause in their investment related to basic capacity for increasing 300mm semiconductor wafer production. This will result in a substantial decrease in capital spending for the second consecutive year.

*Paper & Pulp: (-33.8% -31.1%) {0.7%}*

There will be large spending cuts for the second year running, due to the completion of a string of spending on machines for manufacturing coated paper and newspaper.

*Cement, Ceramics & Glass: (-9.5% -23.0%) {0.7%}*

In the glass and ceramic industries, the companies will keep the lid on spending for reasons such as slack demand. In the cement industry as well, spending will decline sharply in response to construction of new electric power generation facilities. For the industry as a whole the size of spending cutbacks will increase.

*Textiles: (-5.4% -16.4%) {0.3%}*

A keynote of spending controls will continue. Overall there will be a double-digit decrease in capital spending mainly for additional production capacity.

## Processing & Assembly

*Electric Machinery: (-21.9% -1.8%) {7.3%}*

For electronic parts, which account for the majority of the electric machinery industry, spending will decline as overall investment controls remain in place. A partial recovery in spending can be seen, however, in some sectors such as liquid crystals. In electric devices difficult business conditions will continue, and this will translate into a continuation of the double-digit spending decline. Although overall spending will decline for the third year running, the size of the year-to-year decrease will shrink because of increased spending in some areas, such as research and development of electronic devices.

*Automobiles: (-4.2% -8.2%) {5.6%}*

For four-wheel vehicles, investment to respond to the demand for new types of vehicles has passed its peak and against a backdrop of industry reorganization the industry has adopted a stance of controls on investment spending. Because spending in response to long-term emission controls on trucks also has ended, total spending will decline for the second year in a row. For parts/bodies, manufacturers are generally squeezing capital spending, and there is a drop in spending for new models. As a result, overall capital spending will fall for the second consecutive year in this industry.

*Food & Beverages: (-12.1% 2.4%) {2.3%}*

The size of spending cutbacks for processed meat & dairy products, flour milling, sugar manufacture, and edible oils will continue to shrink. Capital spending for new factory construction in sectors such as beer and other alcoholic beverages and other foodstuffs, moreover, will push the food & beverages industry as a whole into positive growth in spending.

*General Machinery: (-6.9% -15.5%) {2.1%}*

For general machinery parts, spending growth will be positive because of large-scale investment related to partial reorganization of the industry, while the size of spending cutbacks for office & household machinery will shrink because of investment for new products. Spending for boilers and motors, on the other hand, will show a broad decline as a reaction to prior acquisitions of land for company headquarters. Coupled with large-scale cutbacks in spending for metal processing machinery and industrial machinery, capital spending for the general machinery industry as a whole will fall into a double-digit decline.

*Precision Machinery: (-3.3% -13.9%) {0.5%}*

Healthy spending growth will continue for medical instruments. For semiconductor manufacturing equipment, however, spending cutbacks will continue due to curbs on spending for semiconductor manufacturing devices. When added to the shift to spending reductions including cuts in investment to increase production capacity for products such as clocks and other measuring instruments, spending for the precision machinery industry as a whole will decline for the second year running.

## Energy

*Electric Power: (-8.0% 7.0%) {17.1%}*

A basic underlying tone of squeezes on investment continues for the nine major electric power companies. However, an increase in spending is planned thanks to good headway being made in construction projects related to the development of power sources such as atomic power stations.

There will also be growth in the rest of electric power industry, due in part to healthy progress in investment related to nuclear fuel and construction for development of electric power source.

*Gas: (-3.7% -3.3%) {1.4%}*

For city gas, increased spending is planned thanks to the full-scale commencement of large-scale construction of LNG bases in some regions. But spending will be sharply curtailed at LNG suppliers following cutbacks in large-scale construction. Added to on-going curtailment in spending for fuel supplies, capital spending in the gas industry as a whole will fall for the fourth consecutive year.

