Development Bank of Japan Research Report
No. 21

Survey on Planned Capital Spending for Fiscal Years 2000, 2001 and 2002 (Conducted in August 2001)

December 2001

Economic and Industrial Research Department
Development Bank of Japan

Contents

I Outline

Objectives

This survey has been conducted biannually (in February and August) since FY1956 by the Development Bank of Japan to assess major trends in the capital spending of Japanese industry.

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 (except that "information technology investment" includes intangible fixed assets as indicated later.)

Survey Methods

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

Capital spending has been calculated based on construction. 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).

Target Firms

This survey covers all private firms in Japan's major industries capitalized at ¥1 billion or more.

However, it excludes agriculture, forestry, finance and insurance, and medicine. 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 System of National Accounts (SNA).

Date of Survey

August 10, 2001

Contents of the Survey

(i) Actual capital spending in FY2000 and planned capital spending for FY2001 and FY2002, (ii) Details of individual construction projects in each of the above years, (iii) Anticipated revenue and expenditure in FY2000 and FY2001, (iv) Investment motives in FY2000 and FY2001, (v) Trends in land investment in FY2000, FY2001 and FY2002, (vi) Capital spending abroad in FY2000 and FY2001, and (vii) Information technology investment in FY2000 and FY2001.

Responses

The responses to the survey are shown below. In terms of the number of targeted firms and respondents, this survey is the largest among similar national surveys on the trend of capital spending.

	No. of Firms Targeted	No. of Firms Giving Valid Responses	Proportion of Valid Responses
Principle Business Classification	3,539	3,096	87.5%
Investment Specific Classification	4,295	3,802	88.5%

On the Totals

Industrial classification

There are two types of industrial classification: principal business classification and investment specific classification. The former classifies and totals the companies' responses based on the main business interest of each company, while the latter classifies and totals the amount of investment for each business department in a company's response according to industrial sector.

As a rule, the investment-specific classification is used for the analysis, but the principal business classification is adopted in some cases.

Timing of survey and years covered

The survey is conducted twice a year, in February and in August. Since each fiscal year is surveyed five times until the planned investments are materialized, the results reveal business sentiments in minute detail, through the extent to which planned investments have been modified for example.

Targeted FY / Timing of survey	1998	1999	2000	2001	2002
August 1999	Actual	Modified plan	Plan for next FY		
February 2000		Actual expected	Initial plan		
August 2000		Actual	Modified plan	Plan for next FY	
February 2001			Actual expected	Initial plan	
August 2001			Actual	Modified plan	Plan for next FY
February 2002				Actual expected	Initial plan

Capital Spending Faces an Adjustment Phase

Steady investment in IT on the user side, and research and development

II Summary

1. Overall Condition

Overall actual capital spending for all industries in FY2000 was up 4.1%, the first increase in four years. (All figures are based on construction; the rate of growth or decline is based on a comparison with the previous year's figures.) Planned capital spending for FY2001 shows an increase in the manufacturing sector (up 6.2%) but a turning to a decrease in the non-manufacturing sector (down 2.0%), meaning only a slight increase (0.6%) for all industries.

2. Actual Capital Spending for FY2000

Looking at actual capital spending for FY2000, there were downward revisions in most industrial sectors after the previous survey (February 2001), but the overall figure was up 4.1%, the first increase in four years, led by substantial growth in the manufacturing sector.

3. Planned Capital Spending for FY2001

Planned capital spending for FY2001 shows an increase in the manufacturing sector but a turn to decrease in the non-manufacturing sector, providing an overall planned investment increase of only 0.6%.

In the manufacturing sector (up 6.2%), investment as planned will show double-digit decreases in electric machinery and electro-devices. However, planned capital spending shows increases for chemicals, automobiles, non-ferrous metals and general machinery, led respectively by investments in high value-added products, new models, optical parts and digital equipment including office and household equipment.

In the non-manufacturing sector (down 2.0% overall), increases in spending are planned in telecommunications & information, as well as in electric power (despite a subdued tone), thanks to construction works related to independent power producers (IPP). In contrast, decreases in capital spending are expected in wholesale & retail, due mainly to reaction to the previous accelerated establishment of new outlets promoted by promulgation of the Large-Scale Retail Stores Law; in real estate business, due to the curtailment of spending in retail business-related and local projects; and in railways, due to completion of both construction of new railway lines and expansion of existing railways lines in the Tokyo metropolitan area.

In comparison to the previous survey (February 2001), investment was revised upwards in both the manufacturing sector (up 1.3%) and the non-manufacturing sector (up 1.0%). Although this means an overall upward revision for two years running, the total increase of 1.1% is minor.

Year-on-year comparison in FY2001 shows an overall increase of 8.1% in the first half, but a decline of 5.6% in the second half.

Looking at the respective shares of different motives for investing in manufacturing, the share of "product development and upgrading" remains low in the materials sub-sector but is rising in the processing & assembly sub-sector, led by electric machinery. The share of "research and development" is rising in both sub-sectors—led by chemicals, particularly pharmaceuticals, and non-ferrous metals in the materials sub-sector, and by electric machinery, automobiles, general machinery and precision machinery in processing & assembly. As a result of this broad-based increase, the share of "research and development" is rising in the manufacturing sector as a whole. In contrast, the share of "expansion of production capacity" is lower, mainly due to curtailed investments related to semiconductors in electric machinery.

Planned land investment is lower in both the manufacturing and non-manufacturing sectors, down 31.5% overall from the previous year. However, land investment tends to be subject to substantial upward revision after the planning stage.

Turning to capital spending abroad, the ratio of capital spending abroad to domestic capital spending reached 33.6% in FY2000 and 30.5% in FY2001 in the manufacturing sector, to which most of the respondents belong, thanks to the growth in investments in the US and Asia.

The domestic capital spending of foreign-affiliated firms shows an increase of 17.1% overall, despite a substantial decline for the service sector due to the completion of large-scale theme parks, as spending will increase in transport equipment and telecommunications & information, and will maintain the level of the previous year in electric machinery. Foreign-affiliated firms now account for 5.0% of total capital spending in Japan.

Looking at information technology investment on the user side, continued increases are expected in both the manufacturing sector (up 21.4%) and the non-manufacturing sector (up 21.9%). Accordingly, the total for all industries will rise 21.7%, far exceeding the meager growth rate of total capital spending. Fixed intangible assets, including software development, accounted for more than a quarter of total IT investment in fiscal 2000 (26.3%).

The ratio of capital spending to cash flow (net income plus depreciation expenses) will likely fall in both the manufacturing sector and the non-manufacturing sector to record low levels.

4. Features of Planned Capital Spending for FY2001

IT-related investment on the equipment supply side may be further revised downwards in electro-devices, as market conditions deteriorate for general-use memories and other items. This might cause a ripple effect in related industries. On the other hand, investment in IT-related infrastructure is slated to increase in telecommunications & information, mainly for next-generation portable phones and high-speed Internet networks. IT investment on the user side, mainly for improving the efficiency of corporate businesses, is poised to continue to increase in both the manufacturing and non-manufacturing sectors. The willingness to invest is still strong, mainly in production management systems for manufacturing and in multi-functional terminals in retail and meter reading systems in electric power for non-manufacturing.

As regards investment motives, the share of "research and development" is increasing to the detriment of "expansion of production capacity." Forward-looking investment seems to remain firm, as the share of "research and development" is rising in automobiles as well as in chemicals, including pharmaceuticals.

Elsewhere, investments related to business restructuring are gaining momentum to cope with harsh competition and the globalization of management, such as spending on the consolidation of production systems observed in parts of the automobile and chemical industries, and investments in the consolidation of distribution facilities in the petroleum industry.

