

## 2. Trends in Supply and Final Demand

### (1) Outline of Trends in Supply for Final Demand in this Quarter

Outline of trends in supply for final demand of the third quarter of 2001 is as follows.

- Government consumption increased by 0.5% compared to the previous quarter for two consecutive quarters with private consumption decreasing by 1.4%, and therefore all industry supplies for consumers decreased by 0.9%, showing a decrease for the first time in four quarters.
- Though public investment increased by 0.1% compared to the previous quarter, private investment decreased by 4.5% for three consecutive quarters and private housing decreased by 2.3% for two consecutive quarters. Therefore, all industry supply for investment decreased by 3.2% for two consecutive quarters.
- Export decreased by 5.0% compared to the previous quarter for five consecutive quarters and import decreased by 5.9%.

**Changes in the Indices of All Industries (Final Demand Components)**  
(1995=100, seasonally adjusted)

	1999	2000	1999		2000				2001		
	Compared to the previous year	Compared to the previous year	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter
<b>Consumption</b>	1.2	2.2	0.7	-0.2	0.5	1.3	-0.1	0.9	0.3	0.2	-0.9
Private consumption	1.2	2.2	0.5	-0.1	0.5	1.4	-0.2	0.7	0.5	0.1	-1.4
Mining and manufacturing industry (goods)	1.5	4.9	-0.1	1.6	0.8	1.5	2.5	0.7	-0.9	0.2	-1.2
Tertiary industries (service)	1.1	1.2	0.9	-0.8	0.4	1.3	-1.2	0.7	1.1	0.1	-1.4
(Special posted) IT-related	20.0	18.3	9.2	2.3	10.2	-4.0	6.7	0.5	6.3	2.1	-5.0
Government consumption	1.3	2.4	1.4	-0.3	0.2	1.2	0.4	0.8	-0.3	0.6	0.5
<b>Investment</b>	0.2	0.6	-0.2	-0.9	0.4	1.1	0.8	-1.6	4.0	-7.3	-3.2
Public investment	4.7	-7.5	-2.7	-4.2	-2.3	1.9	-3.0	-6.4	12.9	-8.8	0.1
Private housing	1.3	0.5	1.0	-5.0	2.5	-1.8	-0.2	4.4	0.8	-10.3	-2.3
Private enterprise facilities	-2.5	5.3	0.7	1.9	0.5	2.1	3.2	0.3	-0.9	-5.3	-4.5
Mining and manufacturing industry (goods)	-0.1	8.0	3.4	2.9	0.4	0.6	5.3	3.7	-5.2	-4.1	-8.7
Construction business (building)	-6.3	0.9	-3.8	-0.6	0.5	4.9	1.1	-5.4	2.7	-10.1	2.6
Tertiary industries (service)	-3.1	4.6	-0.4	4.5	-4.2	4.7	1.7	2.8	-1.8	0.2	-2.9
(Special posted) IT-related	8.9	13.9	5.7	-0.8	3.3	4.8	8.5	4.8	-3.6	-0.3	-8.5
<b>Exports</b>	0.3	5.6	3.6	2.7	-0.2	3.3	-2.7	-0.2	-1.8	-2.5	-5.0
Mining and manufacturing industry (goods)	1.6	5.7	5.1	3.0	-0.6	3.6	-3.3	-0.4	-2.0	-3.4	-5.3
Tertiary industries (service)	-3.9	5.1	-0.5	0.3	1.9	2.6	-0.6	0.1	-1.2	0.9	-3.5
<b>Imports</b>	6.6	6.9	-0.5	5.2	-2.9	-1.1	8.1	5.4	-2.5	0.9	-5.9
Mining and manufacturing industry (goods)	11.9	13.2	-0.9	8.4	-0.7	-1.6	11.5	6.1	-3.0	0.4	-6.6
Tertiary industries (service)	-4.9	-9.3	0.7	-3.6	-8.4	-0.2	-0.5	1.2	0.4	1.5	-2.9

(Notes) 1. IT-related consumption is consumption related to facsimiles, PHS/mobile telephones, pocket bells, cordless telephones, personal computers, domestic telecommunications business (mobile communications excluded) and mobile communications which are also supplied for private consumption.

2.IT-related investments are investments for communication wire and power cables, optical fiber products, for wires and cables, electrostatic indirect copying machines, digital color copying machines, key service units, facsimiles, electronic automatic exchange, transmission units, fixed communication devices, PHS and mobile telephones, pocket bells, base station communication devices, general purpose computers, mid-range computers, personal computers, external storages, input-output devices, terminal units, software development and program creation (subcontracts) that are also supplied to private enterprise facilities.