*Petroleum: (-32.5% -21.3%) {0.6%}*

Although there will be some increases in investment into environmental measures such as reducing the amount of benzene in gasoline, restraints on investment into refineries and distribution facilities will continue. Overall, capital spending into the petroleum industry will decline for the seventh consecutive year.

### **Non-Manufacturing Industries, excluding Energy**

*Leasing: (-6.5% 7.3%) {18.4%}*

Amid improvement in the environment for capital procurement, small and medium-sized leasing companies will increase spending to replace assets and carry out reorganization of their business. Both bank-related and manufacturer-related leasing companies are also planning capital spending increases.

*Telecommunications & Information Technology: (3.7% -11.3%) {15.1%}*

For telecommunications, which is the mainstay of this industry, a high level of spending will be maintained to respond to the increase in demand for cellular telephones. However, improvement in investment efficiency and cuts in investment for PHS will mean a reduction in capital spending. Companies will be reducing capital spending for information services, on the other hand, after large increases in spending in the previous fiscal year related to system construction and head offices. This will lead to a downturn in capital spending in the telecommunications & information technology industry as a whole.

*Railways: (1.3% 18.4%) {5.7%}*

Spending will continue to grow thanks to progress in the construction of new lines and line extensions in the Tokyo metropolitan area.

*Wholesale & Retail: (-1.7% -11.6%) {4.4%}*

In wholesale, cuts in investments such as distribution centers will lead to large reductions in capital spending. In retail, department stores have clamped down on spending. Despite the prospect of investment by some supermarkets in new store development ahead of the enforcement of the Large-Scale Retail Store Law (June 2000) and by some volume sellers with new store development and store enlargement, the continuation of a cautious attitude towards store investment by convenience stores will result in a spending decline for the industry as a whole for the third year running.

*Real estate: (-19.2% -30.0%) {3.1%}*

Although construction of large office buildings is healthily progressing in the Tokyo metropolitan

area, in general there is a pause in investment and postponement of regional projects, meaning a large overall drop in capital spending for the second year in a row.

*Services: (-7.1% 44.3%) {1.9%}*

Propelled by construction of large-scale, water front theme parks, plus investment in hotels and inns, overall there will be growth for the first time in 8 years.

*Warehousing & Transportation: (-19.7% 48.0%) {0.9%}*

Benefiting from investment in new airports and airport-related construction, spending will increase after 6 years of spending declines.

*Construction: (-16.6% -33.7%) {0.8%}*

In construction there will be reduced investment for the seventh straight year, with continuation of restraints on investment and completion of construction for new office buildings by general construction firms.

*Airlines: (-44.0% 0.4%) {0.7%}*

Although the introduction of new aircraft will decline as each company carries out plans to improve management efficiency, industry spending overall will show a small increase because carriers plan to increase the percentage of owned aircraft and to increase capital spending for ground facilities and spare parts.

*Marine Transport: (-14.3% -40.3%) {0.2%}*

With the completion of spending on the construction of LNG transport ships, investment will decline sharply.

### **3. Planned Capital Spending for FY 2000**

Planned capital spending for FY 2000 for all industries shows an overall decrease of 5.0%. In both the manufacturing sector (down 10.9%) and the non-manufacturing sector (down 4.0%), however, there are a large number of capital spending decisions that still have not been made.

### **4. Investment Motives**

#### **Investment Motives in the Manufacturing and Non-Manufacturing Sectors in FY 1999**

Looking at the respective shares of each category of investment motive for the manufacturing sector in FY 1999, one finds a decrease in “expansion of production capacity” to an unprecedented low level for most industries. In materials industry particularly, the decrease has been substantial over the past several years, falling from 33% in FY 1997 to 21% for FY 1999.

