

## **Positive Growth for the First Time in Four Years, Mainly in Manufacturing: Information technology's ripple effect on investment**

1. Planned capital spending for FY2000 will increase in both the manufacturing sector (up 15.2%) and the non-manufacturing sector (up 0.2%), the first overall industrial increase in four years (up 7.6%).
  
2. In the manufacturing sector, there will be broad spending increases for electric machinery, because of capacity expansion for semiconductors and liquid crystals, as well as higher spending in precision machinery, non-ferrous metals, cement, ceramics & glass, automobiles, and chemicals, resulting in the first spending increase in the manufacturing sector in three years. In contrast, food & beverages and iron & steel will fall sharply from the large-scale investment levels of the prior year, and tight spending controls will decrease capital investment in petroleum.  
In the non-manufacturing sector, overall spending will increase for the first time in four years. Spending in the telecommunications and information sector will rise, corresponding to increase in demand for advanced systems. Increases are also planned in both railways for new lines and line extensions, and in wholesale and retail for accelerating new store openings before enactment of the Large-Scale Retail Store Siting Law. Spending will also increase in electric power and leasing.
  
3. Looking at the different investment motives within the manufacturing sector, there are planned increases in 'expansion of production capacity', 'product development and upgrading' and 'research and development' for both materials industries and processing and assembly industries. In particular, capital spending for 'expansion of production capacity' will increase at a high level for the first time since 1995 because of demand for electric machinery and precision machinery.
  
4. Investments in information technology (a new survey item) will grow by double digits, exceeding the growth rate of overall capital spending.
  
5. Both manufacturing and non-manufacturing will return to spending increases, with some exceptions among sectors, so capital spending is making good progress.

Capital Spending in electric machinery has largely been revised upward led by electronic parts. Along with precision machinery, increases will also be seen in related industries : cement, ceramics and glass, which have seen revived investment activity since the previous survey; non-ferrous metals for wafers, etc.; general machinery for digitization of offices; and household machinery. Information technology's ripple effect on investment will intensify and telecommunications and information

industry will return to growth because of spending for cellular telephones and advanced systems.

On the other hand, the outlook in large industries will continue. The underlying tone of investment in the automobile and chemical industries will still essentially be one of restraint, although there will be some increase, and spending in electric power sector may shift downward. Thus, the disposition for investment is mixed throughout the various sectors, and spending increases in wholesale & retail are specifically tied to an acceleration in new store openings ahead of the Large-Scale Retail Store Siting Law.

## **Survey Method and Target Firms**

Survey Method:	Questionnaire
Date of Survey:	August 10, 2000
Target Firms:	3,495 private firms in Japan's major industries capitalized at ¥1 billion or more
Proportion of Valid Responses:	88.0% (3,076 firms)
Industrial Classification for the Totals:	Investment-specific Classification as a rule, Principle Business Classification in some parts of the analysis

## Outline

Overall actual capital spending in FY1999 (all figures are on a construction basis; the growth rate is compared with the previous year) was down 8.4%, the third consecutive year in which spending declined. In both the manufacturing sector (down 15.5%) and the non-manufacturing sector (down 5.0%), they declined.

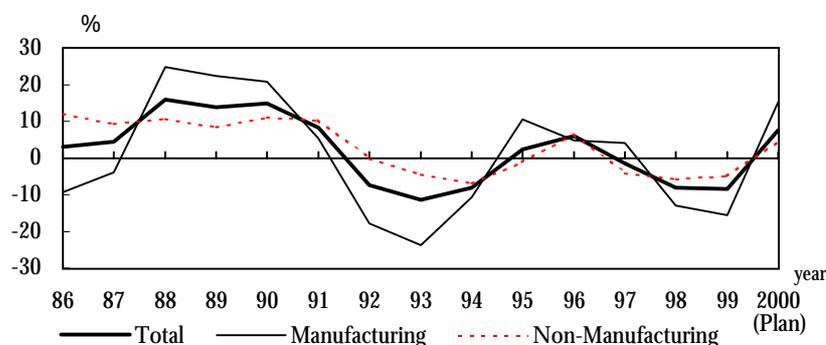
Planned capital spending for FY 2000 will increase in both the manufacturing sector (up 15.2%) and the non-manufacturing sector (up 4.4%), the first increase in four years in total (up 7.6%).