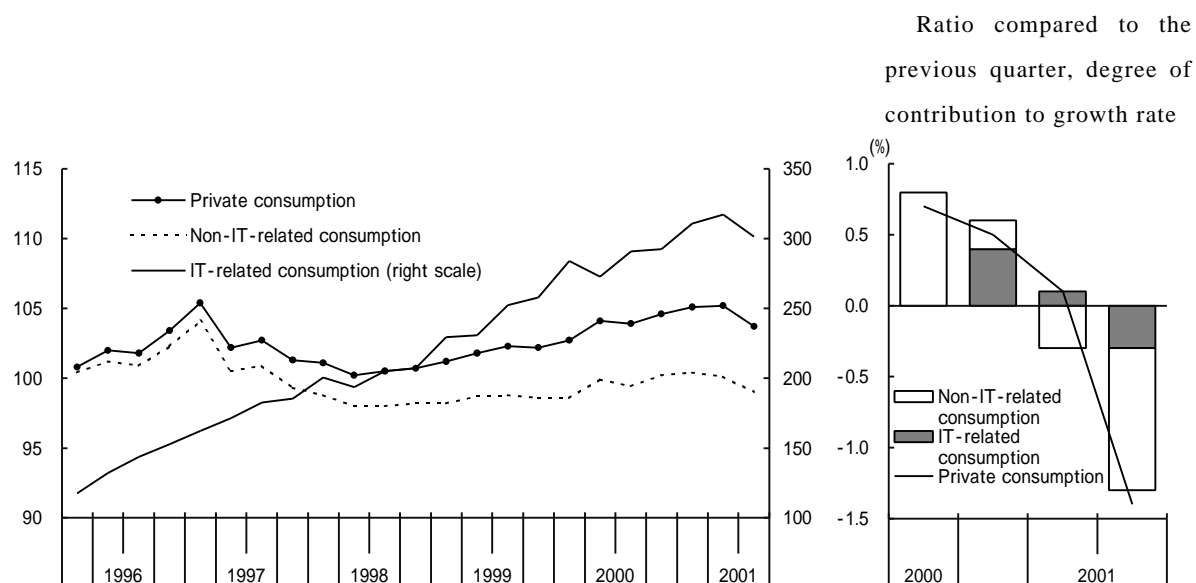
(Source) “The indices of all industries (final demand components)”

## (2) Trends in IT-related Consumption and Investment

IT-related consumption for the third quarter of 2001 decreased by 5.0% compared to the previous quarter for the first time in five quarters. IT-related investment decreased by 8.5% for three consecutive quarters.

### Changes in IT-related Consumption

Index level (1995=100)

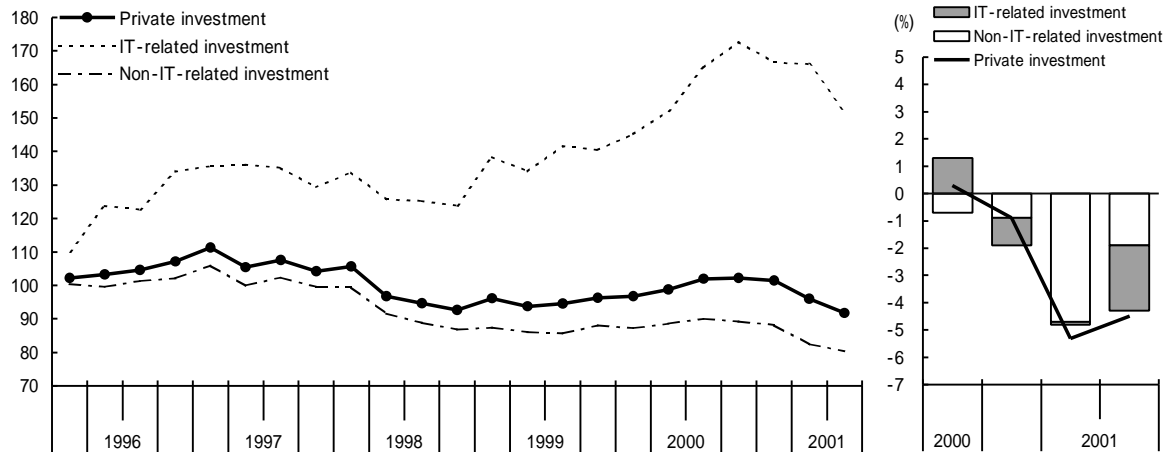


(Note ) IT-related consumption is consumption related to facsimiles, PHS/mobile telephones, pocket bells, cordless telephones, personal computers, domestic telecommunications business (mobile communications excluded) and mobile communications which are also supplied for private consumption.

## Changes in IT-related Investment

Index level (1995=100)

Ratio compared to the previous quarter, degree of contribution to growth rate



(Note) IT-related investments are investments for communication wire and power cables, optical fiber products, for wires and cables, electrostatic indirect copying machines, digital color copying machines, key service units, facsimiles, electronic automatic exchange, transmission units, fixed communication devices, PHS and mobile telephones, pocket bells, base station communication devices, general purpose computers, mid-range computers, personal computers, external storages, input-output devices, terminal units, software development and program creation (subcontracts) that are also supplied to private enterprise facilities.

