Development Bank of Japan Research Report No. 33

Survey on Planned Capital Spending for Fiscal Years 2001, 2002 and 2003 (Conducted in August 2002)

November 2002

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 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, excluding agriculture, forestry, finance and insurance and medicine. 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, 2002

Contents of the Survey

(i) Actual capital spending in FY2001 and planned capital spending for FY2002 and FY2003
(ii) Details of individual construction projects for each of the above years
(iii) Actual revenue and expenditure in FY2001 and estimated revenue and expenditure for FY2002
(iv) Investment motives in FY2001 and FY2002
(v) Trends in land investment in FY2001, FY2002 and FY2003
(vi) Capital spending abroad for FY2001 and FY2002
(vii) Information technology investment in FY2001 and FY2002

Responses

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

	No. of Firms Targeted	No. of Firms Giving Valid Responses	Proportion of Valid Responses
Principle Business Classification	3,566	3,021	84.7%
Investment Specific Classification	4,300	3,698	86.0%

On the Totals

Industrial classification

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

Although mainly the investment specific classification is used for the analysis, the principal business classification is adopted in some cases.

Timing of the 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 planned investments are materialized, the results reveal business sentiments in detail, for example, through the extent to which planned investments have been modified.

Targeted FY Timing of survey	1999	2000	2001	2002	2003
August 2000	Actual	Modified plan	Plan for next FY		
February 2001		Estimate	Initial plan		
August 2001		Actual	Modified plan	Plan for next FY	
February 2002			Estimate	Initial plan	
August 2002			Actual	Modified plan	Plan for next FY
February 2003				Estimate	Initial plan

Decrease in Capital Spending for the Second Consecutive Year; Adjustment Continuing in the Manufacturing Sector
---Urban infrastructures supporting overall investment under conservative plans---

II Summary

1. Overall Condition

Actual capital spending for all industries in FY2001 was down 9.3% overall, resuming its downtrend after positive growth in FY2000. (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 FY2002 shows a continued decline in the manufacturing sector (down 5.6%) but a turning to an increase in the non-manufacturing sector (up 1.7%), meaning a decline for all industries for the second consecutive year (down 0.6%).

2. Actual Capital Spending for FY2001

Looking at actual capital spending for FY2001, there were downward revisions in most industries after the previous survey (February 2002), and the overall figure was down 9.3% as the downtrend accelerated in manufacturing (down 9.7%) and the initially expected increase was reversed in non-manufacturing (down 9.2%).

3. Planned Capital Spending for FY2002

Total industries' planned capital spending for FY2002 will decrease for the second consecutive year (down 0.6%), continuing to decrease in the manufacturing sector and starting to increase in the non-manufacturing sector.

In the manufacturing sector (down 5.6%), capital spending is expected to increase in the automobile industry as companies introduce new models, as well as in the petroleum industry as measures are taken for environmental protection. However, decreases are expected in many industries, including electric machinery, mainly due to declines in areas involving semiconductors, as well as paper & pulp, chemicals, cement, ceramics & glass, iron & steel, and non-ferrous metals, largely affected by the completion of large investments in the previous year.

In the non-manufacturing sector (up 1.7%), decreases are expected in electric power, due to limited investment in thermal power plants; in telecommunications & information, due to restraints on mobile telephone investment; and in services, due to the completion of a large amusement park. Increases are expected however in transportation, mainly as a result of the building of new railway lines and extensions and continued construction of airports, and in real estate, led by the full-scale promotion of a large development project in the Tokyo metropolitan area, as well as in leasing, where demand is expected to increase.

In comparison with the previous survey (February 2002), investment for FY2002 was revised downwards in both the manufacturing sector (down 2.3%) and the non-manufacturing sector (down 1.6%), resulting in a downward revision of 1.8% overall.

Year-on-year comparison for FY2002 shows an overall increase of 2.3% in the first half, but a decline of 3.2% in the second half.

Looking at the respective shares of different motives for investing in the manufacturing sector, the share of "expansion of production capacity" is dropping sharply while that of "maintenance and repair" is increasing. The share of "research & development" is growing steadily in both the materials and processing & assembly sub-sectors. "Product development and upgrading" has the largest share in processing & assembly.

Planned land investment is lower in both the manufacturing and non-manufacturing sectors, down 33.8% overall from the previous year. However, land investment tends to be subject to substantial upward revision after the planning stage.

Capital spending abroad is slated to increase 6.1% overall. Investments in the EU and Asia are expected to rise, partially offset by reduced investments in the US and other regions.

The domestic capital spending of foreign-affiliated firms (132 firms owned one-third or over by foreign capital) shows a slight increase of 1.8% overall, as declines in electric machinery and telecommunications & information are more than offset by increases in transport equipment, petroleum and leasing. Foreign-affiliated firms now account for 5.6% of total capital spending in Japan.

The ratio of capital spending to cash flow (net income plus depreciation expenses) will fall from the previous year to one of the lowest levels recorded so far in both manufacturing and non-manufacturing.

Looking at information technology investment on the user side, continued increases are expected in both the manufacturing sector (up 11.9%) and the non-manufacturing sector (up 1.3%). Accordingly, the total for all industries will rise 4.8%, showing a healthy growth as compared with the decline in total capital spending. Fixed intangible assets (33.4%) and fixed tangible assets (31.5%) had the largest shares in actual IT investment in FY2001.

4. Features of Planned Capital Spending for FY2002

Revenues and profits are expected to recover steadily in FY2002 from the poor performance in FY2001. However, relatively conservative capital spending plans still prevail. As regards investment motives in the manufacturing sector, the share of “expansion of production capacity” will decline, while that of “maintenance and repair” will increase. At the same time, the rising shares of “product development and upgrading” and “research & development” attest to the firmness of forward-looking investment.

In the non-manufacturing sector, the restrained mood continues in the heavy-weighted electric power and telecommunications & information industries. Urban infrastructures, however, are supporting overall investment: transportation infrastructure in metropolitan areas including railways and airports real estate redevelopment projects in the Tokyo metropolitan area.

5. Planned Capital Spending for FY2003

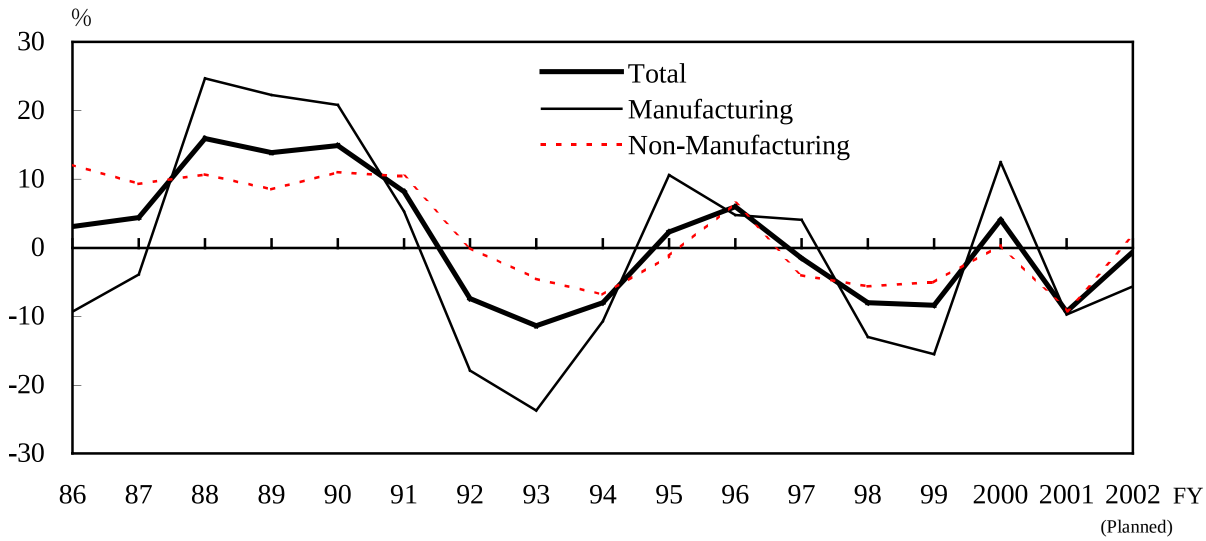
Planned capital spending for FY2003 shows an overall decline of 5.1%, although many investment projects still remain uncertain in both the manufacturing (down 3.9%) and non-manufacturing (down 5.3%) sectors.