5. Planned Capital Spending for FY2002

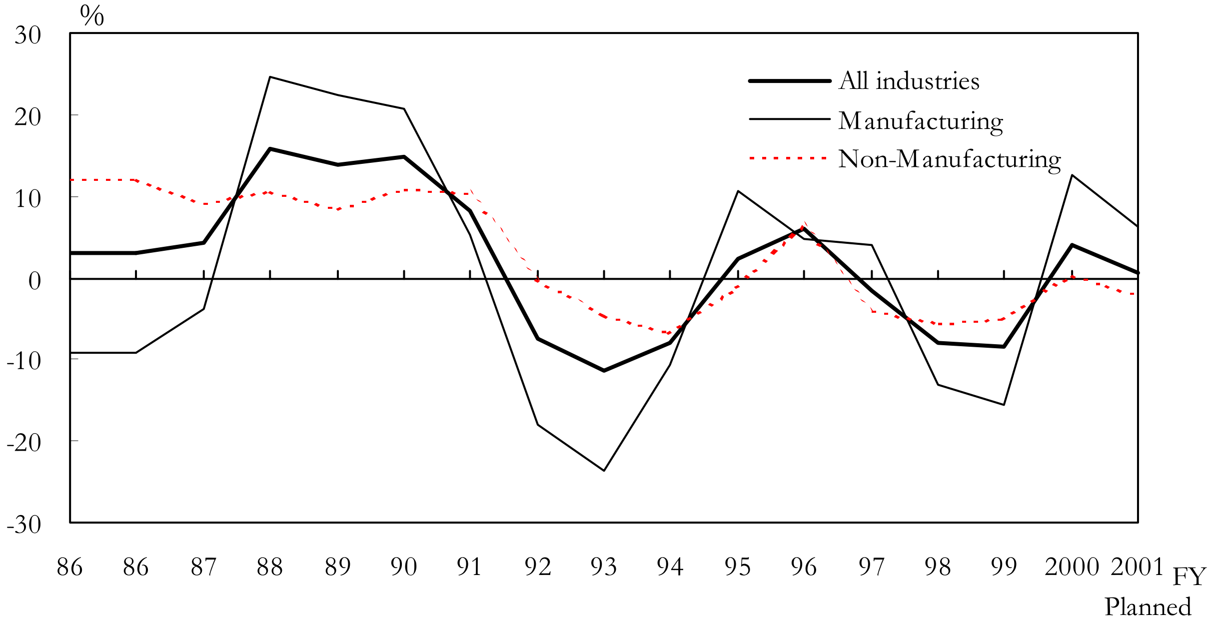
Planned capital spending for FY2002 shows an overall increase of 1.4%, although many investment projects still remain uncertain in both the manufacturing (down 9.2%) and non-manufacturing (up 3.4%) sectors.

Capital Spending

	FY2000 (2,842 firms)			FY2001 (3,096 firms)			FY2002 (1,512 firms)		
	FY1999 Actual	FY2000 Actual	Growth Rate 2000/99	FY2000 Actual	FY2001 Planned	Growth Rate 2001/2000	FY2001 Planned	FY2002 Planned	Growth Rate 2002/2001
Total	234,150	243,746	4.1	251,604	253,176	0.6	91,715	93,026	1.4
Excluding Electric Power	*195,283*	*208,568*	*6.8*	*216,426*	*217,416*	*0.5*	*63,897*	*66,191*	*3.6*
Manufacturing	70,944	79,822	12.5	81,653	86,686	6.2	14,350	13,030	-9.2
Non-Manufacturing	163,207	163,924	0.4	169,951	166,490	-2.0	77,364	79,996	3.4
Excluding Electric Power	*124,339*	*128,746*	*3.5*	*134,773*	*130,730*	*-3.0*	*49,546*	*53,162*	*7.3*
Electric Power	*38,868*	*35,178*	*-9.5*	*35,178*	*35,760*	*1.7*	*27,818*	*26,834*	*-3.5*

Note: Monetary amounts are in 100 million yen.

Growth of Capital Spending



Capital Spending, by Industry

	Capital Spending (100 million yen)				Growth Rate (%)			Component Rate (%)	
	FY2000 (Actual)	FY2001 (Planned)	FY2001 (Planned)	FY2002 (Planned)	2000/99	2001/2000	2002/2001	FY2000 (Actual)	FY2001 (Planned)
	(3,096 firms)		(1,512 firms)					(3,096 firms)	
Total	251,604	253,176	91,715	93,026	4.1	0.6	1.4	100.0	100.0
Excluding Electric Power	*216,426*	*217,416*	*63,897*	*66,191*	*6.8*	*0.5*	*3.6*	*86.0*	*85.9*
Manufacturing	81,653	86,686	14,350	13,030	12.5	6.2	-9.2	32.5	34.2
Food & Beverages	5,630	5,783	1,202	1,041	-3.2	2.7	-13.4	2.2	2.3
Textiles	681	765	129	115	-19.8	12.4	-11.0	0.3	0.3
Paper & Pulp	2,252	2,675	728	425	24.2	18.8	-41.6	0.9	1.1
Chemicals	10,388	11,989	2,182	2,004	10.1	15.4	-8.2	4.1	4.7
Organic Chemicals	*4,548*	*5,222*	*1,099*	*1,121*	*5.6*	*14.8*	*2.0*	*1.8*	*2.1*
Pharmaceuticals	*2,337*	*2,722*	*574*	*477*	*19.8*	*16.5*	*-16.9*	*0.9*	*1.1*
Petroleum	936	1,405	838	1,096	-36.8	50.1	30.9	0.4	0.6
Cement, Ceramics & Glass	2,494	2,618	278	219	37.1	5.0	-21.2	1.0	1.0
Iron & Steel	3,925	4,518	1,291	1,343	-21.1	15.1	4.1	1.6	1.8
Ordinary Steel	*3,226*	*3,777*	*892*	*913*	*-23.4*	*17.1*	*2.3*	*1.3*	*1.5*
Non-Ferrous Metals	3,140	4,012	594	652	64.3	27.8	9.8	1.2	1.6
General Machinery	4,385	4,999	540	502	0.6	14.0	-7.0	1.7	2.0
Electric Machinery	27,262	25,546	3,950	3,190	38.7	-6.3	-19.2	10.8	10.1
Electric Devices	*20,741*	*18,085*	*3,142*	*2,438*	*60.5*	*-12.8*	*-22.4*	*8.2*	*7.1*
Precision Machinery	1,515	1,711	115	115	34.2	12.9	0.4	0.6	0.7
Transportation	13,244	14,549	1,567	1,581	-3.7	9.9	0.9	5.3	5.7
Automobiles	*12,515*	*13,739*	*1,428*	*1,452*	*-3.2*	*9.8*	*1.7*	*5.0*	*5.4*
Other Manufacturing	5,802	6,116	937	747	5.3	5.4	-20.4	2.3	2.4
Non-Manufacturing	169,951	166,490	77,364	79,996	0.4	-2.0	3.4	67.5	65.8
Excluding Electric Power	*134,773*	*130,730*	*49,546*	*53,162*	*3.5*	*-3.0*	*7.3*	*53.6*	*51.6*
Construction	1,695	1,570	510	419	-5.4	-7.4	-18.0	0.7	0.6
Wholesale & Retail	14,190	11,041	4,192	4,361	6.6	-22.2	4.0	5.6	4.4
Retail	*11,579*	*8,909*	*3,372*	*3,635*	*10.4*	*-23.1*	*7.8*	*4.6*	*3.5*
Real Estate	12,158	8,436	3,805	4,262	17.7	-30.6	12.0	4.8	3.3
Transportation	17,721	17,574	5,621	8,390	-5.0	-0.8	49.3	7.0	6.9
Railways	*12,734*	*10,825*	*2,380*	*5,195*	*-0.1*	*-15.0*	*118.3*	*5.1*	*4.3*
Marine Transport	*382*	*395*	*223*	*226*	*-41.8*	*3.3*	*1.7*	*0.2*	*0.2*
Airlines	*1,686*	*1,727*	*91*	*85*	*-24.3*	*2.4*	*-6.8*	*0.7*	*0.7*
Warehousing	*1,672*	*3,228*	*2,480*	*2,506*	*-10.8*	*93.0*	*1.1*	*0.7*	*1.3*
Electric Power & City Gas	38,351	38,877	30,879	29,730	-8.9	1.4	-3.7	15.2	15.4
Electric Power	*35,178*	*35,760*	*27,818*	*26,834*	*-9.5*	*1.7*	*-3.5*	*14.0*	*14.1*
City Gas	*3,173*	*3,117*	*3,060*	*2,896*	*-2.1*	*-1.8*	*-5.4*	*1.3*	*1.2*
Telecom. & Information	39,525	41,942	8,408	8,616	2.1	6.1	2.5	15.7	16.6
Leasing	40,772	42,803	22,773	23,415	5.4	5.0	2.8	16.2	16.9
Services	5,226	3,672	1,135	765	3.7	-29.7	-32.6	2.1	1.5
Other Non-Manufacturing	314	575	42	38	-13.9	83.3	-10.8	0.1	0.2

Notes: Other Manufacturing industries include Publishing & Printing, Rubber, Metal Products, and Others. Other Non-Manufacturing industries include Fishing, Mining, and Others.