(Source) "The indices of all industries (final demand components)"

### (3) Relationship between Prices and Consumption

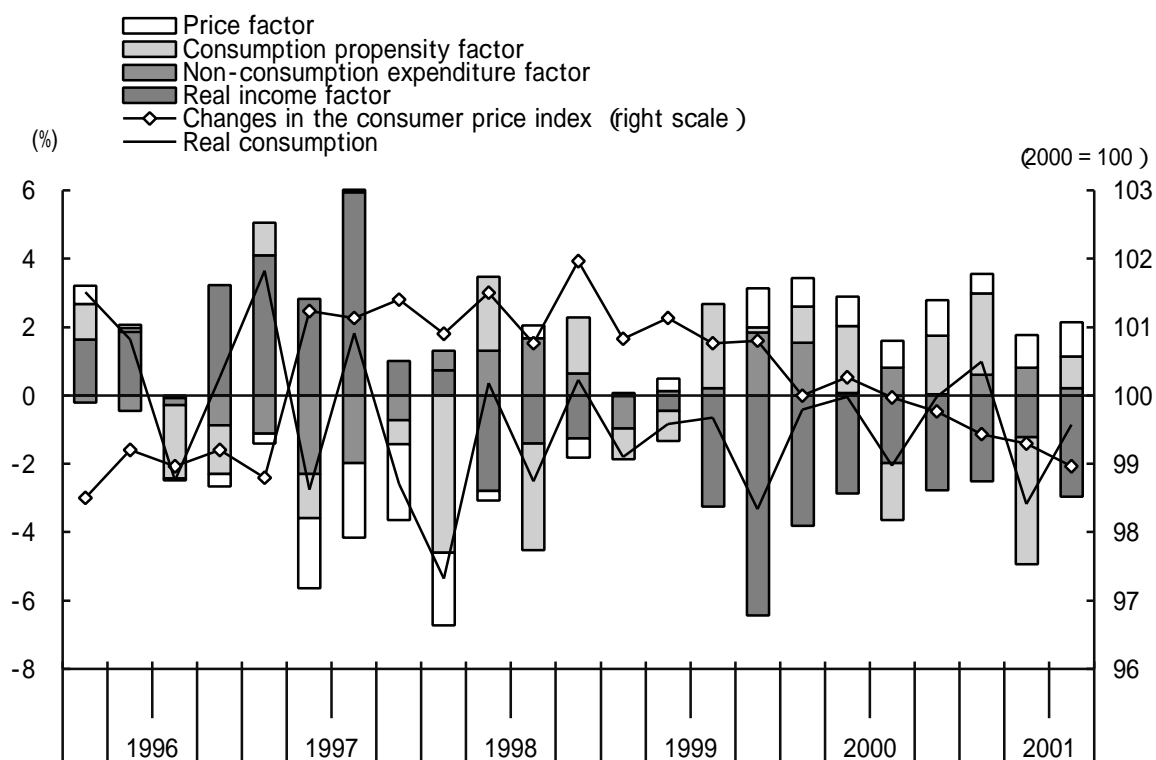
Several years have already past since the plunge of consumer prices became a topic in the news. When making a factor analysis of real consumption expenditure in order to observe the impact of dropping consumer prices on the consumption trend, it was revealed that price factors have been contributing to the increase for eight consecutive quarters while net income factor has been contributing to the decrease for fourteen consecutive quarters. Therefore, it is considered that though consumers have benefited from their increased real purchasing power, this benefit has been offset as their income decreased drastically.

Furthermore, in order to observe the changes in the supply trend caused by the drop in price, study on the trends was conducted through the plotted diagram of the indices of all industries (final demand components) (hereinafter referred to as “IAI”) which is the quantitative index grasping the consumer price index and private consumption from the supply side. The diagram shows a free and easy cycle ( ), in which prices decrease as the consumption decreases and prices increase as consumption bottoms out and starts to increase. As in 2000, however, the plot of 2001 still remains in stage .

In order to observe the price-IAI relationship more in detail, a calculation of the composition ratio was made after having allocated the increase ratio of the price and IAI to each stage by item<sup>(note)</sup>. The result showed that the ratio of stage decreased and that of stage increased when the IAI decreased in the first quarter of 1997. The reason behind this is expected to be the fact that the price relatively increased due to the higher consumer tax rate while consumption was on a downward tendency, which has created a further downward pressure on consumption. On the other hand, in the course of decreases in the total supply since its peak in the third quarter of 2000, though the percentage of stage had been expanding till the first quarter of 2001, it has decreased in this quarter and the percentage of stage has expanded. This situation has occurred because while the price-decreasing items had been able to support the consumption with the increased real purchasing power under the price decreasing condition till the first quarter of 2001, it seems to have become less effective in this quarter.

Taking the relationship of price and consumption cycle up to now into consideration, the expansion of stage is necessary for the recovery of consumption; plus high value-added items that attract consumers despite their higher prices are also needed, which means that the expansion of stage is vital to recover this situation.