Capital Spending

	FY2001 Actual (2,821firms)			FY2002 Planned (3,021 firms)			FY2003 Planned (1,385 firms)		
	FY2000 Actual	FY2001 Actual	Growth Rate (%) 2001/2000	FY2001 Actual	FY2002 Planned	Growth Rate (%) 2002/2001	FY2002 Planned	FY2003 Planned	Growth Rate (%) 2003/2002
Total	238,837	216,528	-9.3	222,206	220,817	-0.6	81,617	77,485	-5.1
Excluding electric power	*203,659*	*184,812*	*-9.3*	*189,562*	*191,037*	*0.8*	*58,695*	*55,332*	*-5.7*
Manufacturing	75,238	67,909	-9.7	70,209	66,297	-5.6	11,940	11,480	-3.9
Non-Manufacturing	163,599	148,619	-9.2	151,997	154,519	1.7	69,677	66,004	-5.3
Excliding electric power	*128,422*	*116,903*	*-9.0*	*119,353*	*124,739*	*4.5*	*46,755*	*43,852*	*-6.2*
Electric power	*35,178*	*31,716*	*-9.8*	*32,644*	*29,780*	*-8.8*	*22,922*	*22,152*	*-3.4*

Note: Monetary amounts are in 100 million yen.

Growth in Capital Spending



Capital Spending by Industry

	Capital Spending (100 million yen)				Growth Rate (%)			Component Rate (%)	
	FY2001 Actual	FY2002 Planned	FY2002 Planned	FY2003 Planned	2001/2000	2002/2001	2003/2002	FY2001 Actual	FY2002 Planned
	(3,021 firms)		(1,385 firms)					(3,021 firms)	
Total	222,206	220,817	81,617	77,485	-9.3	-0.6	-5.1	100.0	100.0
Excluding Electric Power	*189,562*	*191,037*	58,695	55,332	-9.3	*0.8*	*-5.7*	*85.3*	*86.5*
Manufacturing	70,209	66,297	11,940	11,480	-9.7	-5.6	-3.9	31.6	30.0
Food and Beverages	4,742	4,494	997	854	-6.5	-5.2	-14.3	2.1	2.0
Textiles	727	738	54	62	3.3	1.5	13.6	0.3	0.3
Paper and Pulp	2,557	1,982	383	389	15.1	-22.5	1.7	1.2	0.9
Chemicals	10,587	10,144	2,171	2,197	8.1	-4.2	1.2	4.8	4.6
Organic Chemicals	*4,909*	*4,513*	*1,019*	*1,116*	*8.4*	*-8.1*	*9.5*	*2.2*	*2.0*
Pharmaceuticals	*2,243*	*2,371*	*565*	*467*	*7.6*	*5.7*	*-17.4*	*1.0*	*1.1*
Petroleum	1,201	1,795	1,004	774	34.7	49.5	-22.9	0.5	0.8
Cement, Ceramics and Glass	2,267	1,703	283	335	-7.4	-24.9	18.3	1.0	0.8
Iron and Steel	4,226	3,431	924	1,070	7.5	-18.8	15.8	1.9	1.6
Ordinary Steel	*3,490*	*2,691*	*707*	*907*	*8.6*	*-22.9*	*28.3*	*1.6*	*1.2*
Non-Ferrous Metals	3,506	2,085	220	213	10.2	-40.5	-3.2	1.6	0.9
General Machinery	4,407	4,323	465	435	-3.3	-1.9	-6.5	2.0	2.0
Electric Machinery	17,366	15,861	3,051	3,000	-34.4	-8.7	-1.7	7.8	7.2
Electric Devices, etc.	*11,629*	*10,281*	*2,265*	*2,220*	*-40.5*	*-11.6*	*-2.0*	*5.2*	*4.7*
Precision Machinery	1,438	1,274	143	127	-5.7	-11.4	-11.0	0.6	0.6
Transportation	13,113	14,510	1,853	1,673	2.0	10.7	-9.7	5.9	6.6
Automobiles	*12,291*	*13,776*	*1,734*	*1,573*	*1.1*	*12.1*	*-9.3*	*5.5*	*6.2*
Other Manufacturing	4,072	3,959	394	352	-9.9	-2.8	-10.6	1.8	1.8
Non-Manufacturing	151,997	154,519	69,677	66,004	-9.2	1.7	-5.3	68.4	70.0
Excluding Electric Power	*119,353*	*124,739*	*46,755*	*43,852*	*-9.0*	*4.5*	*-6.2*	*53.7*	*56.5*
Construction	1,620	1,378	349	313	-0.1	-14.9	-10.3	0.7	0.6
Wholesale and Retail	11,375	11,715	3,807	3,590	-19.6	3.0	-5.7	5.1	5.3
Retail	*8,732*	*9,611*	*3,086*	*3,042*	*-23.4*	*10.1*	*-1.4*	*3.9*	*4.4*
Real Estate	8,811	9,424	3,267	3,241	-20.5	7.0	-0.8	4.0	4.3
Transportation	16,493	20,916	7,406	4,452	-7.1	26.8	-39.9	7.4	9.5
Railways	*10,122*	*13,824*	*4,146*	*2,468*	*-20.5*	*36.6*	*-40.5*	*4.6*	*6.3*
Marine Transport	*471*	*289*	*202*	*144*	*23.4*	*-38.6*	*-28.9*	*0.2*	*0.1*
Airlines	*1,933*	*1,845*	*40*	*19*	*14.7*	*-4.6*	*-52.1*	*0.9*	*0.8*
Warehousing, etc.	*2,688*	*3,520*	*2,691*	*1,549*	*58.3*	*30.9*	*-42.4*	*1.2*	*1.6*
Electric Power and City Gas	35,314	32,546	25,685	24,981	-10.3	-7.8	-2.7	15.9	14.7
Electric Power	*32,644*	*29,780*	*22,922*	*22,152*	*-9.8*	*-8.8*	*-3.4*	*14.7*	*13.5*
City Gas	*2,669*	*2,766*	*2,764*	*2,829*	*-15.3*	*3.6*	*2.3*	*1.2*	*1.3*
Telecom. and Information	35,056	34,381	4,834	4,059	-10.8	-1.9	-16.0	15.8	15.6
Leasing	39,390	40,899	23,428	24,624	2.8	3.8	5.1	17.7	18.5
Services	3,524	2,688	749	604	-35.5	-23.7	-19.4	1.6	1.2
Other Non-Manufacturing	416	572	153	142	34.8	37.4	-7.0	0.2	0.3

Notes: Other Manufacturing includes Publishing and Printing, Rubber, Metal Products and others.
Other Non-Manufacturing includes Fishing, Mining and others.

III Survey Results

1. Actual Capital Spending for FY2001

Outline

Overall actual capital spending for FY2001 resumed its decline (down 9.3%) as declines were recorded in both the manufacturing and non-manufacturing sectors.

In the manufacturing sector, (down 9.7%), spending increased in chemicals, led by investments in high-value added products; in iron & steel, led by repair works largely in blast furnace steel makers; and in non-ferrous metals, led by investments in optical parts and fiber. These increases have not been able to prevent the decline of total spending in the sector, as capital spending in electric machinery fell substantially from the significant increase recorded in the previous year, led by capacity investment in electro-devices such as semiconductors and liquid crystals.

In the non-manufacturing sector (down 9.2%), spending increased in the heavy-weighted leasing industries. Declines were recorded however in wholesale & retail, due to reaction to the accelerated establishment of outlets ahead of the promulgation of the Large-scale Retail Stores Law; in real estate due to reaction to the acquisition of existing assets; in transportation due to a respite in the building of new railway lines and extensions; and in services as the construction of large amusement parks had peaked. In addition, spending in electric power declined for the eighth consecutive year as the mood remained subdued, and a double-digit decline was recorded in the telecommunications & information industry, largely due to restrained investment in fixed communications. Overall, total capital spending turned down again in the non-manufacturing sector.