III Survey Results

1. Actual Capital Spending for FY2000

Outline

Overall actual capital spending for FY2000 increased in both the manufacturing and non-manufacturing sectors, resulting in growth of 4.1%, the first increase in four years.

In the manufacturing sector (up 12.5%), spending declined in iron & steel due to the completion of large-scale investment projects in the previous year, as well as in petroleum and automobiles. However, investment grew significantly in electric machinery, led by capacity investment in electro-devices including semiconductors and liquid crystals, thus inducing substantial increases in spending in related industries such as precision machinery, non-ferrous metals, and cement, ceramics & glass. On balance, the manufacturing sector experienced its first increase in capital spending in three years.

In the non-manufacturing sector (up 0.4%), spending increased in real estate and wholesale & retail, primarily due to the accelerated establishment of outlets ahead of the promulgation of the Large-Scale Retail Stores Law. Spending also increased in telecommunications & information thanks to the start of investments in system renewals, as well as in leasing, which accounts for a major part of investment in the sector, thus resulting in the first increase in non-manufacturing capital spending in four years.

Trends by Industrial Sub-Sector

The trends in actual capital spending for FY2000, classified according to industrial sub-sector, are as follows. (Numbers in curly brackets { } show the percentage of total capital spending accounted for by each sub-sector.)

Materials (up 10.0%) {9.2%}

Total capital spending in the materials industries increased for the first time in three years, as double-digit growth was recorded in the chemical industry, which represents a large portion of spending in the materials sub-sector. Spending also turned to a significant increase in non-ferrous metals, and cement, ceramics & glass thanks to capital investment related to information technology, as well as in paper & pulp, with investments accompanying the consolidation of production centers.

In iron & steel, spending continued to decline, due to the completion of large-scale investment projects in the previous year, while textiles experienced a decline in capital investment for a third consecutive year.

In the chemical industry, on the other hand, capital spending increased for the first time in three years, recording double-digit growth due to investments in high value-added products in organic chemicals and plant construction in pharmaceuticals. Spending increased in non-ferrous metals for the first time in three years, due to investments related to optical parts and 300mm wafers, whereas cement, ceramics & glass saw an increase in capital spending for the first time in five years, led by capacity investments in glass for LC display and ceramic products. The paper & pulp industry experienced its first substantial growth in three years, thanks to expansion in paper manufacturing machinery accompanying the consolidation of production centers for raw corrugated paper and whiteboard paper as well as investments related to environmental conservation.

Processing & Assembly (up 15.1%) {23.2%}

Spending in the processing & assembly industries rose substantially for the first time in three years, despite declines in that for automobiles and food & beverages, as investment in electric machinery and precision machinery increased significantly. Capital spending in general machinery also turned to a slight increase.

Spending in automobiles declined for the third year running due to general curbs on investment, although some investments were observed concerning new models and business restructuring. Food & beverages also recorded a decline for the third consecutive year.

In electric machinery, continued spending cutbacks in electronic and electrical equipment were more than offset by a significant increase in investment in electro-devices, which accounts for more than half of the investment in this industry, led by capacity investment in semiconductors and liquid crystals and other electronic parts. As a result, the industry experienced its first significant growth in capital spending in three years. In general machinery, spending rose in office and household equipment, led by that for new products, and continued to increase in general machinery parts, due to large-scale investments to address the conceived tightness in the market. The combination more than compensated for declines in other parts of the industry, and as a whole, capital spending in general machinery recorded a slight increase.

Energy (down 9.9%) {16.2%}

The energy sub-sector recorded a decrease in capital spending for the seventh consecutive year.

Spending in the electric power industry decreased for the seventh year running as Japan's nine major electric power companies revised their investment downwards amidst an underlying trend toward curbs on investment. In the gas industry as well, investment in production and distribution facilities was revised downwards and spending decreased for the fifth consecutive year. Spending in petroleum was cut back for the eighth year running, as investments for the reduction of benzene content in gasoline had been completed.

Non-Manufacturing, excluding Energy (up 3.7%) {51.5%}

Despite cutbacks in transportation and construction, total spending in non-manufacturing excluding energy rose for the first time in four years, reflecting growth in leasing, real estate, wholesale & retail, telecommunications & information, and services.

In transportation, spending decreased due to controls on the purchase of new aircraft and to the completion of the construction of LNG ships. Capital spending in construction declined for the eighth straight year.

Meanwhile, capital spending continued to increase in leasing, thanks mainly to asset purchases; increased for the first time in three years in real estate, primarily due to progress in large-scale projects in the Tokyo metropolitan area; and grew for the first time in four years in wholesale & retail with the accelerated establishment of outlets by supermarkets and other stores prior to the promulgation of the Large-Scale Retail Stores Law. In telecommunications & information, spending turned up despite declines in that for fixed phones, satellite communication, and information services as demand increased for portable phones and investments were made in next-generation systems. Spending in services declined for the second year running as investment in a large-scale theme park in the Tokyo waterfront area had passed its peak.

Capital Spending, by Industry

	Growth Rate (%)					Share (%)			
	FY1998	FY1999	FY2000	FY2001	FY2002	FY1998	FY1999	FY2000	FY2001
Materials[a]	-12.8	-21.5	10.0	16.2	-8.5	9.7	8.5	9.1	10.5
Paper & Pulp	*-33.8*	*-29.4*	*24.2*	*18.8*	*-41.6*	*1.0*	*0.7*	*0.9*	*1.1*
Chemicals	*-10.2*	*-22.4*	*10.1*	*15.4*	*-8.2*	*4.3*	*3.9*	*4.1*	*4.7*
Iron & Steel	*0.3*	*-14.0*	*-21.1*	*15.1*	*4.1*	*2.2*	*2.0*	*1.6*	*1.8*
Processing & Assembly[b]	-12.1	-12.2	15.1	1.5	-13.7	21.0	20.8	23.0	23.2
Food & Beverages	*-12.1*	*-2.7*	*-3.2*	*2.7*	*-13.4*	*2.2*	*2.4*	*2.2*	*2.3*
Electric Machinery	*-21.9*	*-0.0*	*38.7*	*-6.3*	*-19.2*	*7.2*	*8.2*	*10.8*	*10.1*
Automobiles	*-4.2*	*-18.6*	*-3.2*	*9.8*	*1.7*	*5.9*	*5.3*	*5.0*	*5.4*
Energy[c]	-9.2	-7.4	-9.9	3.1	-2.8	17.6	18.0	15.7	16.1
Petroleum	*-32.5*	*-32.3*	*-36.8*	*50.1*	*30.9*	*0.8*	*0.6*	*0.4*	*0.6*
Electric Power	*-8.0*	*-5.6*	*-9.5*	*1.7*	*-3.5*	*15.4*	*16.0*	*14.0*	*14.1*
Non-Manufacturing Excluding Energy[d]	-4.8	-4.5	3.7	-3.2	8.1	51.6	52.7	52.2	50.3
Construction	*-16.6*	*-35.0*	*-5.4*	*-7.4*	*-18.0*	*1.2*	*0.8*	*0.7*	*0.6*
Wholesale & Retail	*-1.7*	*-8.5*	*6.6*	*-22.2*	*4.0*	*4.8*	*5.2*	*5.6*	*4.4*
Real Estate	*-19.2*	*-19.2*	*17.7*	*-30.6*	*12.0*	*4.3*	*4.0*	*4.8*	*3.3*
Transportation	*-8.8*	*-2.7*	*-5.0*	*-0.8*	*49.3*	*7.0*	*7.6*	*7.0*	*6.9*
Telecom.& Information	*3.7*	*-12.5*	*2.1*	*6.1*	*2.5*	*16.4*	*15.4*	*15.7*	*16.6*
Leasing	*-6.5*	*7.6*	*5.4*	*5.0*	*2.8*	*16.5*	*17.6*	*16.2*	*16.9*
Services	*-7.1*	*38.9*	*3.7*	*-29.7*	*-32.6*	*1.3*	*2.1*	*2.1*	*1.5*
All Industries	-8.0	-8.4	4.1	0.6	1.4	100.0	100.0	100.0	100.0
Excluding Electric Power	*-8.0*	*-8.9*	*6.8*	*0.5*	*3.6*	*84.6*	*84.0*	*86.0*	*85.9*
Manufacturing	-13.0	-15.5	12.5	6.2	-9.2	31.6	29.9	32.5	34.2
Non-Manufacturing	-5.6	-5.0	0.4	-2.0	3.4	68.4	70.1	67.5	65.8
Excluding Electric Power	*-4.9*	*-4.8*	*3.5*	*-3.0*	*7.3*	*53.0*	*54.1*	*53.6*	*51.6*

Note: FY2000 and FY2001 share (%) figures are based upon 3,096 companies that responded to the survey in both years.