## Factor Analysis of Real Consumption and Changes in CPI



(Notes) 1. The factor analysis of the real consumption expenditure is based on the following.

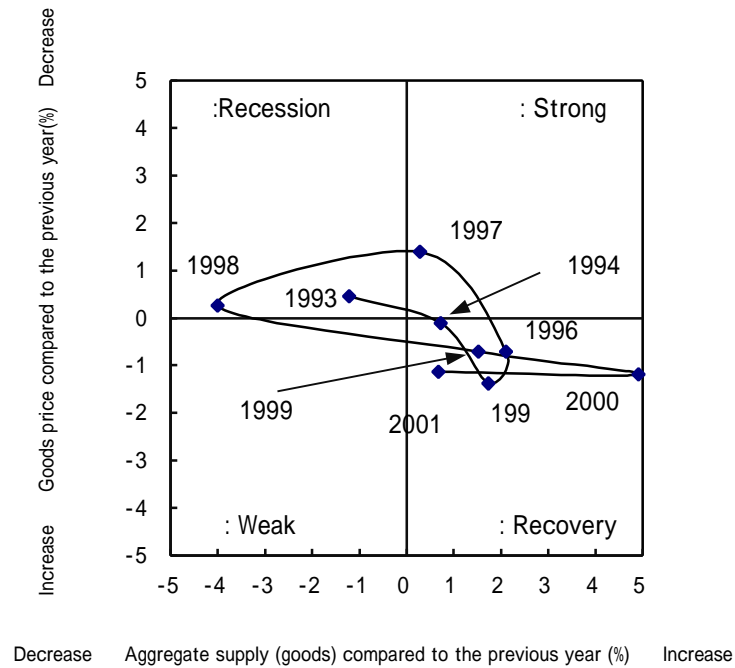
From  $C / P = C_p \times (Y - T) / P$ ,

$$(C / P) = Y \times C_p / P - T \times C_p / P + C_p \times (Y - T) / P - P \times C_p \times (Y - T) / P^2$$

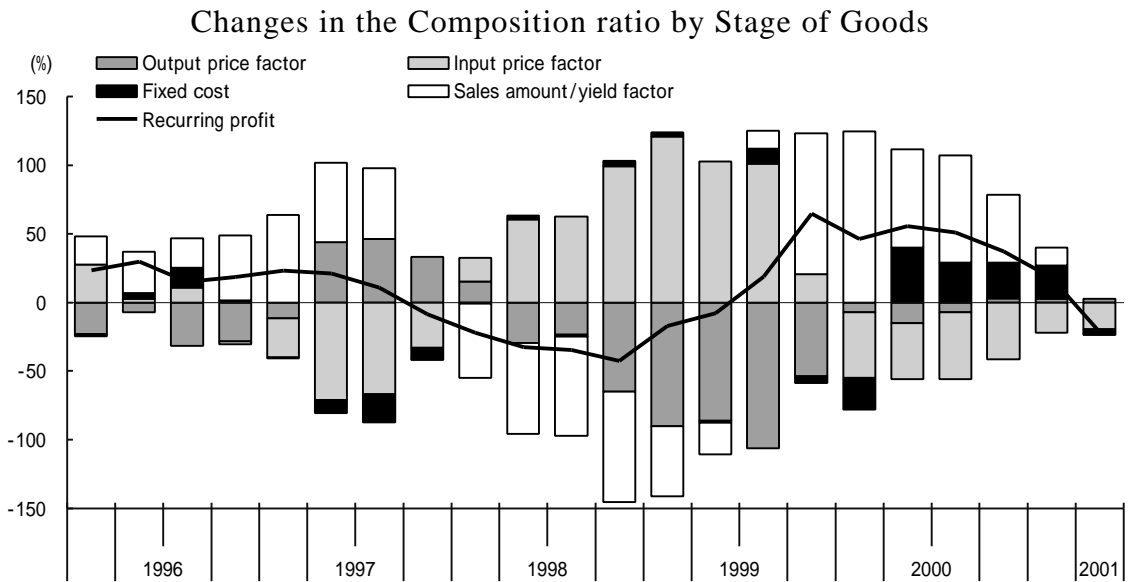
2. Non-consumption expenditure refers to direct tax, social insurance, etc.

(Sources) "House hold expenditure survey" and "Consumer price index" (Management and Coordination Agency)

# Plotted Diagram of the Consumer Price Index and the Indices of All Industries (final demand components, goods)



(Sources) “Indices of All Industries (final demand component)” and “Consumer Price Index” (Management and Coordination Agency)



(Sources) “Indices of All Industries (final demand component)” and “Consumer Price Index” (Management and Coordination Agency)

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(Note) The signs used in the analysis are as follows.