Trends by Industrial Sub-Sector

The trends in actual capital spending for FY2001, 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 7.1%) {10.7%}

Total capital spending in the materials industries rose for two years in a row despite turning down in cement, ceramics & glass, as the increase continued for a second consecutive year in non-ferrous metals and spending started climbing again in iron & steel and textiles.

Spending in chemicals increased for the second straight year due to investments in organic chemicals for high-value added products and the construction of plants and laboratories in pharmaceuticals and other chemicals. A second straight increase was also recorded in paper & pulp, due to investment in the rebuilding of production systems and environmental protection in addition to capacity investment in special paper; as well as in non-ferrous metals due to the contribution of investment related to optical parts, fiber and 300mm silicon wafers. Spending turned up in iron & steel, led by blast furnaces.

Meanwhile, cement, ceramics & glass saw spending turn down from the substantial increase in the previous year, as restraint continued in cement and investment decreased in products related to information equipment including materials for optical parts and liquid crystal displays.

Processing & Assembly (down 17.5%) {20.3%}

In spite of the first increase in four years in automobiles, capital spending in the processing & assembly sub-sector recorded a double-digit decline overall as investment in the heavy-weighted electric machinery industry slumped from the significant growth in the previous year. Spending also decreased in many other industries including general machinery, precision machinery and food & beverages.

Despite a decline in four-wheeled vehicles, the automobile industry experienced the first increase in spending in four years, with the contribution from new model investment in auto parts, among others. However, capital spending in other machinery industries slumped in general. Spending in electric machinery dropped heavily as investments plummeted in electro-devices related to semiconductors and liquid crystals, in particular. Capital spending in precision machinery fell from significant growth in the previous year despite steady investment in medical instruments, as spending peaked in other sectors of the industry including semiconductor equipment. In the general machinery industry, a healthy growth in spending in office and household equipment was more than offset by downward revisions in industrial machinery and general machinery parts, resulting in a decline for the second consecutive year. Likewise, capital spending decreased for the fourth consecutive year in food & beverages, as stagnant conditions prevailed with the exception of investment for organizational restructuring in sugar manufacturing.

Energy (down 8.9%) {16.6%}

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

Spending in electric power decreased for the eighth year running as the nine major electric power companies revised their investment downwards amidst an underlying trend toward curbs on investment. In the gas industry as well, investment declined for the sixth consecutive year largely due to the prevailing restrictive mood regarding city gas and the termination of large investments in heat supply in particular. Meanwhile, spending in petroleum rose for the first time in nine years thanks to the consolidation and refurbishment of distribution facilities as well as to active investment in environmental protection including the desulfurization of light oil.

Non-manufacturing, excluding Energy (down 8.9%) {52.4%}

Despite an increase in leasing, total capital spending in non-manufacturing excluding energy turned down due to decreases in telecommunications & information, wholesale & retail, real estate, services and transportation.

Capital spending in leasing increased for the third straight year, led by telecommunication equipment, office equipment and transport equipment. In contrast, a double-digit decline was recorded in telecommunications & information largely due to cutbacks in fixed communication, although investment was active in broadcasting for new premises and digitalization. Spending dropped 20% in wholesale & retail, largely due to reaction to the accelerated establishment of outlets by supermarkets and other stores prior to the promulgation of the Large-scale Retail Stores Law in the previous year, as well as in real estate due to reaction to the acquisition of existing assets in the previous year. Services saw a substantial drop in spending, mainly due to the completion of a large amusement park in the Kansai region. Spending continued to decline in transportation with increased investment related to airport construction and aircraft having been more than offset by a slowdown in the construction and extension of railway lines.

Capital Spending, by Industry

	Growth Rate (%)					Share (%)			
	FY1999	FY2000	FY2001	FY2002	FY2003	FY1999	FY2000	FY2001	FY2002
Materials[a]	-21.5	10.0	7.1	-15.9	5.7	8.5	9.1	10.7	9.1
Paper & Pulp	*-29.4*	*24.2*	*15.1*	*-22.5*	*1.7*	*0.7*	*0.9*	*1.2*	*0.9*
Chemicals	*-22.4*	*10.1*	*8.1*	*-4.2*	*1.2*	*3.9*	*4.1*	*4.8*	*4.6*
Iron & Steel	*-14.0*	*-21.1*	*7.5*	*-18.8*	*15.8*	*2.0*	*1.6*	*1.9*	*1.6*
Processing & Assembly[b]	-12.2	15.1	-17.5	-1.6	-6.7	20.8	23.0	20.3	20.1
Food & Beverages	*-2.7*	*-3.2*	*-6.5*	*-5.2*	*-14.3*	*2.4*	*2.2*	*2.1*	*2.0*
Electric Machinery	*-0.0*	*38.7*	*-34.4*	*-8.7*	*-1.7*	*8.2*	*10.8*	*7.8*	*7.2*
Automobiles	*-18.6*	*-3.2*	*1.1*	*12.1*	*-9.3*	*5.3)*	*5.0*	*5.5*	*6.2*
Energy[c]	-7.4	-9.9	-8.9	-5.7	-3.5	18.0	15.7	16.6	15.7
Petroleum	*-32.3*	*-36.8*	*34.7*	*49.5*	*-22.9*	*0.6*	*0.4*	*0.5*	*0.8*
Electric Power	*-5.6*	*-9.5*	*-9.8*	*-8.8*	*-3.4*	*16.0*	*14.0*	*14.7*	*13.5*
Non-Manufacturing Excluding Energy[d]	-4.5	3.7	-8.9	4.5	-6.7	52.7	52.2	52.4	55.1
Construction	*-35.0*	*-5.4*	*-0.1*	*-14.9*	*-10.3*	*0.8*	*0.7*	*0.7*	*0.6*
Wholesale & Retail	*-8.5*	*6.6*	*-19.6*	*3.0*	*-5.7*	*5.2*	*5.6*	*5.1*	*5.3*
Real Estate	*-19.2*	*17.7*	*-20.5*	*7.0*	*-0.8*	*4.0*	*4.8*	*4.0*	*4.3*
Transportation	*-2.7*	*-5.0*	*-7.1*	*26.8*	*-39.9*	*7.6*	*7.0*	*7.4*	*9.5*
Telecom.& Information	*-12.5*	*2.1*	*-10.8*	*-1.9*	*-16.0*	*15.4*	*15.7*	*15.8*	*15.6*
Leasing	*7.6*	*5.4*	*2.8*	*3.8*	*5.1*	*17.6*	*16.2*	*17.7*	*18.5*
Services	*38.9*	*3.7*	*-35.5*	*-23.7*	*-19.4*	*2.1*	*2.1*	*1.6*	*1.2*
All Industries	-8.4	4.1	-9.3	-0.6	-5.1	100.0	100.0	100.0	100.0
Excluding Electric Power	*-8.9*	*6.8*	*-9.3*	*0.8*	*-5.7*	*84.0*	*86.0*	*85.3*	*86.5*
Manufacturing	-15.5	12.5	-9.7	-5.6	-3.9	29.9	32.5	31.6	30.0
Non-Manufacturing	-5.0	0.4	-9.2	1.7	-5.3	70.1	67.5	68.4	70.0
Excluding Electric Power	*-4.8*	*3.5*	*-9.0*	*4.5*	*-6.2*	*54.1*	*53.6*	*53.7*	*56.5*

Note: FY2001 and FY2002 share (%) figures are based upon 3,021 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 FY2002

Outline

Total industries' planned capital spending for FY2002 will decrease for the second consecutive year (down 0.6%), continuing to decrease in the manufacturing sector and starting to rise in the non-manufacturing sector.