On the other hand, there is an increase in “product development and upgrading”, “research & development” and “maintenance” as investment motives. In general machinery and non-ferrous metals “product development and upgrading” is a substantial motive, but its importance declined in many other industries. By contrast, many industries, such as automobiles, increased the share of “research & development” as an investment motive, which can be interpreted as meaning that although the overall amount of spending will fall, companies will continue spending with eyes on future business sectors. Increases are also seen in the motives “rationalization and labor saving” and “maintenance” for many industries.

For the non-manufacturing sector, the motive “expansion of production capacity” which accounts for about 60% of capital spending will decrease.

## **Investment Motives in the Manufacturing Sector for the “Materials” and “Processing & Assembly” Industries**

We now look at the respective shares of each category of investment motive within the manufacturing sector, comparing the materials industry with the processing & assembly industry. For the materials industry, the motives “rationalization and labor saving”, and “maintenance” are at high levels, whereas for the processing & assembly industry, the incentives “product development and upgrading” and “research & development” are most important. For the materials industry, the motive “expansion of production capacity” has become much less important, and now has a lower share than that for the processing & assembly industry. For the core sectors in the processing & assembly industry, the motives “product development and upgrading” and “research & development” have been growing in importance.

The characteristics of investment motives for the materials industry in FY 1999 are:

- i) A large reduction in the share of “expansion of production capacity” (27.1% → 20.6%), particularly for paper & pulp where investment into increasing and improving production facilities has come to an end amidst concerns about excess capacity, and for chemicals and non-ferrous metals (semiconductor-related fields) with restraint of investment.
- ii) An increase in “research & development” (7.7% → 8.1%), particularly for industries such as the chemical industry and the textiles industry.
- iii) A rise in the importance of “rationalization and labor saving” (21.1% → 24.0%) in most industries including iron & steel, paper & pulp and non-ferrous metals.
- iv) An increase for all industries, particularly in chemicals and paper & pulp, in “maintenance” (23.6% → 25.9%).

The significant trends for the processing & assembly industry are:

- i) A decline in the importance of “expansion of production capacity” (27.8% → 25.4%) in all industries with the exception of electric machinery, where investment increase can be seen in certain sectors such as semiconductors and liquid crystals.
- ii) An increase in “product development and upgrading” (21.0% → 21.1%) for general machinery, where investment related to consumables for office automation equipment such as copiers will increase, and food & beverages, where spending will increase in selected areas.
- iii) A small increase in “research & development” (12.6% → 12.7%) in many industries including automobiles.

## **Shift in Investment Motives within the Manufacturing Sector**

We now look at the change in the percentage share of each category of investment motive for the manufacturing sector. For “expansion of production capacity”, there are increases for electric machinery and petroleum. There are drops for most industries, however, including paper & pulp, chemicals, and automobiles. Overall there is a large reduction from 27.7% to 24.1%.

For “product development and upgrading”, there are decreases for electric machinery and automobiles. There are increases, however, for other industries including general machinery and non-ferrous metals, meaning an overall increase from 15.5% to 16.0%.

“Rationalization and labor saving” is up from 18.4% to 18.8% for all industries, thanks to an increase for most industries including iron & steel, paper & pulp and precision machinery. The importance of this motive decreased in the electric machinery and the food & beverages industry, however.

For “research & development” there are rises for most industries, including the highly influential, chemicals and automobile industries, resulting in an overall increase from 10.4% to 10.7%.

“Maintenance” as a spending incentive shows an increase from 15.9% to 16.7%, due to rises for the majority of industries particularly for the materials industry such as chemicals and paper & pulp.