Price	Decrease	(Recession)	(Strong)
	Increase	(Weak )	(Recovery )
		Decrease	Increase
		Aggregate supply (goods/service)	



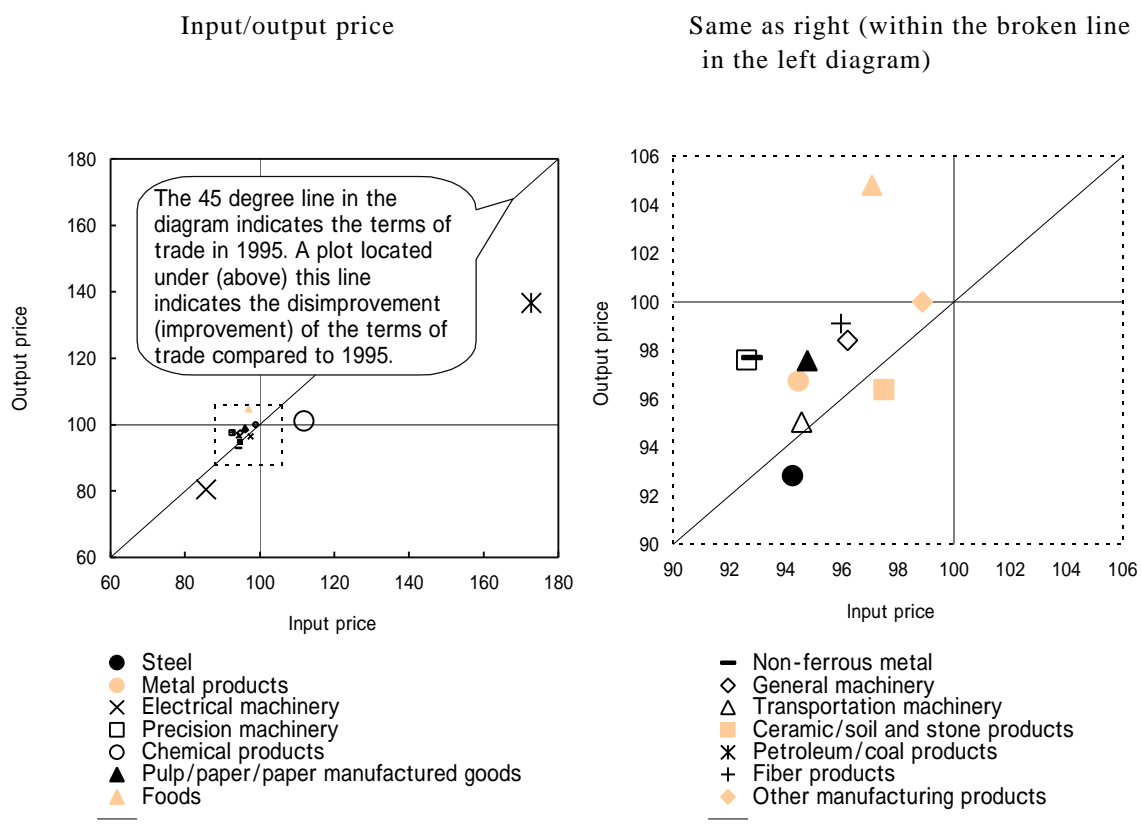
#### (4) Impact of Price Changes on Corporate Earnings

The degrees of the fluctuations of the corporate earnings and price trend have been small lately. Reviewing the trend of input/output prices by kind of industry, the fluctuation of price in the electric machinery industry, chemical industry and petroleum/coal products industry have become larger, and the terms of trade have worsened compare to those in 1995. Also in other industries, although a downward tendency of price is perceived, the terms of trade have been rather improving, explaining that the impact of price changes on the corporate earnings is limited to certain industries.

In addition, considering the changes in the operating revenues in the manufacturing industries, the improvement of the yield owing to the improvement of unit sales and productivity contributed to the recovery stage started from the latter half of 1999. On the other hand, in terms of the price, the increase in the input price worsened the earnings. Since such pressure to decline profits exists, it is expected that the companies try to underpin their earnings by restructuring including fixed cost (such as labor cost) reduction.

Although some signs of the upturn of the terms of trade such as the lower petroleum import price have been observed in this quarter, the decreasing output price is expected to spread the pressure to decline profits, which is currently limited to certain categories, throughout the industry. Also, it is expected to have impacts on employment as the restructuring goes further and on production to shift overseas. Therefore, future development concerning this matter remains to be seen.