In the manufacturing sector (down 5.6%), capital spending is expected to increase substantially in the automobile industry as companies introduce new models. Substantial increase is also planned in petroleum as measures are taken for environmental protection. However, total capital spending in the sector will decline as decreases are expected in many other industries. Sluggish investment will result in a spending decline in electric machinery, particularly in areas involving semiconductors. The completion of large-scale projects in the previous year will reduce spending in materials industries such as chemicals, iron & steel and paper & pulp. Spending is also scheduled to decline in non-ferrous metals and cement, ceramics & glass, due to the drop in investment in IT-related materials.

In the non-manufacturing sector (up 1.7%), decreases are planned in electric power, due to limited investment in thermal power plants; in telecommunications & information, due to restraints on mobile telephone investment; and in services, due to the completion of a large amusement park. Increases are expected, however, in the transportation industry, mainly as a result of continued airport construction, the building of new railway lines and extensions, and active investment in the *Shinkansen* bullet train project. Other increases will take place in real estate, led by the full-scale promotion of a large-scale redevelopment project in the Tokyo metropolitan area, and in leasing, where demand is expected to expand, thus contributing to the overall increase in capital spending for the non-manufacturing sector.

Trends by Industrial Sub-sector

The trends in planned capital spending for FY2002, 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 (down 15.9%) {9.1%}

Planned capital spending in the materials sub-sector will suffer a double-digit drop despite a slight growth expected in textiles, as investment will decline in all other industries largely due to the completion of large investment projects and lower investment in IT-related materials.

Despite the continued strong investment in pharmaceuticals, capital spending in chemicals is scheduled to decrease, as declines will be recorded in organic, inorganic and other chemicals. Spending will turn to a double-digit decline in paper & pulp, with continued investment in environmental protection being more than offset by the completion of capacity investment in special paper and projects for rebuilding production systems, as well as in iron & steel, in reaction to large refurbishment projects particularly among blast furnace steel manufacturers. Non-ferrous metals and cement, ceramics & glass will both experience substantial drops in spending from the previous year due to reduced investment in IT-related materials, including optical parts and fiber for the former, and optical parts, semiconductors and materials for liquid crystals for the latter.

Processing & Assembly (down 1.6%) {20.1%}

Setting aside the second consecutive increase in automobiles, capital spending in the processing & assembly sub-sector is expected to record a slight decline as spending in electric machinery and precision machinery will decrease primarily due to restrained investment in semiconductors and other IT-related materials. Also, other major industries including general machinery and food & beverages will see a decline in spending for the second consecutive year.

The automobile industry will post a double-digit increase in spending, led by investment in four-wheeled vehicles for new models as well as projects related to the development of business structure.

Increased investments in thin displays will not stop the electric machinery industry from recording a decline in spending for the second consecutive year, as the restrictive mood prevails particularly in areas related to semiconductors. Spending in precision machinery will also post a double-digit decrease largely due to reduced investment in semiconductor equipment. General machinery will experience a slight decline in capital spending with restraints in general machinery parts and metal working machinery more than offsetting the continued healthy investment in office and household equipment. Spending will continue to decline in food & beverages, as active investment in soft drinks will not be enough to compensate for the reduction of investment in beer & other alcoholic beverages and processed meat & dairy products.

Energy (down 5.7%) {15.7%}

Capital spending in energy is expected to decline for the ninth straight year.

In the electric power industry, spending is slated to decline for the ninth consecutive year due to restraints on power source development and distribution facilities, particularly for thermal power plants of the nine major electric power companies, as well as to the completion of investments in the wholesale power supply business. In contrast, the gas industry will experience the first increase in spending in seven years thanks to increased investment in city gas for

LNG bases and supply facilities, as spending in heat supply will maintain the level of the previous year. A substantial increase is planned for the second consecutive year in petroleum due to investment in desulfurization and other environmental protection projects and self-service filling stations.

Non-manufacturing, excluding Energy (up 4.5%) {55.1%}

Looking at the non-manufacturing sector, excluding energy, declines will continue in services, telecommunications & information and construction, but spending is set to increase in industries such as transportation (railways in particular), leasing, real estate, wholesale & retail. Overall, capital spending in the sub-sector as a whole is expected to rise.

A double-digit drop in spending is expected in services, due to the completion of a large amusement park in the Tokyo metropolitan area, as well as in construction, largely due to curbs on investment by general contractors. A continued decline is planned in telecommunications & information mainly due to restraints on spending in mobile telephones, although the construction of new premises and system-related investments will progress in broadcasting and information services.

In contrast, spending in transportation will increase substantially as a result of continued airport construction, the building of new railway lines and extensions in the waterfront area, and active investment in the *Shinkansen* bullet train. In leasing, demand is expected to increase mainly for IT and commercial equipment. Spending will also rise in real estate, led by the full-scale promotion of a large-scale redevelopment project in the Tokyo metropolitan area, as well as in wholesale & retail, thanks to the establishment of new outlets by supermarkets and do-it-yourself stores.

Trends and Features of Capital Spending for FY2002, by Industry

The trends and features of capital spending in 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 FY2001 and FY2002. The figures in curly brackets { } show the percentage of total planned spending for FY2002 accounted for by each industry.

Materials

Chemicals (8.1%→-4.2%) {4.6%}

Spending will increase in pharmaceuticals due to investment in new products and the expansion of laboratories. It will turn down in organic chemicals following the exceptional result in the previous year, despite some investments for the enhancement of core businesses. Investment will be restrained in organic and other chemicals. Overall, capital spending in the industry will decline for the first time in three years.

Iron & Steel (7.5%→-18.8%) {1.6%}

The subdued tone continues in both ordinary and special steel. The investment plans of individual manufacturers focus on maintenance and rationalization. With the completion of large repair works, capital investment in the industry as a whole is expected to resume its downtrend.

Non-ferrous Metals (10.2%→-40.5%) {0.9%}

Capacity investment in optical parts and fiber will plummet as investments related 300mm silicon wafers has peaked. All in all, capital spending in the industry will fall for the first time in three years.

Paper & Pulp (15.1%→-22.5%) {0.9%}

Some investments for environmental protection will continue, including the introduction of de-inked pulp (DIP) production equipment and non-chlorine bleaching facilities. However, many capacity investments and projects related to the reconstruction of production systems have already been completed. As a result, capital spending in the industry is expected to decline for the first time in three years.

Cement, Ceramics & Glass (-7.4%→-24.9%) {0.8%}

Curbs on investment continue in cement. Investment in IT materials such as glass boards for liquid crystal displays will be held back in glass and other areas, due to the deterioration in supply and demand. Overall, spending in the industry will decline for the second consecutive year.

Textiles (3.3%→1.5%) {0.3%}
Growth in capital spending will slow down due to a reactionary drop in synthetic fiber.

Processing & Assembly
Electric Machinery (-34.4%→-8.7%) {7.2%}
Spending will remain unchanged in electronic equipment and will decline in electric equipment. It will drop further in electronic component and devices largely due to sluggish investment related to semiconductors, although investment in some flat panel displays is expected to increase, such as PDPs. Overall, the decline in capital spending in the entire industry will be alleviated to some extent.

Automobiles (1.1%→12.1%) {6.2%}
Backed by the continued active investment in new models, spending in four-wheeled vehicles will rise substantially, assisted by investment for business reorganization and the enhancement of domestic sales networks. Although spending in parts & bodies will turn down as investment for new models has peaked, capital spending in the automobile industry as a whole is expected to increase for the second consecutive year.

Food & Beverages (-6.5%→-5.2%) {2.0%}
Spending will increase substantially in soft drinks, but will continue to decline in beer & other alcoholic beverages with the completion of a series of plant reorganization projects. Investment in processed meat & dairy products is expected to decline, especially in dairy products. Overall, the industry will record a decline in capital spending for the fifth straight year.

General Machinery (-3.3%→-1.9%) {2.0%}
Spending will continue to increase in office and household equipment, mainly for new products, as well as in boilers & motors, driven by investment for rationalization. General machinery parts and industrial machinery will experience a continued decline in spending, due to the worsening supply-and-demand situation and the completion of plant construction/expansion projects. As spending in metal processing machinery is expected to turn down due to the termination of plant construction and renewal projects in the previous year, capital investment in the whole industry is expected to continue to decline.