[a] Materials: textiles; paper & pulp; chemicals; cement, ceramics & glass; iron & steel; non-ferrous metals

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

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

[d] Non-manufacturing, excluding energy: non-manufacturing industries excluding those industries mentioned in 'energy' above

2. Planned Capital Spending for FY2001

Outline

Planned capital spending for FY2001 shows a 0.6% increase, as an increase in the manufacturing sector will be largely offset by a reduction in the non-manufacturing sector.

In the manufacturing sector (up 6.2%), spending on electro-devices is expected to record a double-digit decline in electric machinery, but increases are expected in chemicals, automobiles, non-ferrous metals, and general machinery, led respectively by high value-added products, new models, optical parts, and digital equipment for offices and households.

In the non-manufacturing sector (down 2.0%) increased investment is planned in telecommunications & information as well as in electric power, thanks to progress in construction works related to independent power producers (IPP) despite the continued subdued mood. In contrast, spending in wholesale & retail is slated to decline in reaction to the previously accelerated establishment of outlets prior to the promulgation of the Large-Scale Retail Stores Law. Capital spending will also decrease in real estate, mainly due to reduction in retail-related and local projects, as well as in railways following the completion of the construction of new lines and the expansion of existing lines in the Tokyo metropolitan area.

Trends by Industrial Sub-Sector

The trends in planned capital spending for FY2001, classified by industrial sub-sector, are as follows. (Numbers in curly brackets { } show the percentage of total planned capital spending accounted for by each sub-sector.)

Materials (up 16.2%) {10.5%}

Planned capital spending in the materials sub-sector shows an increase for the second consecutive year as double-digit growth continues in the heavy-weighted chemicals, non-ferrous metals and paper and pulp. Spending is slated to continue increasing in cement, ceramics & glass. It will increase for the first time in three years in iron & steel and for the first time in four years in textiles.

Investments in consolidation for business restructuring are slated for increase. Also, spending in chemicals is likely to be boosted by investments in high value-added products in organic chemicals and the development of plants and laboratories in pharmaceuticals and other chemicals, resulting in a double-digit increase for a second consecutive year. A second year of increased capital spending is expected in non-ferrous metals, led by investments related to optical parts and 300mm semiconductor wafers, and in paper & pulp as the dearth of investments accompanying the completion of reconstruction of paperboard production systems will be more than offset by capacity investments in Western-style paper. Spending in cement, ceramics & glass is scheduled to increase, backed by investments related to glass for LC display.

Meanwhile, planned spending in iron & steel is higher for the first time in three years, as plant and equipment repairs are expected to make headway, mainly among blast furnace steel manufacturers. In textiles, capital spending is expected to increase for the first time in four years, led by capacity investments in non-woven fabrics.

Processing & Assembly (up 1.5%) {23.2%}

Capital spending in the processing & assembly sub-sector is expected to record a small growth, despite a downturn in electric machinery from a spectacular increase in the previous year, as upturns are expected in automobiles and food & beverages. An increase is also expected in general and precision machinery.

In the electric machinery industry, spending in electro-devices, which accounts for more than half of the spending in the industry, is expected to start to decrease due to the deteriorating market environment, with substantial semiconductor-related investments cutbacks and the completion of investments related to liquid crystals, resulting in a decline for the whole industry.

In automobiles, continued checks on domestic investments are expected to be more than offset by increases in four-wheeled vehicles, led by investments in new models, in business reconstruction, and in parts and bodies in line with the investments in new models. On balance, capital investment in the industry is slated to increase for the first time in four years. Investment is planned to slightly increase in food & beverages, with contributions chiefly coming from flour milling, sugar manufacturing, and edible oils. In general machinery, an anticipated downturn in general machinery parts is expected to be more than compensated for by increases in office and household equipment and other sectors of the industry. Finally, capital spending is slated to continue to increase in precision machinery, led by that for semiconductor manufacturing devices in line with investments in next-generation products.

Energy (up 3.1%) {16.1%}

The energy sub-sector is expected to show growth for the first time in eight years.

In the electric power industry, spending is slated to increase as independent power producers and nuclear fuel-related businesses make headway, despite continued declines in the nine major electric power companies in line with the peaking of investments in thermal power generation. Planning in the gas sub-sector shows an expected upturn in city gas being cancelled out by substantial declines, mainly in the exclusive LNG business and heat supply, resulting in a sixth consecutive year of decline overall. On the other hand, the first increase in nine years is expected in petroleum, thanks to the consolidation of distribution facilities and active investments in environmental conservation measures such as light oil desulfurization.

Non-Manufacturing, excluding Energy (down 3.2%) {50.3%}

Looking at the non-manufacturing sector, excluding energy, continued increases in spending are planned in telecommunications & information and leasing, but spending looks set to decline in real estate, services, wholesale & retail, construction, and transportation. On balance, capital spending in the sub-sector as a whole is expected to fall.

In telecommunications & information, spending is scheduled to increase for a second consecutive year, led by investments in next-generation portable phones and high-speed Internet networks in communications, as well as by spending on new office construction and digitalization in information services and broadcasting. The leasing industry anticipates increased demand for information-related equipment and the replacement of equipment through leasing.

Capital spending will show a substantial decline in real estate, services, and wholesale & retail, respectively due to the slowdown in local projects and establishment of retail outlets, to the completion of a large-scale theme park in the Tokyo waterfront area, and to reaction to the stepped-up establishment of outlets prior to the promulgation of the Large-Scale Retail Stores Law. The restrained mood will continue in construction, resulting in a decline in investment for the ninth year running. Spending in transportation will start to decrease as a whole despite increased investments in airport construction and the like as major projects will be completed for the construction of new railway lines and the expansion of existing lines.

Trends and Features of Capital Spending in FY2001, by Industry

Trends and features of capital spending for main industries are shown below. The figures in parentheses ( ) indicate changes in the rate of growth in capital spending for the industry in question between FY2000 and FY2001. The figures in curly brackets { } show the percentage of total planned spending for FY2001 accounted for by each industry.

Materials

Chemicals (10.1% → 15.4%) {4.7%}

In addition to investments in consolidation for business reconstruction, spending will post a double-digit increase in organic chemicals, led by investments in high value-added products, as well as in pharmaceuticals and other chemicals thanks to the development of plants and laboratories. Increased spending is also expected in inorganic chemicals. Combining all of these factors, capital spending in the chemical industry as a whole is expected to rise for a second consecutive year.

Iron & Steel (-21.1% → 15.1%) {1.8%}
Capital spending will increase for the first time in three years on the back of equipment repairs, mainly among blast furnace steel manufacturers and some construction works left over from the previous year.

Non-Ferrous Metals (64.3% → 27.8%) {1.6%}
Thanks to investments related to optical parts and 300mm silicon wafers, capital spending in the industry will increase for a second consecutive year, albeit at a slower pace.

Paper & Pulp (24.2% → 18.8%) {1.1%}
Despite already completed investment accompanying production system reconstruction in paperboard, the industry will record an increase in spending for a second consecutive year, led by capacity investments by some manufacturers of Western-style paper as well as by investments related to environmental conservation.

Cement, Ceramics & Glass (37.1% → 5.0%) {1.0%}
Although spending will remain restrained in cement, investment related to glass for LC displays is expected to rise. With increased spending expected in other areas related to cement, ceramics & glass, capital spending in the industry will grow.

Textiles (-19.8% → 12.4%) {0.3%}
Capital spending will start to increase, boosted by capacity investments in non-woven fabrics.