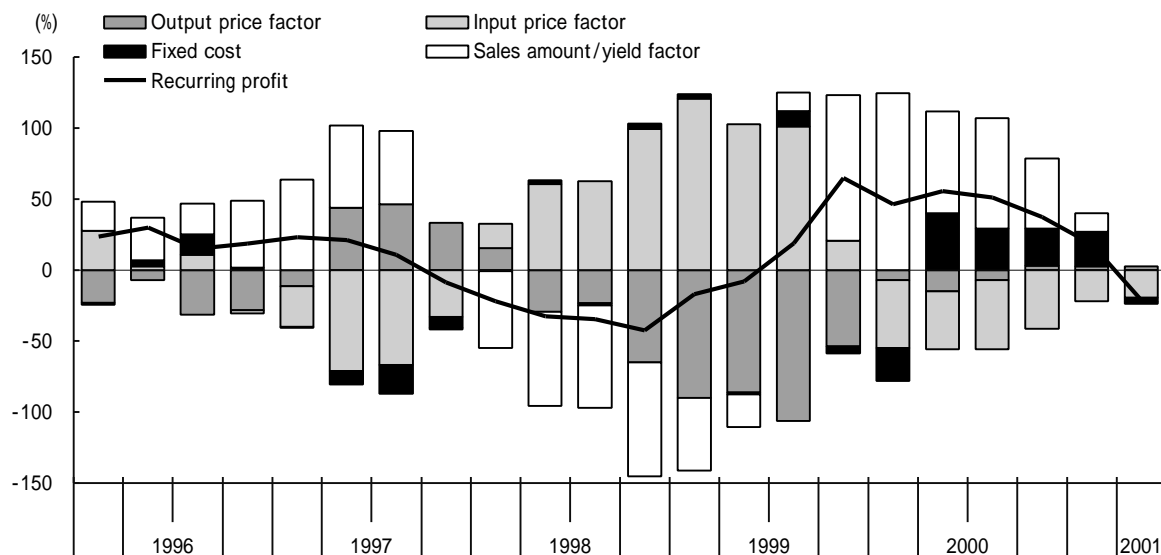
#### Relationship between the Input/Output Price Index by Industry



(Note) The input/output prices are the average of the period from the forth quarter of 2000 to

the third quarter of 2001.

### Operating Revenues in the Manufacturing Industry (compared to the corresponding period of the previous year)



(Sources) "Price Indexes Monthly" (Bank of Japan) and "Quarterly Financial Statements of Corporation Industry" (Ministry of Finance)