Precision Machinery (-5.7%→-11.4%) {0.6%}
Spending will continue to increase in medical instruments. A small increase is also expected in clocking & measuring instruments. In contrast, spending in semiconductor equipment will fall substantially due to difficult market conditions. Overall, capital spending is slated to fall more sharply for the entire industry.

Energy
Electric Power (-9.8%→-8.8%) {13.5%}
Investment is restrained for power source development works related to thermal power plants, largely due to falling demand for electricity. Furthermore, improvement works and distribution facilities will be cut back, while a series of investments in the wholesale power supply business have been completed. Thus, capital spending will continue to decline in the industry as a whole.

Gas (-15.3%→3.6%) {1.3%}
Although spending by specialized LNG producers will continue to decline following the completion of a series of investments, spending is expected to increase in city gas, led by the development of LNG bases and supply facilities. As heat supply and others will maintain the level of the previous year thanks to the construction of some new plants, the gas industry will experience the first rise in capital spending in seven years.

Petroleum (34.7%→49.5%) {0.8%}
In addition to investment for environmental protection in refineries, such as the desulfurization of light oil, spending in distribution facilities is expected to increase, mainly for self-service filling stations, resulting in the second consecutive increase in capital spending for the industry as a whole.

Non-Manufacturing Industries, excluding Energy

Leasing (2.8%→3.8%) {18.5%}

In the leasing industry, demand for IT equipment and commercial equipment, among others, is expected to increase.

Telecommunications & Information (-10.8%→-1.9%) {15.6%}

Despite healthy investment in fixed communications for broadband, spending will continue to decline in telecommunications due to controlled investment in mobile telephones. Spending will start to rise in information services. In broadcasting, spending will continue to rise thanks to investment for digitalization in broadcasting equipment, as well as to new office construction. All in all, the industry will see a smaller decline in capital spending.

Railways (-20.5%→36.6%) {6.3%}

A substantial increase is planned for new line construction and extension mainly in the Tokyo metropolitan area. This, along with investments related to the *Shinkansen* bullet train, will result in a substantial increase in capital spending for the industry as a whole.

Wholesale & Retail (-19.6%→3.0%) {5.3%}

In wholesale, spending will be cut for the fourth straight year, as some of the investments related to head offices will be completed. In retail, spending will decline in department stores due to a cool-off in investment for refurbishment, but will continue to increase in convenience stores. As the establishment of outlets by supermarkets and do-it-yourself stores will flourish under the Large-scale Retail Stores Law, total capital spending will increase in wholesale & retail.

Real Estate (-20.5%→7.0%) {4.3%}

Although train station area development projects related to private railway companies are expected to slow down, large-scale redevelopment projects in the Tokyo metropolitan area will progress in full swing for completion within FY2002. With the establishment of new outlets by retail stores, capital spending is expected to turn up in the real estate industry as a whole.

Services (-35.5%→-23.7%) {1.2%}

Capital spending in services will plummet for the second consecutive year, largely due to the completion of a large amusement park in the Tokyo metropolitan area.

Warehousing & Transportation (58.3%→30.9%) {1.6%}

With airport construction in full swing, the industry is expected to record a substantial increase in capital spending for the second consecutive year.

Construction (-0.1%→-14.9%) {0.6%}

Curbs on capital spending will continue in general, particularly among general contractors.

Airlines (14.7%→-4.6%) {0.8%}

Spending on ground facilities will increase, but investment by airline companies themselves will decline due to the utilization of leasing in adding airplanes. Overall, capital spending will turn down for the whole industry.