## Investment Motives

(Unit: %)

	Total		Manufacturing				Non-Manufacturing			
	(2,158 firms)		FY98	FY99	Materials		Processing & Assembly		FY98	FY99
	FY98	FY99			FY98	FY99	FY98	FY99		
	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned
Expansion of Production Capacity	53.8	52.8	27.7	24.1	27.1	20.6	27.8	25.4	64.5	62.8
Product Development and product upgrading	6.4	6.9	15.5	16.0	7.7	8.6	21.0	21.1	2.7	3.7
Rationalization and Labor Saving	7.1	7.0	18.4	18.8	21.1	24.0	17.0	16.3	2.5	2.8
Research & Development	3.6	3.4	10.4	10.7	7.7	8.1	12.6	12.7	0.9	0.8
Maintenance	15.1	14.5	15.9	16.7	23.6	25.9	10.2	10.6	14.7	13.7
Others	14.0	15.5	12.1	13.7	12.8	12.9	11.4	13.9	14.8	16.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## **5. Trends in Land Investment (Classified According to Principal Business Sector)**

### **Actual Land Investment for FY 1998**

Actual land investment for FY 1998 (based on figures for the 1,756 firms that gave responses regarding both FY 1997 and FY 1998) was down 4.3% compared with the previous year, the second consecutive annual decline. The size of the decrease was smaller, however. In the manufacturing sector there was an 11.7% decrease, reflecting reductions in chemicals, petroleum and electric machinery. In the non-manufacturing sector, the size of the decrease became smaller (-2.3%) thanks to land acquisitions for large company-owned buildings in wholesale & retail and telecommunication & information technology in addition to land acquisitions for electric power. As a whole, there were land purchases related to development of former railroad properties or business reorganization, and land investment accounted for 8.5% of capital spending, the highest level since FY 1991.

### **Planned Land Investment for FY 1999**

Planned land investment for FY 1999 (based on figures for the 2,210 firms that gave responses regarding both FY 1998 and FY 1999) is down 54.6%, a large decline from the prior fiscal year. (Land investment accounts for 4.1% of all investment planned for FY 1999.) With the exceptions of the electric machinery industry, where large amount of land has been acquired for company premises, and land investment in the transportation industry for the new airport facilities, no large acquisitions are planned.

It should be noted that there is a tendency for large upward revisions in land investment between the planning stage and actual implementation.

### **Planned Land Investment for FY 2000**

Planned land investment for FY 2000 (based on figures for the 1,297 firms that gave responses regarding both FY 1999 and FY 2000) is down 33.9% on the previous year. (Land investment accounts for 3.2% of all investment planned for FY 2000.) Planned land investment for FY 2000 is even more uncertain than for FY 1999, however.

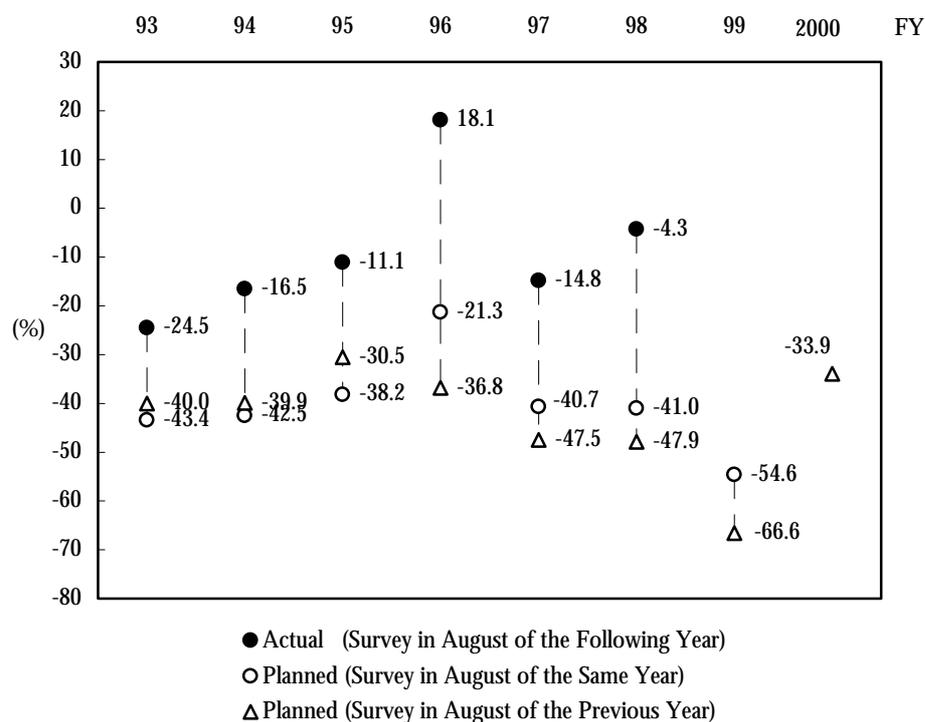
## Trends in Land Investment (Classified According to Principal Business Sector)