### Trends in Capital Spending for FY 1999 through FY 2001

(Units: 100 million yen, %)

	FY 1999 Survey (Actual) (2,752 firms)			FY 2000 Survey (Planned) (3,076 firms)			FY 2001 Survey (Planned) (1,579 firms)		
	FY 1998 (Actual)	FY 1999 (Actual)	Growth rate 99/98	FY 1999 (Actual)	FY 2000 (Planned)	Growth rate 00/99	FY 2000 (Planned)	FY 2001 (Planned)	Growth rate 01/00
Total	258,114	236,433	-8.4	242,682	261,227	7.6	105,970	96,887	-8.6
<i>(except Electric Power)</i>	<i>(216,928)</i>	<i>(197,568)</i>	<i>(-8.9)</i>	<i>(203,814)</i>	<i>(221,214)</i>	<i>(8.5)</i>	<i>(74,801)</i>	<i>(66,883)</i>	<i>(-10.6)</i>
Manufacturing	83,477	70,498	-15.5	72,582	83,586	15.2	17,463	16,844	-3.5
Non-Manufacturing	174,637	165,936	-5.0	170,100	177,641	4.4	88,507	80,043	-9.6
<i>(except Electric Power)</i>	<i>(133,450)</i>	<i>(127,070)</i>	<i>(-4.8)</i>	<i>(131,232)</i>	<i>(137,628)</i>	<i>(4.9)</i>	<i>(57,339)</i>	<i>(50,039)</i>	<i>(-12.7)</i>
<i>(Electric Power)</i>	<i>(41,187)</i>	<i>(38,866)</i>	<i>(-5.6)</i>	<i>(38,868)</i>	<i>(40,013)</i>	<i>(2.9)</i>	<i>(31,169)</i>	<i>(30,004)</i>	<i>(-3.7)</i>