Processing & Assembly
Electric Machinery (38.7% → -6.3%) {10.1%}
Although spending is expected to increase in electronic and electrical equipment, investment in electro-devices will record a double-digit drop from the substantial growth in the previous year due to the deteriorating market environment. Thus, investments related to semiconductors will drop substantially, while LC-related investments will start to decrease with the completion of large-scale projects. On balance, capital investment is expected to decline for the industry as a whole.

Automobiles (-3.2% → 9.8%) {5.4%}
Despite continued controls on investment due in part to the shift of production overseas, capital spending in four-wheeled vehicles will increase, led by investments in new models and business reconstruction. Investments in new models will also increase capital spending in parts & bodies in spite of the difficult situation. As a result, overall capital spending in the industry is expected to rise for the first time in four years.

Food & Beverages (-3.2% → 2.7%) {2.3%}
Although spending will decrease in processed meat & dairy products and beer & other alcoholic beverages, capital spending in the industry as a whole is expected to increase thanks to both industrial restructuring in flour milling, sugar manufacturing, and edible oils, and to increased spending in other foodstuffs.

General Machinery (0.6% → 14.0%) {2.0%}
Although spending will turn down in general machinery parts following the completion of large-scale projects, spending is expected to accelerate in office and household equipment, led by new products. In addition, boilers & motors, metal processing machinery, and industrial machinery will all experience increased spending, although mainly geared toward rationalization. On balance, capital spending in the industry will increase for a second consecutive year.

Precision Machinery (34.2% → 12.9%) {0.7%}
Double-digit increase will continue in spending for measuring instruments. Spending will also increase in semiconductor manufacturing equipment, led by investments in next-generation products. As an increase is also expected in medical instruments, spending for precision machinery as a whole will increase for a second consecutive year.

Energy

Electric Power (-9.5% → 1.7%) {14.1%}
The nine major electric power companies are expected to reduce their spending as the construction of thermal power plants has peaked and the distribution sector will cut back on investment. However, spending increases are expected in other parts of the industry, thanks to progress in the independent power producers and nuclear fuel businesses, thus leading to an increase for the industry as a whole.

Gas (-2.1% → -1.8%) {1.2%}
Although increased spending by some city gas suppliers is expected, led by investments in supply facilities for shifting to LNG, overall investment in LNG and heat supplies will decline, primarily due to the completion of large-scale projects. On balance, capital spending in the industry as a whole will decline for the sixth year running.

Petroleum (-36.8% → 50.1%) {0.6%}
Spending on distribution facilities is expected to increase due mainly to consolidation-related investments and remodeling of service stations. Investment in environmental conservation will become active in refineries, including that for the desulfurization of light oil. Thus, the industry will experience its first increase in capital spending in nine years.

Non-Manufacturing Industries, excluding Energy

Leasing (5.4% → 5.0%) {16.9%}
Spending in leasing will increase in anticipation of increased demand for both leasing in plant and equipment replacement and for information equipment.

Telecommunications & Information (2.1% → 6.1%) {16.6%}
Telecommunications, which is the core of this industry, will see heavy investment in line with increasing demand both for next-generation cellular phones and systems, and for high-speed Internet networks in fixed communication. Spending in information services is also expected to increase, mainly due to new office construction. An increase is also expected in broadcasting, led by investments in digitalization. All in all, capital spending will rise in the industry for the second consecutive year.

Railways (-0.1% → -15.0%) {4.3%}
Capital spending will be reduced due to the completion of construction of new lines and line extensions in the Tokyo metropolitan area.

Wholesale & Retail (6.6% → -22.2%) {4.4%}
In wholesale, spending will be cut for the third straight year, as investments related to head offices will come to a halt. In retail, department stores will maintain the level of the previous year, mainly through floor expansion and remodeling. However, spending will be reduced substantially in supermarkets and other stores in reaction to the previously accelerated establishment of new outlets prior to the promulgation of the Large-Scale Retail Stores Law, and there will be some cases of store downsizing. Thus, the industry is expected to suffer a sizable drop in capital spending.

Real Estate (17.7% → -30.6%) {3.3%}
Although construction of large office buildings will continue in the Tokyo metropolitan area, spending will decline in retail-related projects in line with the expected slowdown in the establishment of new outlets and the start of local projects. Purchases of existing assets, which were active in the previous year, are also expected to drop as a result. On balance, capital spending in real estate will show a substantial decline.

Services (3.7% → -29.7%) {1.5%}
Capital spending will fall substantially, following the completion of a large theme park in the Tokyo waterfront area.

Warehousing & Transportation (-10.8% → 93.0%) {1.3%}
A substantial increase is expected, as airport construction gets underway.

Construction (-5.4% → -7.4%) {0.6%}
Capital spending will be reduced for the ninth year running as investment continues to be restrained, mainly among major general contractors.

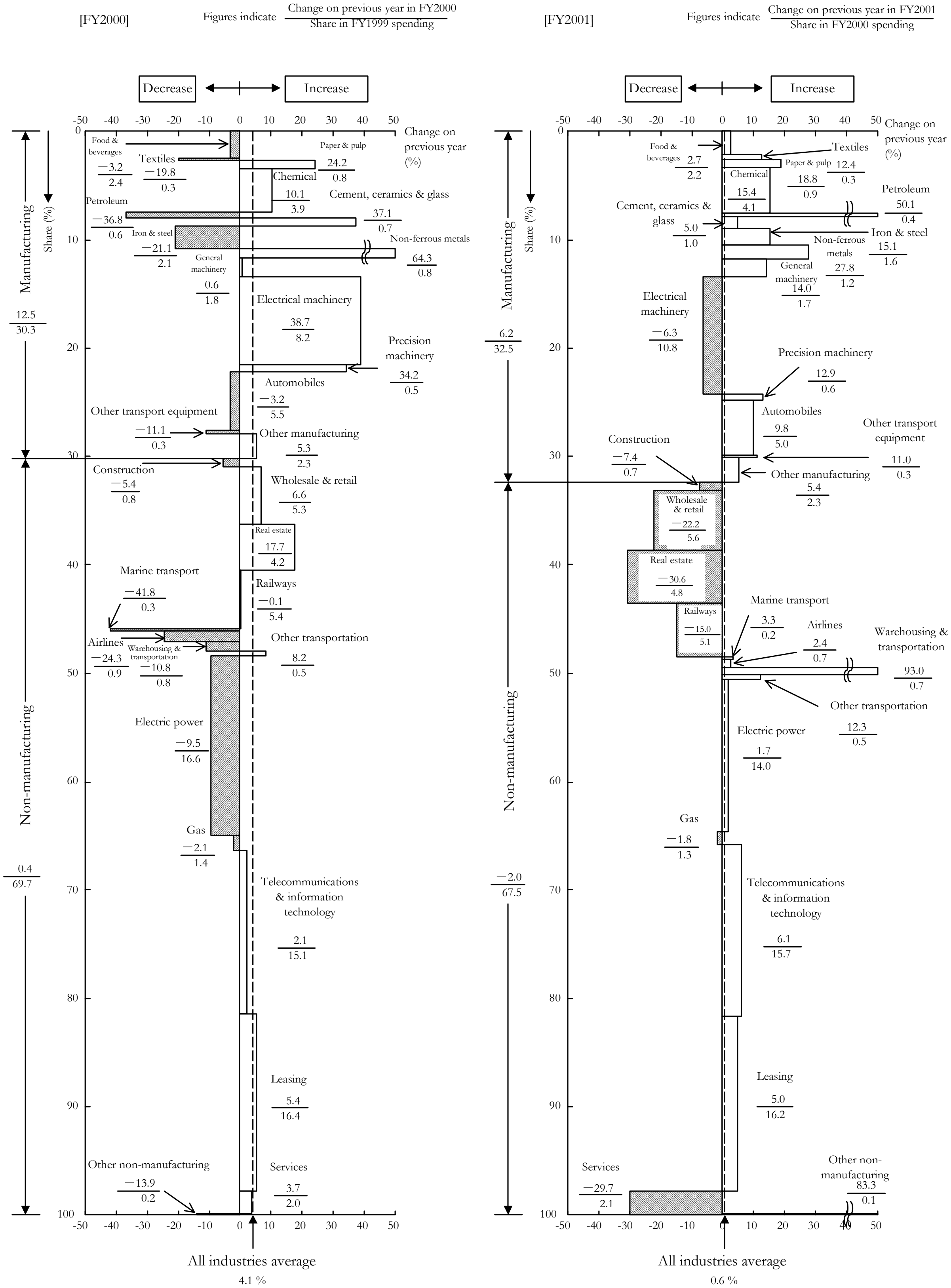
Airlines (-24.3% → 2.4%) {0.7%}
Spending will increase led by investments in aircrafts and computerization.