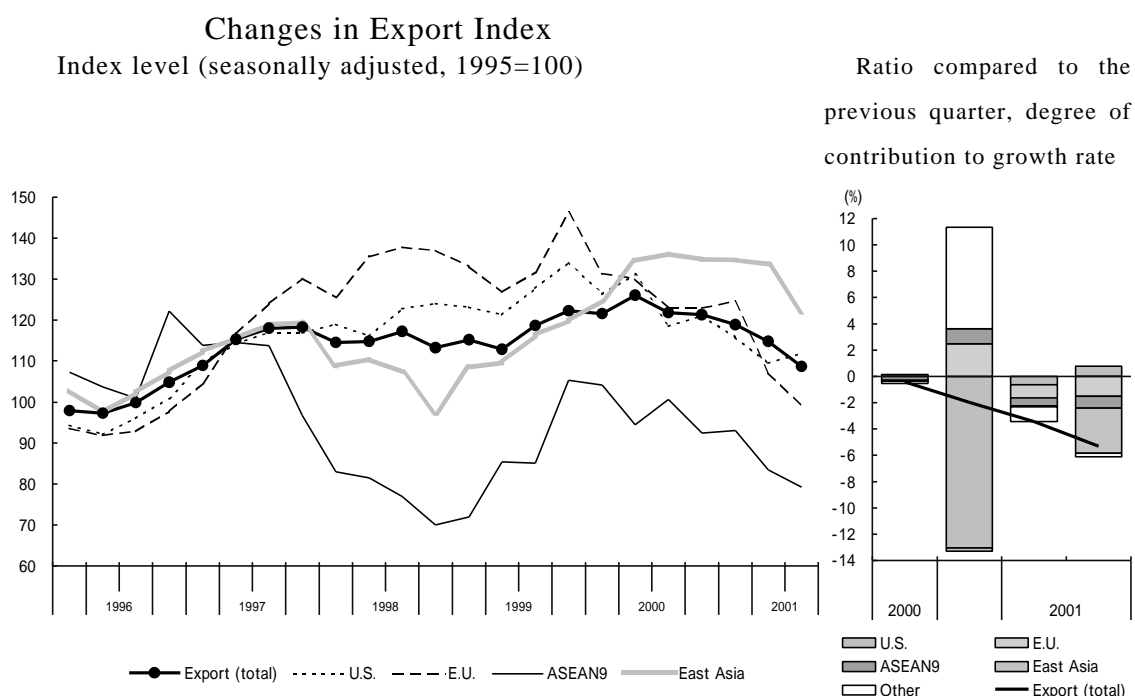
## (5) Outline of Import and Export

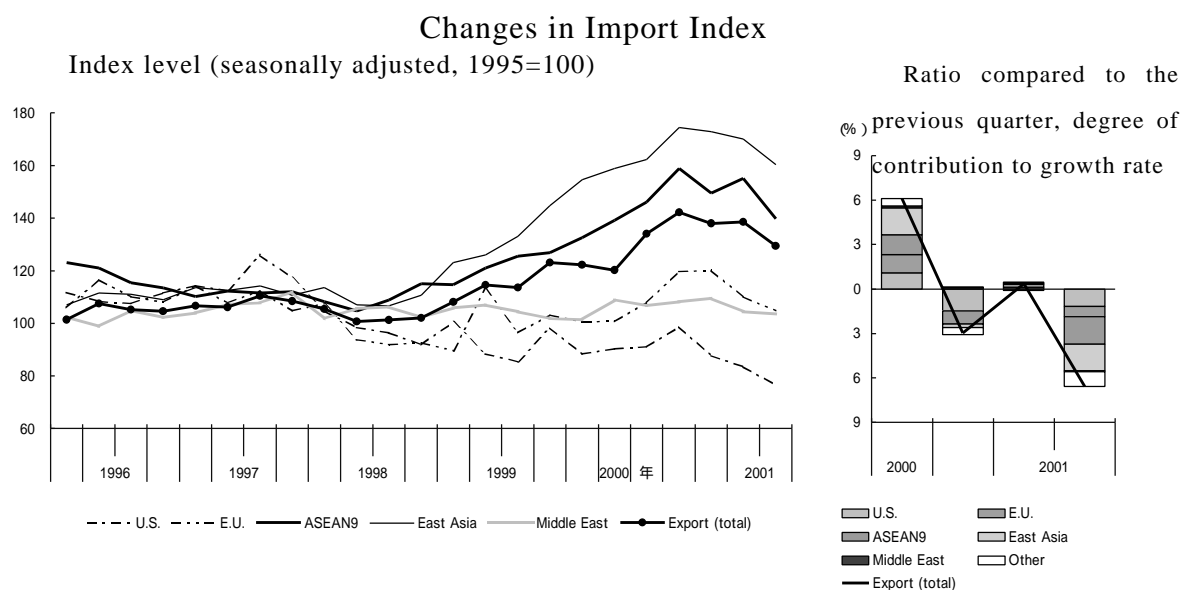
### Trends in Import and Export

Receipt of services decreasing by 3.5% compared to the previous quarter for five consecutive quarters with export of goods (mining and manufacturing industry) by 5.3% for the five consecutive quarters, and therefore all export decreasing by 5.0% for five consecutive quarters.

Payment of services by 2.9% compared to the previous quarter for the first time in four quarters with import of goods (mining and manufacturing industry) by 6.6%, and therefore all import decreasing by 5.9%.

Regionally speaking, although exports to the U.S. increased, those to the E.U., ASEAN9 and East Asia decreased. Imports from all regions decreased.





(Notes) 1.Import index by region is calculated by rearranging the foreign trade statistics into total supply index classification.

2. Regional classifications are as follows.

ASEAN9 : Singapore, Thailand, Malaysia, Brunei, Philippines, Indonesia, Vietnam, Laos and Myanmar.

East Asia : Korea, China, Taiwan and Hong Kong

Middle East: Iran, Iraq, Bahrain, Saudi Arabia, Kuwait, Qatar, Oman, Israel, Jordan, Syria, Lebanon, United Arab Emirates, Gaza and Yemen

(Source) “Indices of Industrial Domestic Shipments and Imports”

## Trends in Japan-U.S.-China Trade

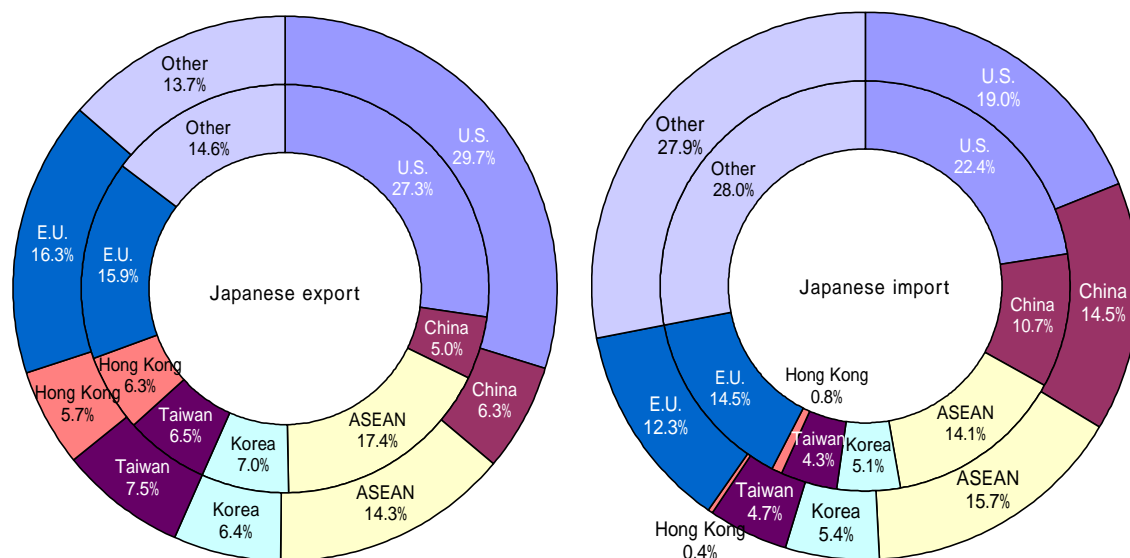
Regarding Japan's export to the U.S., transportation machinery increased both in terms of the degree of specialization to export and export share during the period from 1995 to 2000, indicating that major export industries have strong competitiveness. On the other hand, general machinery and electric machinery have decreased in both indices.