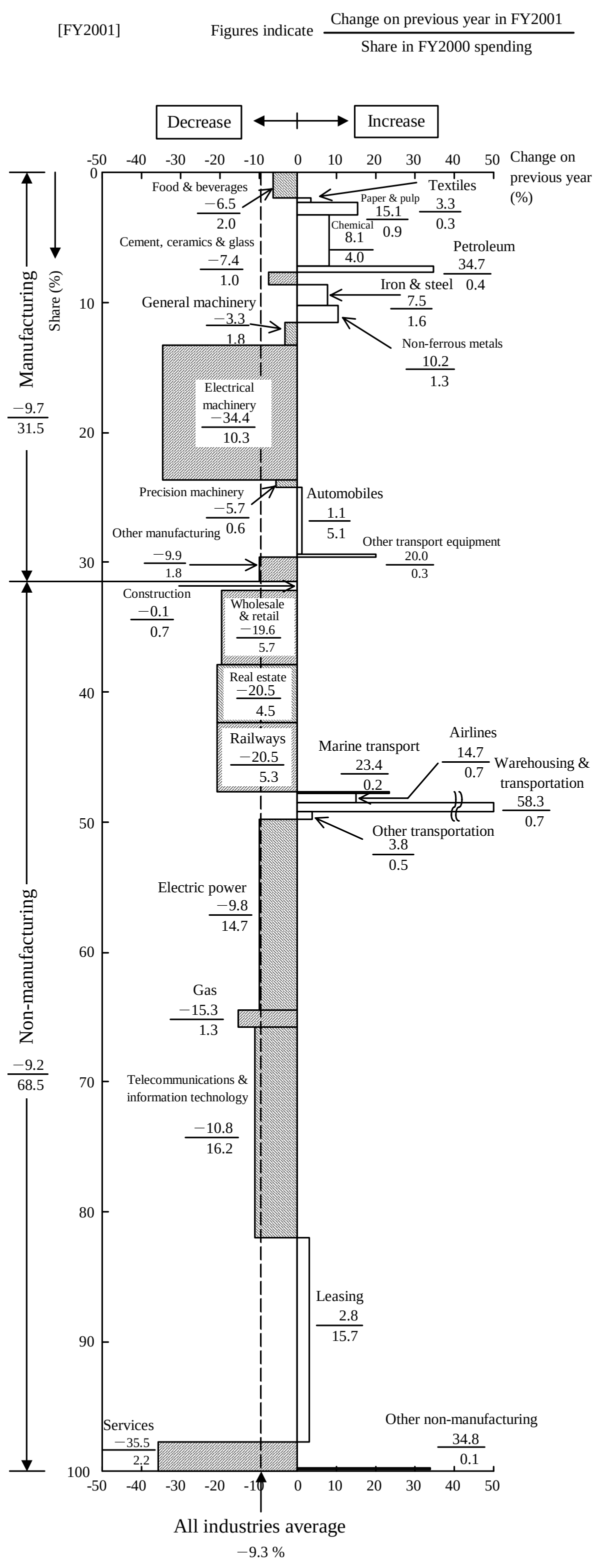
Marine Transport (23.4%→-38.6%) {0.1%}

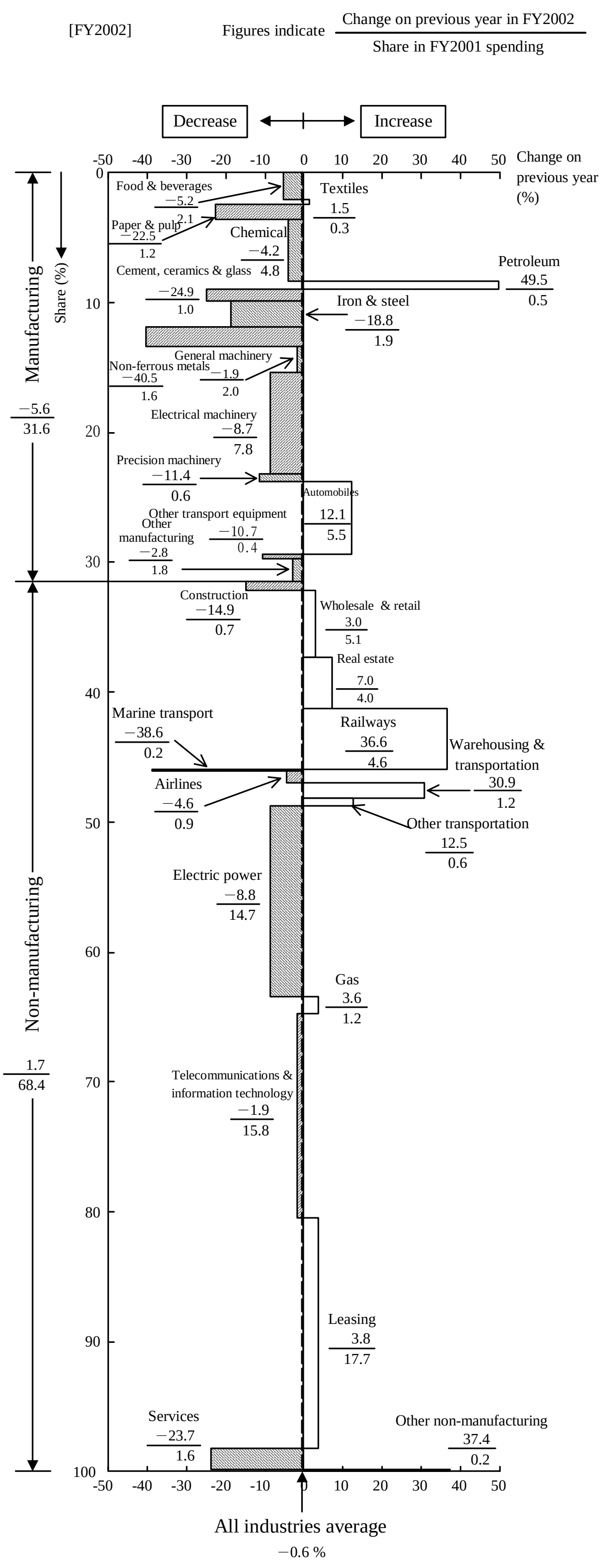
Capital spending will slump in reaction to ship construction and acquisition in the previous year.

3. Planned Capital Spending for FY2003

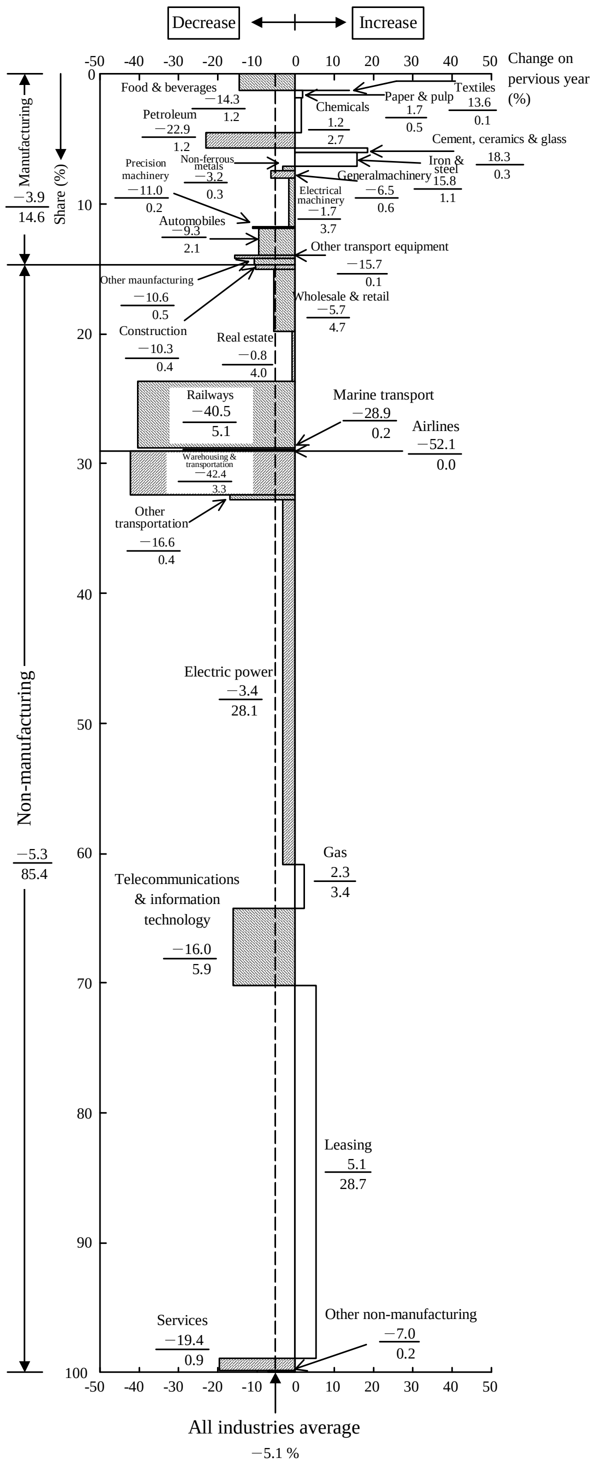
Planned capital spending for FY2003 for all industries shows a decline of 5.1%. However, in both the manufacturing sector (down 3.9%) and the non-manufacturing sector (down 5.3%), many capital spending decisions remain to be made.

Characteristics of Capital Spending by Industry





[FY2003] Figures indicate Change on previous year in FY2003 / Share in FY2002 spending



4. Investment Motives

Investment Motives in the Manufacturing and Non-manufacturing Sectors for FY2002

Looking at the share of each category of investment motive for the manufacturing sector for FY2002, there are increases in "maintenance and repair," "research & development" and "product development and upgrading" 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" has increased for the first time in three years with major contributions from railways, real estate and retail. In contrast, the share of "product development and upgrading" is falling.

Investment Motives in the Manufacturing Sector's "Materials" and "Processing & Assembly" Industries

We now look at the share 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 repair" 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 FY2002 are as follows:

i. An increase in the share of "maintenance and repair" in each of the industries (23.9%→27.2%), becoming the most important investment motive overall;

ii. A diminished share of "rationalization and labor saving," falling for the third consecutive year in industries such as paper & pulp and chemicals;

iii. A substantial drop in the share of "expansion of production capacity" (27.2%→23.8%), especially in non-ferrous metals, paper & pulp and cement, ceramics & glass; and

iv A considerable share of "research and development," with increases in chemicals and other industries.

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

i. A diminished share of "expansion of production capacity" (27.3%→23.2%), with substantial drops in electric machinery and transport equipment in particular;

ii. The largest share of "product development and upgrading" in the sub-sector, rising for the third consecutive year in industries such as transport equipment; and

iii. A sizable share of "maintenance," rising for the second consecutive year in transport equipment in particular.

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 largely due to a substantial drop in the heavy-weighted electro-devices, mainly for semiconductor materials.

The share – but not the investment volume – of "product development and upgrading" has increased despite a decline in electric machinery, being led by investment in transport equipment for new models (16.8%→17.6%).

For "rationalization and labor saving," the share remains unchanged, with rises in general machinery and other processing & assembly industries being offset by falls in materials industries such as paper & pulp and chemicals(15.0%→15.0%).

The share of "research & development" has increased in the manufacturing sector as a whole (9.2%→10.3%), rising for the second consecutive year in both the materials (especially in chemicals including pharmaceuticals) and processing & assembly (especially in automobiles) sub-sectors.

For "maintenance and repair," the share has increased in the materials sub-sector, particularly in iron & steel and paper & pulp, despite the reduced amount of investment. As both the share and amount have increased in the processing & assembly sub-sector, "maintenance and repair" now accounts for a considerable part in capital spending for the whole manufacturing sector (17.8%→19.7%).