(Units: 100 million yen)

	FY1997 (Actual)	FY1998 (Planned)	Growth Rate (%)	FY1998 (Actual)	FY1999 (Planned)	Growth Rate (%)	FY1999 (Actual)	FY2000 (Planned)	Growth Rate (%)
	(1,756 firms)		98/97	(2,210 firms)		99/98	(1,297 firms)		2000/99
<b>Total</b>									
Total Investment	175,284	162,733	-7.2	179,637	171,823	-4.3	91,403	87,011	-4.8
Investment except Land	160,809	148,880	-7.4	164,117	164,778	0.4	87,136	84,191	-3.4
Investment in Land	14,475	13,853	-4.3	15,521	7,046	-54.6	4,267	2,820	-33.9
<i>(Share of Land %)</i>	<i>(8.3)</i>	<i>(8.5)</i>		<i>(8.6)</i>	<i>(4.1)</i>		<i>(4.7)</i>	<i>(3.2)</i>	
<b>Manufacturing</b>									
Total Investment	56,626	50,373	-11.0	57,990	50,717	-12.5	13,843	12,002	-13.3
Investment except Land	53,590	47,691	-11.0	54,638	49,264	-9.8	13,135	11,953	-9.0
Investment in Land	3,036	2,681	-11.7	3,352	1,453	-56.7	707	49	-93.0
<i>(Share of Land %)</i>	<i>(5.4)</i>	<i>(5.3)</i>		<i>(5.8)</i>	<i>(2.9)</i>		<i>(5.1)</i>	<i>(0.4)</i>	
<b>Non-Manufacturing</b>									
Total Investment	118,658	112,361	-5.3	121,647	121,106	-0.4	77,560	75,008	-3.3
Investment except Land	107,219	101,189	-5.6	109,478	115,513	5.5	74,001	72,237	-2.4
Investment in Land	11,439	11,172	-2.3	12,169	5,593	-54.0	3,600	2,771	-22.2
<i>(Share of Land %)</i>	<i>(9.6)</i>	<i>(9.9)</i>		<i>(10.0)</i>	<i>(4.6)</i>		<i>(4.6)</i>	<i>(3.7)</i>	

## Growth Rate of Investment in Land

Total of All Industries



## **6. Foreign Direct Investment and Capital Spending Abroad (Classified According to Principal Business Sector)**

### **Foreign Direct Investment**

Foreign direct investment rose 8.0% from ¥1,095.1 billion in FY 1998 to ¥1,182.4 billion in FY 1999 (based on figures for the 1,246 firms that gave responses regarding both FY 1998 and FY 1999). (The manufacturing sector increased by 42.5%, while the non-manufacturing sector decreased by 68.2%.) In the manufacturing sector, which accounts for the majority of foreign direct investment in the survey responses, there was a large decline in foreign direct investment of 32.9% for materials industry, with the most significant drops being in the non-ferrous metals and chemicals industry. In the processing & assembly industry, investment rose significantly by 70.2%, based upon large increases in food & beverages, however, for the non-manufacturing sector, there was a large decline of 68.2%, with large drops in construction and wholesale & retail.