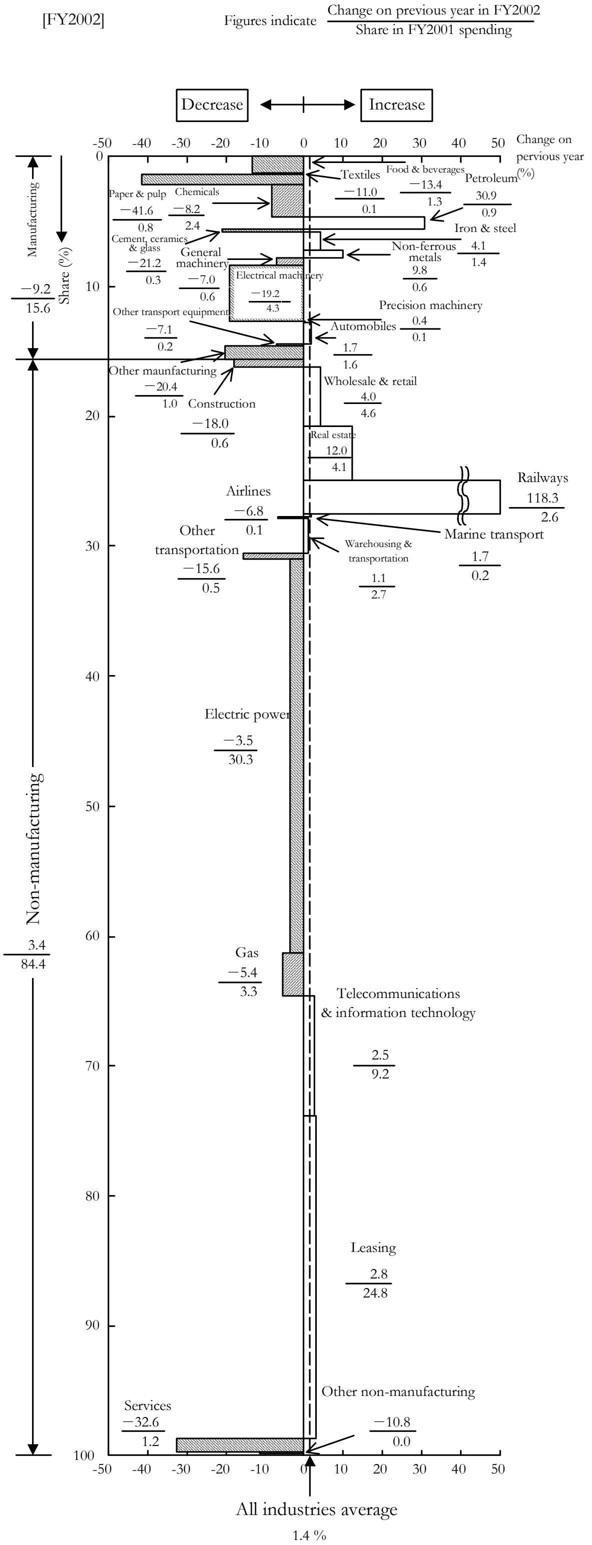
Marine Transport (-41.8% → 3.3%) {0.2%}
Although the construction of LNG transport ships will be terminated, an increase is expected in other shipbuilding, leading to positive growth overall.

3. Planned Capital Spending for FY2002

Planned capital spending for FY2002 for all industries shows an increase of 1.4%. However, in both the manufacturing sector (down 9.2%) and the non-manufacturing sector (up 3.4%), there are a large number of capital spending decisions that still have not been made.

Characteristics of Capital Spending, by Industry




[FY2002]
Figures indicate Change on previous year in FY2002 / Share in FY2001 spending
Decrease
Increase
Change on pervious year (%)
Share (%)
Manufacturing
−9.2 / 15.6
Non-manufacturing
3.4 / 84.4
Textiles −11.0 / 0.1
Food & beverages −13.4 / 1.3
Petroleum 30.9 / 0.9
Paper & pulp −41.6 / 0.8
Chemicals −8.2 / 2.4
Iron & steel 4.1 / 1.4
Cement, ceramics & glass −21.2 / 0.3
General machinery −7.0 / 0.6
Non-ferrous metals 9.8 / 0.6
Electrical machinery −19.2 / 4.3
Precision machinery 0.4 / 0.1
Other transport equipment −7.1 / 0.2
Automobiles 1.7 / 1.6
Other maunfacturing −20.4 / 1.0
Construction −18.0 / 0.6
Wholesale & retail 4.0 / 4.6
Real estate 12.0 / 4.1
Railways 118.3 / 2.6
Airlines −6.8 / 0.1
Marine transport 1.7 / 0.2
Other transportation −15.6 / 0.5
Warehousing & transportation 1.1 / 2.7
Electric power −3.5 / 30.3
Gas −5.4 / 3.3
Telecommunications & information technology 2.5 / 9.2
Leasing 2.8 / 24.8
Services −32.6 / 1.2
Other non-manufacturing −10.8 / 0.0
All industries average 1.4 %

4. Investment Motives

Investment Motives in the Manufacturing and Non-Manufacturing Sectors in FY2001

Looking at the respective shares of each category of investment motive for the manufacturing sector in FY2001 one finds increases in "product development and upgrading," "research and development" and "maintenance" as well as a huge drop in the share of "expansion of production capacity."

In the non-manufacturing sector, the share of "expansion of production capacity" still exceeds 50% but is declining, mainly in electric power, railways and retail. In contrast, the share of "maintenance" is increasing.

Investment Motives in the Manufacturing Sector's "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 sub-sector with the processing & assembly sub-sector. For the materials sub-sector, the motives "maintenance" and "rationalization and labor saving" are traditionally high, whereas for the processing & assembly sub-sector, "product development and upgrading" is more important.

The characteristics of investment motives for the materials industries in FY2001 are as follows:

i. Increased shares of "maintenance" (23.0% → 24.2%) and "rationalization and labor saving" (19.3% → 19.9%), with contributions from chemicals and iron & steel;

ii. A rise in the importance of "research and development" (6.9% → 7.3%) for the first time in four years, with contributions from chemicals and non-ferrous metals; and

iii. A decline in the share of "expansion of production capacity" (28.7% → 27.5%).

The significant trends for the processing & assembly sub-sector are as follows:

i. A substantial drop in the importance of "expansion of production capacity" (33.4% → 28.7%), due to a decline in electric machinery and changes in the composition of investments;

ii. A substantial increase in "product development and upgrading" (21.7% → 24.6%); and

iii. A sizable increase in "research & development" (9.1% → 11.7%), supported by a wide range of industries.

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. The share of "expansion of production capacity" has declined from 31.8% to 28.4% due to reduced investments in semiconductors and liquid crystals in electric machinery and a respite in capacity investments, mainly in cement, ceramics & glass.

For "product development and upgrading," the share has stabilized at a low level in the materials sub-sector but increased in the processing & assembly sub-sector, led by electric machinery, resulting in an increase from 16.7% to 18.3%.

Despite leveling off in the processing & assembly industries, "rationalization and labor saving" increased its share slightly from 14.7% to 15.1% thanks to increases in the materials sub-sector, including iron & steel for blast furnace repairs and paper & pulp.

For "research & development," the share increased from 8.3% to 10.0% in the manufacturing sector as a whole, led in the materials sub-sector by chemicals, including pharmaceuticals, and non-ferrous metals, including optical fiber and silicon, and in the processing & assembly sub-sector by a wide range of industries, including electric machinery, automobiles, general machinery and precision machinery.

The share of "maintenance" increased from 14.8% to 15.4% overall, led by materials industries such as chemicals and iron & steel.