Investment Motives

	Total		Manufacturing						Non-Manufacturing	
	(2,043 firms)				Materials		Processing & Assembly			
	FY2001 Actual	FY2002 Planned	FY2001 Actual	FY2002 Planned	FY2001 Actual	FY2002 Planned	FY2001 Actual	FY2002 Planned	FY2001 Actual	FY2002 Planned
Expansion of Production Capacity	40.1	41.2	27.4	24.0	27.2	23.8	27.3	23.2	46.2	48.7
Product Development and Upgrading	12.3	10.4	16.8	17.6	5.6	6.3	24.3	24.6	10.1	7.3
Rationalization and Labor Saving	6.8	6.4	15.0	15.0	18.6	17.5	12.7	13.6	2.9	2.7
Research and Development	3.9	4.0	9.2	10.3	7.1	9.2	10.8	11.4	1.4	1.3
Maintenance and Repairs	17.4	17.4	17.8	19.7	23.9	27.2	13.5	15.0	17.2	16.4
Others	19.5	20.5	13.8	13.4	17.7	15.9	11.3	12.2	22.2	23.6
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, by Principal Business Sector

Actual Land Investment for FY2001

Actual land investment for FY2001 (based on figures for the 1,675 firms that gave responses regarding both FY2000 and FY2001) was down 4.1% compared with the previous year, the fifth consecutive annual decline. In the manufacturing sector, land investment rose 9.1% due to purchases for plant sites and business reorganization in chemicals and transport equipment. In non-manufacturing, it dropped 7.3% from the previous year due to the completion of a series of investments in real estate for redevelopment and business reorganization, although investments in transportation for airport sites reached their peak. As a result, land investment accounted for 6.4% of total capital spending (4.7% in manufacturing, 7.0% in non-manufacturing).

Planned Land Investment for FY2002

Planned land investment for FY2002 (based on figures for the 2,066 firms that gave responses regarding both FY2001 and FY2002) is down 33.8%, following the peaking of investment in new airport sites in transportation. (Land investment accounts for 4.1% of total capital spending planned for FY2002.)

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 FY2003

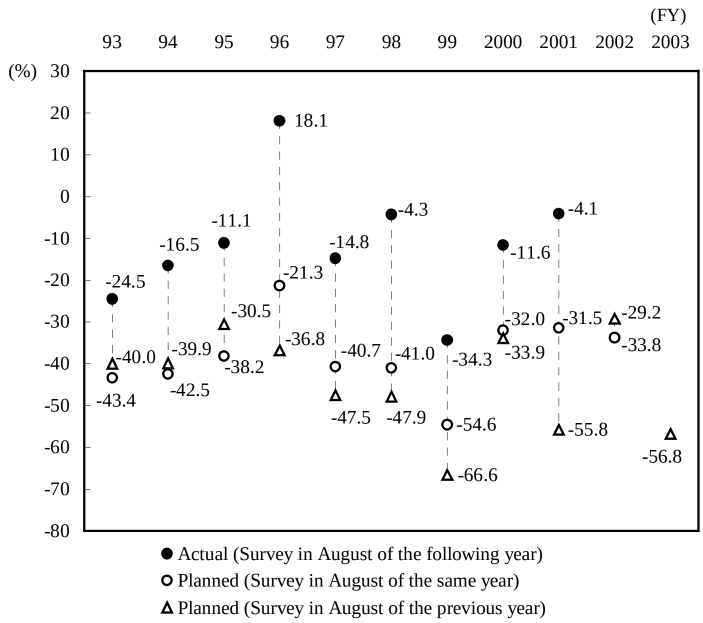
Planned land investment for FY2003 (based on figures for the 1,097 firms that gave responses regarding both FY2002 and FY2003) is down 56.8% from the previous year. (Land investment accounts for 2.1% of total capital spending planned for FY2003.) Planned land investment for FY2003 is even more subject to revision than is that for FY2002, however.

Trends in Land Investment

	FY2000 Actual	FY2001 Planned	Growth Rate (%)	FY2001 Actual	FY2002 Planned	Growth Rate (%)	FY2002 Actual	FY2003 Planned	Growth Rate (%)
	(1,675 firms)		2001/2000	(2,066 firms)		2002/2001	(1,097 firms)		2003/2002
Total Investment	138,612	120,974	-12.7	135,739	136,211	0.3	64,850	60,485	-6.7
Investment excluding Land	130,600	113,292	-13.3	127,286	130,613	2.6	61,939	59,228	-4.4
Investment in Land	8,012	7,682	-4.1	8,453	5,598	-33.8	2,911	1,257	-56.8
Share of Land (%)	*5.8*	*6.4*		*6.2*	*4.1*		*4.5*	*2.1*	
Manufacturing	39,503	35,597	-9.9	40,068	37,608	-6.1	9,605	9,635	0.3
Investment excluding Land	37,955	33,907	-10.7	38,113	36,669	-3.8	9,249	9,604	3.8
Investment in Land	1,548	1,690	9.1	1,955	939	-52.0	356	31	-91.3
Share of Land (%)	*3.9*	*4.7*		*4.9*	*2.5*		*3.7*	*0.3*	
Non-Manufacturing	99,109	85,377	-13.9	95,671	98,603	3.1	55,245	50,850	-8.0
Investment excluding Land	92,645	79,384	-14.3	89,173	93,944	5.4	52,690	49,625	-5.8
Investment in Land	6,464	5,993	-7.3	6,498	4,659	-28.3	2,555	1,225	-52.1
Share of Land (%)	*6.5*	*7.0*		*6.8*	*4.7*		*4.6*	*2.4*	

Note: Monetary amounts are in 100 million yen.

Growth Rate of Total Investment in Land by All Industries



6. Capital Spending Abroad, by Principal Business Sector

Capital spending abroad in all industries will rise 6.1% in FY2002 (based on figures for the 1,014 firms that gave responses regarding both FY2001 and FY2002). Investment is expected to increase in the EU (up 32.4%) and Asia (up 12.5%), but will decline in the US (down 0.6%) and other areas (down 15.1%).

The manufacturing sector accounts for 85.0% of the planned capital spending abroad (up 3.6%). In the materials sub-sector, capital spending abroad will drop 7.1% as increased investment in the EU and Asia in chemicals will be more than offset by decreases in cement, ceram-
ics & glass and non-ferrous metals, largely due to the slumping demand for IT in the US and the completion of new plants in Asia. Capital spending abroad in the processing & assembly sub-sector is expected to increase 7.5%, mainly due to the establishment of joint ventures and plants in the EU and Asia in transport equipment.

In the non-manufacturing sector (up 22.3%), capital spending is expected to increase, led by marine transport and leasing, as well as by wholesale & retail with increased investment in the US.

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.)

Capital Spending Overseas, by Region

	Region	Amount				Change (%)
		FY2001	Share	FY2002	Share	2002/2001
Capital spending overseas	US	6,152	48.3	6,117	45.3	-0.6
	EU	1,793	14.1	2,374	17.6	32.4
	Asia	3,450	27.1	3,880	28.7	12.5
	Others	1,348	10.6	1,144	8.5	-15.1
(1,014 firms)	Total	12,742	100.0	13,516	100.0	6.1

Notes: Monetary amounts are in 100 million yen.

7. Trends in Capital Spending by Foreign-affiliated Firms, by Principal Business Sector

Out of the 3,021 firms that responded to the survey for both FY2001 and FY2002, 132 are classified as foreign-affiliated firms (more than one-third foreign ownership). They account for 5.6% of total capital spending.

Planned capital spending by foreign-affiliated firms for FY2002 is 1.8% higher than in the previous year. As regards the manufacturing sector, spending will continue to decline in electric machinery, down 21.2%. However, the heavy-weighted transport equipment will increase 49.9%. The petroleum industry is also expected to record a substantial growth in spending of 86.5%. Overall, capital spending by foreign-affiliated firms will increase 15.2% in the entire manufacturing sector. The non-manufacturing sector will see a 8.7% drop in capital spending by foreign affiliates, with curbs on investment in telecommunications and information overwhelming an increase in leasing. Of the foreign-affiliated firms, the companies wholly owned by foreign capital (40 firms, accounting for 0.4% of the companies covered by the survey) will see an increase of 4.5% in domestic capital spending.

Planned capital spending by foreign-affiliated firms (73 firms with over one-third foreign ownership) for FY2003 is down 16.6% from the previous year.