### **Capital Spending Abroad**

There was an overall drop in capital spending abroad of 11.3% from ¥1,130.2 billion in FY 1998 to ¥1,002.1 billion in FY 1999 (based on figures for the 1,174 firms that gave responses regarding both FY 1998 and FY 1999). (The decrease for the manufacturing sector was 16.3%, while the non-manufacturing sector rose 19.7%.) In the manufacturing sector, there was a decline in capital spending abroad of 4.6% for the processing & assembly industry, with a significant drop occurring in the general machinery industry. For the materials industries, there was a big decline of 47.6%, with the most significant drops in the non-ferrous metals and textiles industries. In the non-manufacturing sector, a broad increase in the transportation industry contributed to a 19.7% increase in capital spending abroad.

### **The ratio of capital spending abroad to domestic capital spending within the manufacturing sector**

Looking at the ratio of capital spending abroad to domestic capital spending for the manufacturing sector (based on figures for the 485 firms that gave responses regarding both FY 1998 and FY 1999), there is a drop of approximately two percentage points from 33.3% in FY 1998 to 31.2% in FY 1999. For the processing & assembly industry there is an increase from 37.5% to 39.5%, with major contribution coming from electric machinery and transportation. For the materials industry, the ratio falls from 26.8% to 16.4%, due in part to the large decreases for non-ferrous metals and textiles.

Note: 'Foreign direct investment' by a company refers to remittance of funds for the establishment of overseas offices, as well as loaning and investment of securities (stocks and bonds) into overseas subsidiaries. (Here, an 'overseas subsidiary' of a company is an overseas firm for which the company holds at least 10% of the shares.)

'Capital spending abroad' by a company refers to capital spending conducted overseas by either the company itself or one of its overseas subsidiaries. (The definition of 'overseas subsidiary' is as above.)

## 7. Trends in Capital Spending by Foreign-Affiliated Firms (Classified According to Principal Business Sector)

142 firms out of 2,923 who responded to both FY 1998 and 1999 surveys are classified as foreign-affiliated firms (firms with over one third foreign ownership). Their capital spending accounts for 2.1% of the total (FY 1999).

Planned capital spending by foreign-affiliated firms in FY 1999 is 9.5% higher than in the previous fiscal year. Looking at by separate industry, there are drops for chemicals and other materials industries (down 19.1%) and energy (down 7.1%). On the other hand, there is an increase in processing & assembly (up 10.3%) as a result of increases for transportation equipment and electric machinery, together with a large increase in non-manufacturing excluding energy (up 68.3%) because of planned spending for large-scale theme parks.

Planned capital spending by foreign-affiliated firms in FY 2000 is down 3.6% from the previous year.

### Capital Spending by Foreign Affiliated Firm (Classified According to Principal Business Sector)

	Capital Spending (hundred million Yen)						Growth rate (%)			Share(%)	
	FY97 (Actual)	FY98 (Actual)	FY98 (Actual)	FY99 (Planned)	FY99 (Planned)	FY2000 (Planned)	98/97	99/98	2000/99	FY99	
	(121 firms)	(121 firms)	(142 firms)	(142 firms)	(142 firms)	(88 firms)				(142 firms)	(of All Firms)
Total	5,452	4,158	4,923	5,392	2,503	2,412	-23.7	9.5	-3.6	100.0	2.1
Manufacturing	4,163	3,558	4,028	3,885	1,490	1,455	-14.5	-3.5	-2.3	72.1	5.1
Non-Manufacturing	1,290	600	895	1,506	1,013	957	-53.5	68.3	-5.6	27.9	0.8
By sector											
Materials	1,306	1,446	1,563	1,265	487	671	10.7	-19.1	37.8	23.5	5.4
Processing & Assembly	1,929	1,569	1,897	2,094	653	541	-18.7	10.3	-17.2	38.8	4.1
Energy	928	543	567	527	350	244	-41.4	-7.1	-30.5	9.8	1.1
Non-Manufacturing excluding Energy	1,290	600	895	1,506	1,013	957	-53.5	68.3	-5.6	27.9	1.1

Note: foreign-affiliated firms are firms with over one-third foreign ownership

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