### Growth Rate of Capital Spending 1986-2000



## Capital spending by Industry for Fiscal Years 1999-2001

	Capital Spending (hundred million yen)				Growth Rate (%)			Component Rate (%)	
	FY1999 (Actual)	FY2000 (Planned)	FY2000 (Planned)	FY2001 (Planned)	99/98	00/99	01/00	FY1999 (Actual)	FY2000 (Planned)
Total	242,682	261,227	105,970	96,887	-8.4	7.6	-8.6	100.0	100.0
<i>except Electric Power</i>	<i>203,814</i>	<i>221,214</i>	<i>74,801</i>	<i>66,883</i>	<i>-8.9</i>	<i>8.5</i>	<i>-10.6</i>	<i>84.0</i>	<i>84.7</i>
Manufacturing	72,582	83,586	17,463	16,844	-15.5	15.2	-3.5	29.9	32.0
Food & Beverages	5,800	5,706	1,399	1,368	-2.7	-1.6	-2.2	2.4	2.2
Textiles	831	761	73	61	-12.8	-8.4	-16.0	0.3	0.3
Paper & Pulp	1,764	2,196	577	644	-29.4	24.5	11.5	0.7	0.8
Chemicals	9,414	10,574	3,038	2,814	-22.4	12.3	-7.3	3.9	4.0
<i>Organic Chemicals</i>	<i>4,179</i>	<i>4,349</i>	<i>1,377</i>	<i>1,408</i>	<i>-20.8</i>	<i>4.1</i>	<i>2.3</i>	<i>1.7</i>	<i>1.7</i>
<i>Pharmaceuticals</i>	<i>1,972</i>	<i>2,448</i>	<i>961</i>	<i>838</i>	<i>-26.8</i>	<i>24.2</i>	<i>-12.7</i>	<i>0.8</i>	<i>0.9</i>
Petroleum	1,481	1,291	474	539	-32.3	-12.8	13.7	0.6	0.5
Cement, Ceramics & Glass	1,769	2,397	641	619	-20.2	35.5	-3.5	0.7	0.9
Iron & Steel	4,974	4,222	1,358	992	-14.0	-15.1	-27.0	2.0	1.6
<i>Ordinary Steel</i>	<i>4,211</i>	<i>3,484</i>	<i>1,064</i>	<i>688</i>	<i>-10.6</i>	<i>-17.3</i>	<i>-35.3</i>	<i>1.7</i>	<i>1.3</i>
Non-Ferrous Metals	1,914	2,747	1,051	1,143	-30.5	43.5	8.8	0.8	1.1
General Machinery	4,557	4,991	912	893	-28.3	9.5	-2.1	1.9	1.9
Electric Machinery	19,817	26,687	4,254	4,531	-0.0	34.7	6.5	8.2	10.2
<i>Electric Devices, etc.</i>	<i>12,882</i>	<i>18,885</i>	<i>3,563</i>	<i>3,798</i>	<i>3.2</i>	<i>46.6</i>	<i>6.6</i>	<i>5.3</i>	<i>7.2</i>
Precision Machinery	1,078	1,659	343	279	-29.2	54.0	-18.7	0.4	0.6
Transportation	13,784	14,761	2,270	2,017	-19.2	7.1	-11.2	5.7	5.7
<i>Automobiles</i>	<i>12,957</i>	<i>13,972</i>	<i>2,176</i>	<i>1,930</i>	<i>-18.6</i>	<i>7.8</i>	<i>-11.3</i>	<i>5.3</i>	<i>5.3</i>
Other Manufacturing	5,400	5,596	1,073	944	-19.2	3.6	-12.0	2.2	2.1
Non-Manufacturing	170,100	177,641	88,507	80,043	-5.0	4.4	-9.6	70.1	68.0
<i>except Electric power</i>	<i>131,232</i>	<i>137,628</i>	<i>57,339</i>	<i>50,039</i>	<i>-4.8</i>	<i>4.9</i>	<i>-12.7</i>	<i>54.1</i>	<i>52.7</i>
Construction	1,957	1,736	515	462	-35.0	-11.3	-10.4	0.8	0.7
Wholesale & retail	12,633	13,622	5,765	3,656	-8.5	7.8	-36.6	5.2	5.2
Retail	9,821	11,204	4,836	2,970	-6.9	14.1	-38.6	4.0	4.3
Real Estate	9,600	8,973	4,492	2,754	-19.2	-6.5	-38.7	4.0	3.4
Transportation	18,462	20,753	9,051	5,822	-2.7	12.4	-35.7	7.6	7.9
<i>Railways</i>	<i>12,526</i>	<i>14,708</i>	<i>5,306</i>	<i>3,175</i>	<i>0.9</i>	<i>17.4</i>	<i>-40.2</i>	<i>5.2</i>	<i>5.6</i>
<i>Marine Transport</i>	<i>688</i>	<i>393</i>	<i>314</i>	<i>112</i>	<i>-48.7</i>	<i>-42.8</i>	<i>-64.5</i>	<i>0.3</i>	<i>0.2</i>
<i>Airlines</i>	<i>2,175</i>	<i>1,261</i>	<i>773</i>	<i>524</i>	<i>13.1</i>	<i>-42.0</i>	<i>-32.2</i>	<i>0.9</i>	<i>0.5</i>
<i>Warehousing, etc.</i>	<i>1,863</i>	<i>2,975</i>	<i>2,191</i>	<i>1,606</i>	<i>20.8</i>	<i>59.7</i>	<i>-26.7</i>	<i>0.8</i>	<i>1.1</i>
Electric Power & City Gas	42,073	43,764	34,875	33,097	-6.3	4.0	-5.1	17.3	16.8
<i>Electric Power</i>	<i>38,868</i>	<i>40,013</i>	<i>31,169</i>	<i>30,004</i>	<i>-5.6</i>	<i>2.9</i>	<i>-3.7</i>	<i>16.0</i>	<i>15.3</i>
<i>City Gas</i>	<i>3,205</i>	<i>3,751</i>	<i>3,707</i>	<i>3,093</i>	<i>-14.1</i>	<i>17.0</i>	<i>-16.6</i>	<i>1.3</i>	<i>1.4</i>
Telecom & Information	37,269	38,415	13,027	13,093	-12.5	3.1	0.5	15.4	14.7
Leasing	42,731	45,091	19,960	20,542	7.6	5.5	2.9	17.6	17.3
Services	5,011	4,941	703	538	38.9	-1.4	-23.4	2.1	1.9
Other Non-Manufacturing	364	346	118	79	-8.0	-5.2	-33.1	0.2	0.1

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

Other non-Manufacturing industries includes Fishing, Mining and Others.