Investment Motives

	Total (2,204 firms)		Manufacturing		Materials		Processing & Assembly		Non-Manufacturing	
	FY2000 Actual	FY2001 Planned	FY2000 Actual	FY2001 Planned	FY2000 Actual	FY2001 Planned	FY2000 Actual	FY2001 Planned	FY2000 Actual	FY2001 Planned
Expansion of Production Capacity	49.4	45.8	31.8	28.4	28.7	27.5	33.4	28.7	57.1	54.2
Product Development and Product Upgrading	8.1	9.5	16.7	18.3	6.8	6.8	21.7	24.6	4.3	5.1
Rationalization and Labor Saving	6.8	7.7	14.7	15.1	19.3	19.9	12.7	12.7	3.4	4.0
Research & Development	3.2	4.1	8.3	10.0	6.9	7.3	9.1	11.7	1.0	1.2
Maintenance	13.9	14.7	14.8	15.4	23.0	24.2	10.4	10.5	13.5	14.4
Others	18.6	18.3	13.7	12.8	15.3	14.3	12.9	11.8	20.7	21.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Figures are given as percentages.

5. Trends in Land Investment (Classified according to Principal Business Sector)

Actual Land Investment for FY2000

Actual land investment for FY2000 (based on figures for the 1,788 firms that gave responses regarding both FY1999 and FY2000) was down 11.6% compared with the previous year, the fourth consecutive annual decline. As the movement of assets between affiliates for business restructuring has peaked, land investment in the manufacturing sector declined 36.8% due to a respite in the purchase of industrial sites, mainly in electric machinery. In the non-manufacturing sector, the drop in land investment slowed to 2.0% thanks to investments in new airport sites in transportation and land purchases related to redevelopment, mainly in the Tokyo metropolitan area in real estate. As a result, land investment accounted for 5.8% of total capital spending (3.5% in manufacturing, 6.9% in non-manufacturing).

Planned Land Investment for FY2001

Planned land investment for FY2001 (based on figures for the 2,272 firms that gave responses regarding both FY2000 and FY2001) was down 31.5% following the peaking of investments in new airport sites in transportation, and there are no significant developments other than enhancement of the information service sector in telecommunications and information. (Land investment accounts for 3.7% of all investment planned for FY2001.)

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

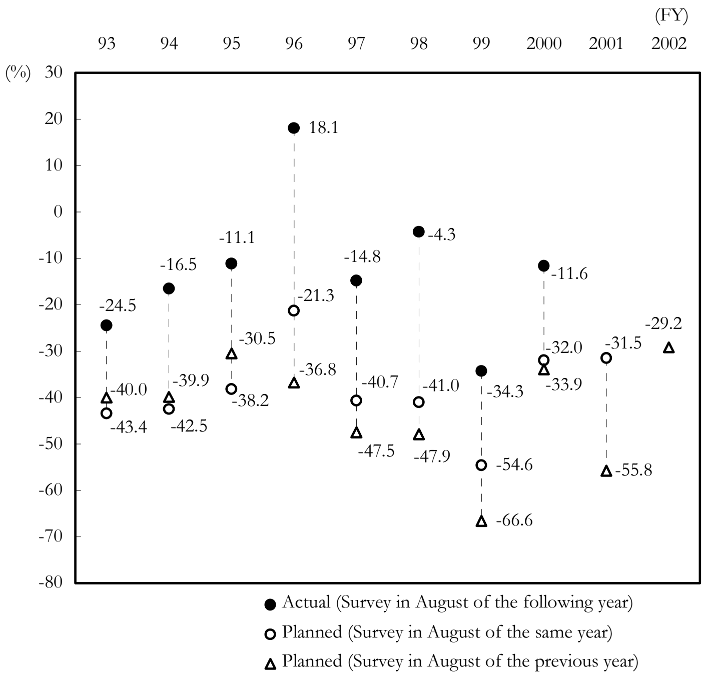
Planned Land Investment for FY2002

Planned land investment for FY2002 (based on figures for the 1,225 firms that gave responses regarding both FY2001 and FY2002) is down 29.2% from the previous year. (Land investment accounts for 3.9% of all investment planned for FY2002.) Planned land investment for FY2002 is even more subject to revision than is that for FY2001, however.

Trends in Land Investment

	FY1999 (Actual)	FY2000 (Planned)	Growth Rate (%)	FY2000 (Actual)	FY2001 (Planned)	Growth Rate (%)	FY2001 (Actual)	FY2002 (Planned)	Growth Rate (%)
	(1,788 firms)		2000/99	(2,272 firms)		2001/2000	(1,225 firms)		2002/2001
Total Investment	143,353	145,465	1.5	173,253	174,064	0.5	71,130	72,691	2.2
Investment excluding Land	133,801	137,025	2.4	163,776	167,577	2.3	67,076	69,820	4.1
Investment in Land	9,552	8,440	-11.6	9,476	6,488	-31.5	4,054	2,871	-29.2
Share of Land (%)	*6.7*	*5.8*		5.5	*3.7*		*5.7*	*3.9*	
Manufacturing									
Total Investment	43,816	47,264	7.9	55,533	61,910	11.5	11,362	10,147	-10.7
Investment excluding Land	41,179	45,598	10.7	53,552	60,944	13.8	11,150	10,044	-9.9
Investment in Land	2,637	1,666	-36.8	1,981	966	-51.3	212	104	-51.0
Share of Land (%)	*6.0*	*3.5*		*3.6*	*1.6*		*1.9*	*1.0*	
Non-Manufacturing									
Total Investment	99,537	98,201	-1.3	117,720	112,155	-4.7	59,768	62,544	4.6
Investment excluding Land	92,622	91,426	-1.3	110,225	106,633	-3.3	55,926	59,776	6.9
Investment in Land	6,915	6,775	-2.0	7,495	5,522	-26.3	3,842	2,768	-28.0
Share of Land (%)	6.9	6.9		6.4	4.9		6.4	4.4	

Growth Rate of Total Investment in Land by All Industries



6. Capital Spending Abroad (Classified according to Principal Business Sector)

Capital spending abroad

Capital spending abroad* in all industries will rise 3.9% from ¥1,123.0 billion in FY2000 to ¥1,166.9 billion in FY2001 (based on figures for the 1,178 firms that gave responses regarding both FY2000 and FY2001). (Capital spending abroad by the manufacturing sector will increase by 2.5%, while that by the non-manufacturing sector will rise by 12.0%.) In the manufacturing sector, which accounts for 85% of capital spending abroad in the survey responses, there is a decline in spending of 10.2% for the materials industries, mainly in chemicals, whereas in the processing & assembly sub-sector, investment will record a growth of 7.5%, mainly due to active spending in transport equipment in the US. In the non-manufacturing sector, increases in industries such as leasing, telecommunications & information, wholesale & retail, and construction will contribute to a 12.0% increase overall.

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

The ratio of capital spending abroad to domestic capital spending for the manufacturing sector (based on figures for the 544 firms that gave responses regarding both FY2000 and FY2001) stands at 33.6% for FY2000 and 30.5% for FY2001. For FY2001, there is a decline from 32.5% to 25.2% in the materials sub-sector, due mainly to drops in chemicals and non-ferrous metals. For the processing & assembly industries, the ratio stays almost unchanged, from 34.8% to 33.9%, with active investments in the US in automobiles being offset by an investment decline in electric machinery.

Capital Spending Overseas, by Region

		Amount				Change (%)
	Region	FY2000	Share	FY2001	Share	2001/2000
Capital spending overseas	US	4,923	43.8	5,269	45.2	7.0
	EU	1,474	13.1	1,317	11.3	-10.7
	Asia	3,557	31.7	3,829	32.8	7.6
	Others	1,276	11.4	1,254	10.7	-1.7
(1,178 firms)	Total	11,230	100.0	11,669	100.0	3.9

Note: Monetary amounts are in 100 million yen.

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

Out of 3,096 firms that responded to the survey for both FY2000 and FY2001, 159 are classified as foreign-affiliated firms (firms with over one-third foreign ownership). The share of their capital spending in the total has risen from 2.7% (FY2000) to 5.0% (FY2001), as more companies are now classified as foreign-affiliated firms.

* Note: "Capital spending abroad" by a company refers to capital spending conducted overseas by either the company itself or one of its overseas subsidiaries. (Here, an "overseas subsidiary" of a company is an overseas firm for which the company holds at least 10% of the shares.)

Planned capital spending by foreign-affiliated firms for FY2001 is 17.1% higher than in the previous fiscal year. In the manufacturing sector, the share is 13.1% as electric machinery firms plan to maintain the level of the previous year while the heavy-weighted transport equipment and chemicals firms will also make significant contributions. In the non-manufacturing sector, the substantial drop expected in services following the completion of large-scale theme parks is more than offset by active investments in telecommunications & information, resulting in a 21.8% increase from the previous year overall.