Capital Spending by Foreign-Affiliated Firms, by Principal Business Sector

	Capital Spending						Growth Rate (%)			Composition (%)	Share of All Firms (%)
	FY2000 Actual	FY2001 Actual	FY2001 Actual	FY2002 Planned	FY2002 Planned	FY2003 Planned	01/00	02/01	03/02	FY2002	
	(114 firms)		(132 firms)		(73 firms)					(132 firms)	
Total	7,769	7,289	12,180	12,393	3,397	2,834	-6.2	1.8	-16.6	100.0	5.6
Wholly owned foreign firms	*921*	*619*	*810*	*847*	*395*	*190*	*-32.8*	*4.5*	*-52.0*	*6.8*	*0.4*
Manufacturing	4,696	4,621	5,319	6,130	1,832	1,423	-1.6	15.2	-22.3	49.5	9.2
Non-Manufacturing	3,073	2,669	6,861	6,263	1,565	1,412	-13.1	-8.7	-9.8	50.5	4.1
By sector											
Materials	1,257	1,387	1,758	1,779	421	418	10.3	1.2	-0.6	14.4	8.8
Processing & Assembly	3,302	3,039	3,366	3,988	1,048	707	-8.0	18.5	-32.5	32.2	9.0
Energy	137	195	195	363	363	297	42.6	86.5	-18.2	2.9	1.0
Non-Manufacturing excluding Energy	3,073	2,669	6,861	6,263	1,565	1,412	-13.1	-8.7	-9.8	50.5	5.2

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

8. Capital Spending Cash Flow Ratio, by Principal Business Sector

The ratio of capital spending to cash flow (net income plus depreciation expenses) will fall from the previous year to one of the lowest levels recorded so far in both manufacturing and non-manufacturing (down from 116.6% in FY2001 to 83.6% in FY2002 for all industries).

Capital Spending Cash Flow Ratio

(Unit:%)

		Revenue Growth (1,951 firms)	Revenue Growth (2,063 firms)	Income (Ordinary) Growth		Capital Spending/ Cash Flow Ratio		Capital Spending/ Depreciation Expenses Ratio	
		FY2001 Actual	FY2002 Forecast	FY2001 Actual	FY2002 Forecast	FY2001 Actual	FY2002 Forecast	FY2001 Actual	FY2002 Forecast
Total		-3.8	0.1	-21.7	24.0	116.6	83.6	109.0	113.3
Manufacturing		-5.8	0.3	-36.9	46.7	126.7	61.6	96.8	94.7
Non-Manufacturing		-2.2	-0.1	-5.2	6.6	112.3	99.1	116.1	123.9
Sub-sector	Materials	-7.2	-0.4	-31.6	14.6	101.2	60.0	98.5	86.2
	Processing & Assembly	-5.6	0.3	-40.3	71.8	159.5	62.3	97.9	100.9
	Energy	-2.4	-0.2	-5.6	-2.9	83.5	84.6	102.9	105.9
	Non-Manufacturing excluding Energy	-2.3	0.1	-6.3	9.8	122.6	102.5	118.9	128.2

Note: Capital spending cash flow ratio = {capital spending ÷ (net income + depreciation expenses)} × 100.

9. Information Technology Investment, by 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,” or “other expenses”). This is the fifth survey on information technology investment since its inception in August 2000.

Actual IT Investment in FY2001

Investment in information technology in FY2001, based on the 1,465 firms that responded to the survey for both FY2000 and FY2001, increased in both the manufacturing sector (up 8.0%) and the non-manufacturing sector (up 6.1%), resulting in a 6.7% increase for all industries. In the manufacturing sector, many industries invested in production and inventory management systems, customer management and sales support. In the non-manufacturing sector, retail and transportation, including airlines and railways, were major contributors to the increase, as well as the heavy-weighted electric power industry.

Planned IT Investment for FY2002

Planned investment in information technology for FY2002, based on the 1,706 firms that responded to the survey for both FY2001 and FY2002, is expected to increase in both the manufacturing sector (up 11.9%) and the non-manufacturing sector (up 1.3%), leading to an overall increase of 4.8%. By sector, investment in manufacturing is expected to continue to increase despite an expected decline in capital spending overall, led by steady investment in production and inventory management systems, customer management and sales support. In the non-manufacturing sector, investment in IT will continue to increase in retail and railways, but is expected to decline in electric power and airlines, following the large investments made in the previous year.

Revisions to IT Investment

In comparison with the previous survey of February 2002, actual investment in information technology for FY2001 was revised downwards in both the manufacturing sector (down 2.3%) and the non-manufacturing sector (down 13.2%), leading to an overall downward revision of 9.9%. On the other hand, planned investment for FY2002 was revised upwards in both the manufacturing sector (up 4.2%) and the non-manufacturing sector (up 6.1%), leading to an overall upward revision of 5.5%.

Overview of IT Investment (actual figures for FY2001)

Industrial Sector (1,465 firms)	Amount of IT Investment (%)		Growth Rate (%)		Share of IT Investment (%)		IT Investment/ Capital Spending (%)	
			Change in IT Investment	Change in Capital Spending				
	FY2000 Actual	FY2001 Actual	2001/2000	2001/2000	FY2000 Actual	FY2001 Planned	FY2000 Actual	FY2001 Actual
Total	8,934	9,537	6.7	-10.3	100.0	100.0	7.8	9.3
Manufacturing	2,957	3,195	8.0	-2.5	33.1	33.5	10.9	12.1
Non-manufacturing	5,977	6,342	6.1	-12.7	66.9	66.5	6.9	8.3

Note: Monetary amounts are in 100 million yen.

Overview of IT Investment (planned figures for FY2002)

Industrial Sector (1,465 firms)	Amount of IT Investment (%)		Growth Rate (%)		Share of IT Investment (%)		IT Investment/ Capital Spending (%)	
			Change in IT Investment	Change in Capital Spending				
	FY2001 Actual	FY2002 Planned	2002/2001	2002/2001	FY2001 Actual	FY2002 Planned	FY2001 Actual	FY2002 Planned
Total	10,177	10,667	4.8	-1.3	100.0	100.0	9.2	9.8
Manufacturing	3,403	3,808	11.9	-4.7	33.4	35.7	12.3	14.4
Non-manufacturing	6,774	6,859	1.3	-0.2	66.6	64.3	8.2	8.3

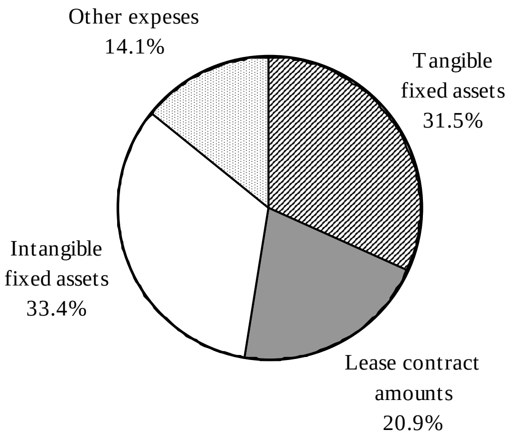
Note: Monetary amounts are in 100 million yen.

Revision to IT Investment

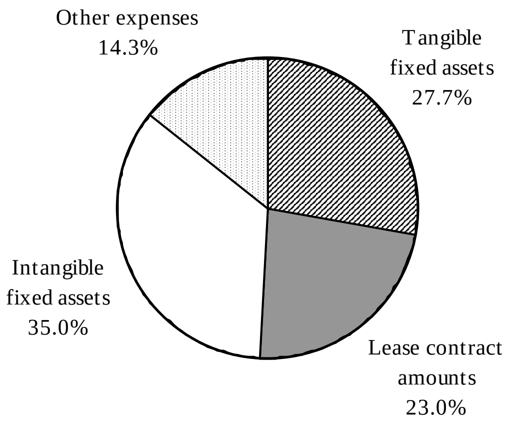
Industrial Sector	FY2001, Actual			FY2002, Planned		
	IT Investment (1,471 firms)		Revision (%)	IT Investment (1,107 firms)		Revision (%)
	Feb. 2002	Aug. 2002		Feb. 2002	Aug. 2002	
Total	10,068	9,067	-9.9	5,430	5,729	5.5
Manufacturing	3,008	2,938	-2.3	1,593	1,659	4.2
Non-manufacturing	7,060	6,129	-13.2	3,837	4,069	6.1

Note: Monetary amounts are in 100 million yen.

Components of IT Investment (actual FY2001)



Components of IT Investment (planned FY2002)



Note: The charts show distribution of the 1,706 firms that responded to the survey both in FY2001 and FY2002.

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