## Revision of Planned Capital Spending

In comparison with the previous survey (February 2000), investment was revised upwards in both the manufacturing sector (up 9.8%) and the non-manufacturing sector (up 1.1%). This means an overall upward revision of 3.7% for the first time in three years. In particular, revision rates in the manufacturing sector are at high levels for the first time since 1990 (10.8%).

### Comparison with the February 2000 Survey

(Units: 100 million yen, %)

	FY 1999 Survey (2,862 firms)			FY 2000 Survey (2,862 firms)		
	Capital Spending		Revision Rate	Capital Spending		Revision Rate
	Feb.00 (Est.)	Aug.00 (Actual)	Feb.00/Aug.00	Feb.00 (Planned)	Aug.00 (Planned)	Feb.00/Aug.00
Total	249,367	238,412	-4.4	247,028	256,080	3.7
<i>(except Electric Power)</i>	<i>(206,416)</i>	<i>(199,545)</i>	<i>(-3.3)</i>	<i>(202,204)</i>	<i>(216,067)</i>	<i>(6.9)</i>
Manufacturing	72,935	70,084	-3.9	73,173	80,365	9.8
Non-Manufacturing	176,432	168,328	-4.6	173,855	175,715	1.1
<i>(except Electric Power)</i>	<i>(133,481)</i>	<i>(129,461)</i>	<i>(-3.0)</i>	<i>(129,031)</i>	<i>(135,702)</i>	<i>(5.2)</i>
<i>(Electric Power)</i>	<i>(42,951)</i>	<i>(38,868)</i>	<i>(-9.5)</i>	<i>(44,824)</i>	<i>(40,013)</i>	<i>(-10.7)</i>

Revision rate= { This survey ( Aug.2000 ) / Previous survey ( Feb.2000 )-1} × 100



## Investments in Information Technology (Classified According to Principal Business Sector)

This is DBJ's first survey on investment in information technology, and 1,763 firms gave valid responses. (proportion of valid responses 50.4%).

Both the manufacturing sector (up 18.8%) and the non-manufacturing sector (up 15.4%) are planning increases investment in information technology by two digits, leading to an increase (up 16.6%) for the entire industrial sector, which far exceed the growth rate of capital spending (4.4%).

(Note) Investment in information technology is the investment which firms regard as investment related to information technology. The following four items were surveyed: 'Tangible fixed assets', 'intangible fixed assets and investments' (what is capitalized, such as development cost for software), 'principal of lease contract' (not rental payment in the reference year, but principal for new contract), 'other expenses' (what is treated as expenses such as computer and office and household machinery)

### Investments in Information Technology

(Units: 100 million yen)

	Investments in Information		Growth Rate(%)		Share of IT Investments(%)		IT/Capital Spending (%)	
	FY1999 (Actual)	FY2000 (Planned)	IT	Capital Spending	FY1999 (Actual)	FY2000 (Planned)	FY1999 (Actual)	FY2000 (Planned)
	(1,763 Firms)		(1,763 Firms)					
Total	8,569	9,992	16.6	4.4	100	100	7	7.8
Manufacturing	3,027	3,596	18.8	17.8	35.3	36	11.1	11.2
Non-Manufacturing	5,543	6,396	15.4	0.5	64.7	64	5.8	6.7
By sector								
Materials Processing	888	991	11.6	17.7	10.4	9.9	8.6	8.1
Processing and Assembly	2,033	2,503	23.1	19.3	23.7	25.1	12.9	13.3
Energy Related	1,642	2,080	26.7	2.9	19.2	20.8	4.7	5.8
Non-manufacturing	4,005	4,416	10.3	-0.9	46.7	44.2	6.5	7.3

### Components of Investment (FY2000)