As for Japan's export to China, though the export shares of general machinery and electric machinery are high, their degree of specialization to import shrunk in 2000 and electric machinery specialized in import in 2000.

On the other hand, with regard to the U.S. import from China in 1995, only transportation machinery specialized in export and other industries specialized in import. Furthermore, in 2000, the degree of specialization increased in all industries and transportation machinery came to specialize in import.

Compared to 1995, China has been obviously strengthening its competitiveness of export to Japan and the U.S. It is expected that foreign capital companies will enter into the Chinese market and local companies will grow as the quality of the plentiful Chinese labor force improves. Therefore, China's position in Japan-U.S.-China trade is expected to be higher in the future.

## Composition Ratio of Japan's Export by Region

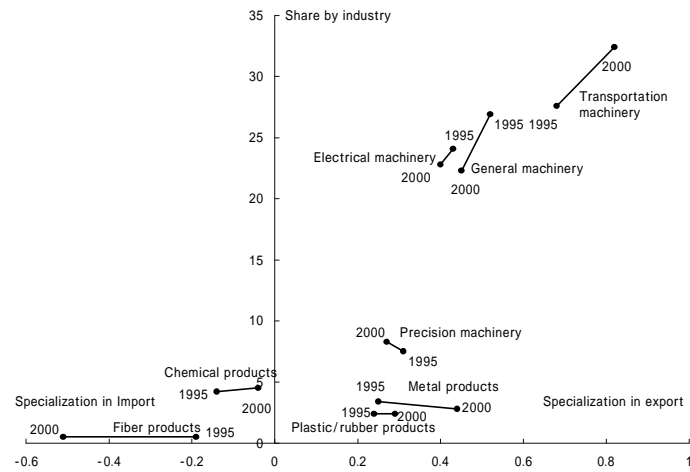


(Note) Internal circle: 1995 External circle: 2000 on an amount of money basis

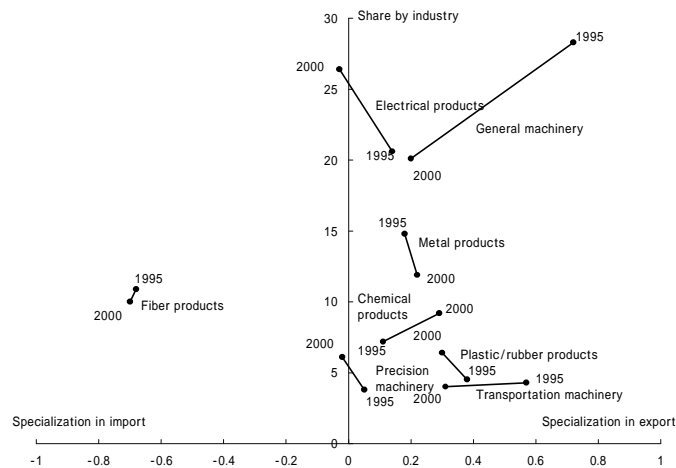
(Source) "Foreign Trade Statistics" (Ministry of Finance)

## Trade Specialization Index and Import/Export Shares by Industry

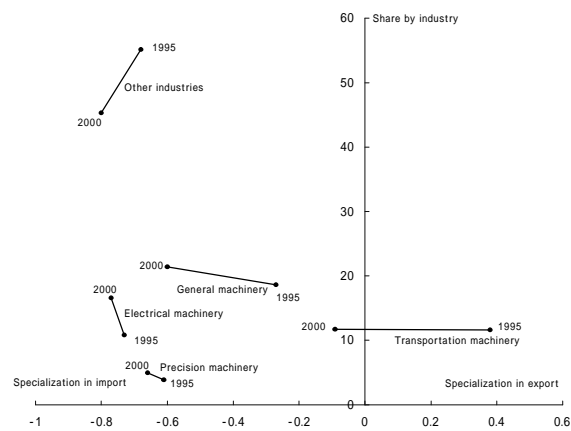
### Japan's Export to the U.S.



### Japan's Export to China



### U.S. Import from China



(Notes) 1. Trade specialization index = (export value – import value)/ (export value + import

value)

2. Export share by industry = (export value of the industry)/total export value of all industries)

3. Import share by industry = (import value of the industry)/(total import value of all industries)

(Sources) “Foreign Trade Statistics” (Ministry of Finance) and “Statistics from the Bureau of the Census, U.S. Department of Commerce”