Planned capital spending by foreign-affiliated firms in FY2002 is also higher, up 9.0% from the previous year.

Capital Spending by Foreign-Affiliated Firms (Classified according to Principal Business Sector)

	Capital Spending						Growth Rate			Share	
	FY1999 (Actual)	FY2000 (Actual)	FY2000 (Actual)	FY2001 (Planned)	FY2001 (Planned)	FY2002 (Planned)	2000/99	2001/2000	2002/2001	FY2001	
	(116 firms)		(159 firms)		(83 firms)					(159 firms)	(All firms)
Total	4,797	6,639	10,831	12,683	1,895	2,065	38.4	17.1	9.0	100.0	5.0
Manufacturing	3,602	4,811	5,841	6,606	1,108	1,180	33.5	13.1	6.5	52.1	7.5
Non-Manufacturing	1,194	1,828	4,991	6,077	787	885	53.0	21.8	12.5	47.9	3.7
By sector											
Materials	970	1,389	1,551	1,887	164	171	43.2	21.7	4.4	14.9	6.7
Processing & Assembly	2,449	3,317	4,105	4,397	622	626	35.4	7.1	0.7	34.7	7.5
Energy	183	105	185	322	322	383	-42.5	74.1	18.8	2.5	0.8
Non-Manufacturing excluding Energy	1,194	1,828	4,991	6,077	787	885	53.0	21.8	12.5	47.9	4.8

Notes: Foreign-affiliated firms are firms with over one-third foreign ownership.
Monetary amounts are in 100 million yen.

8. Information Technology Investment (Classified according to Principal Business Sector)

Contents of the survey

The survey concerns the investments related to information aimed at improving the business efficiency and productivity of firms (corresponding to any of the following four factors: "tangible fixed assets," "intangible fixed assets," "leasing contracts," and "other expenses"). This is the third survey on information technology investment since its inception in August 2000.

Actual IT investment in FY2000

Actual IT investment in FY2000 (based on figures for the 1,466 firms that responded to the survey for both FY1999 and FY2000) rose 9.6% for all industries, recording growth that exceeds that of total capital spending in manufacturing (up 16.2%) as well as non-manufacturing (up 6.1%). (Total capital spending rose 1.0%.) By sector, "materials" industries led the manufacturing sector with investments in production management systems, while the heavy-weighted "electric power" industry made a major contribution in non-manufacturing.

Tangible fixed assets accounted for 31.9% of actual IT investment in FY2000, followed by intangible fixed assets with 26.3%, leasing contracts with 25.1%, and other expenses with 16.7%.

Planned IT investment for FY2001

Planned IT investment for FY2001 (based on figures for the 1,807 firms that responded to the survey for both FY2000 and FY2001) will continue to increase both in manufacturing (up 21.4%) and non-manufacturing (up 21.9%). The overall increase of 21.7% is particularly significant because total capital spending is expected to increase only slightly. By sector, the introduction and renewal of production management systems and the upgrading of new product design functions are planned in the manufacturing sector in general, with substantial contribution from "transport equipment." The "petroleum" sector is also moving toward system integration for business restructuring. In the non-manufacturing sector, the growth of IT investment will slow somewhat in the heavy-weighted "electric power" sub-sector, which will be more than compensated for by substantial increases in "wholesale & retail," led by multi-functional terminals and point-of-sale related investments by convenience stores, as well as increases in "transportation" thanks to system renewal in airlines and railways.

Consequently, the share of IT investment in total capital spending is expected to rise.

Revisions to IT investment

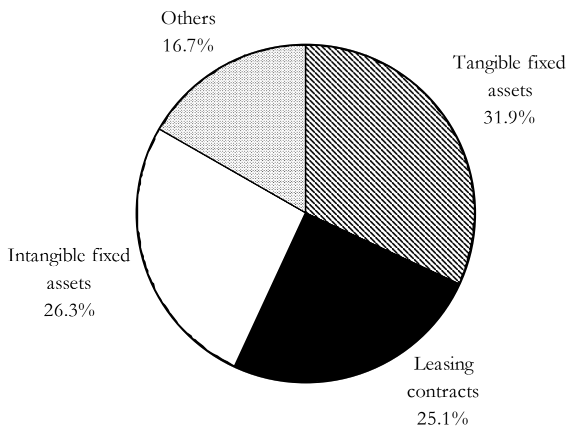
In comparison with the previous survey on IT investment (February 2001), planned IT investment for FY2001 has been revised upwards by 13.0%. The non-manufacturing sector (up 18.0%) accounts for a major part of the upward revision.

Overview of IT Investment (actual figures for FY2000)

Industrial sector	Amount of IT investment (1,466 firms)		Change in IT investment	Change in capital spending	Share of IT investment		IT investment/ capital spending	
	FY1999 Actual	FY2000 Actual	2000/1999 (1,466 firms)	2000/1999 (1,466 firms)	FY1999 Actual	FY2000 Actual	FY1999 Actual	FY2000 Actual
All industries	7,897	8,657	9.6	1.0	100.0	100.0	7.2	7.8
Manufacturing	2,794	3,246	16.2	11.4	35.4	37.5	11.9	12.4
Non-Manufacturing	5,103	5,411	6.0	-1.8	64.6	62.5	5.9	6.4

Note: Monetary amounts are in 100 million yen.

Composition of IT Investment (actual figures for FY2000)



Definition of IT Investment

For the purpose of this survey, IT investment refers to the capital spending deemed as such by the respondent firms, and covers the following four items:

(i) Tangible fixed assets,
(ii) Intangible fixed assets and investments (software development and other costs credited to assets rather than accounted for as costs),
(iii) Leasing contracts (the amount of newly concluded leasing contracts and not that of leasing charges for the fiscal year), and
(iv) Other expenses (PCs and other office equipment accounted for as costs).

Overview of IT Investment (planned figures for FY2001)

Industrial sector	Amount of IT investment (1,807 firms)		Change in IT investment	Change in capital spending	Share of IT investment		IT investment/ capital spending	
	FY2000 Actual	FY2001 Planned	2001/2000 (1,807 firms)	2001/2000 (1,807 firms)	FY2000 Actual	FY2001 Planned	FY2000 Actual	FY2001 Planned
All industries	10,322	12,565	21.7	1.3	100.0	100.0	7.7	9.3
Manufacturing	3,396	4,122	21.4	13.3	32.9	32.8	11.1	11.9
Non-Manufacturing	6,927	8,443	21.9	-2.3	67.1	67.2	6.7	8.3

Note: Monetary amounts are in 100 million yen.

Revisions to IT Investment (FY2000, FY2001)

Industrial sector	FY2000, Estimated or Actual			FY2001, Planned		
	IT investment (1,562 firms)		Revisions (1,562 firms)	IT investment (1,258 firms)		Revisions (1,258 firms)
	Previous survey	Current survey		Previous survey	Current survey	
All industries	8,998	9,048	0.6	6,333	7,157	13.0
Manufacturing	3,276	3,179	-3.0	1,999	2,045	2.3
Non-Manufacturing	5,722	5,869	2.6	4,334	5,112	18.0

Note: Monetary amounts are in 100 million yen.

Comparison between IT Investment and Capital Spending (FY2000 - FY2001)

Industrial sector (1,525 firms)	Tangible fixed assets in IT investment		(Tangible fixed assets + leasing) in IT investment		Capital spending		Tangible fixed assets/capital spending		(Tangible fixed assets + leasing)/capital spending	
	FY2000 Actual	FY2001 Planned	FY2000 Actual	FY2001 Planned	FY2000 Actual	FY2001 Planned	FY2000 Actual	FY2001 Planned	FY2000 Actual	FY2001 Planned
All industries (2000/2001 growth)	3,291	4,876 48.1%	5,885	7,554 28.4%	134,152	135,832 1.3%	2.5	3.6	4.4	5.6
Excluding leasing	3,288	4,868	5,875	7,539	119,841	120,552	2.7	4.0	4.9	6.3
Manufacturing	892	1,185	1,873	2,304	30,629	34,690	2.9	3.4	6.1	6.6
Non-Manufacturing	2,399	3,691	4,012	5,250	103,521	101,142	2.3	3.6	3.9	5.2

Note: Monetary amounts are in 100 million yen.

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