2. Trends of Information-related items

(1) Information-related investment

Information-related investment rose 4.6% from the preceding quarter, contributing to an increase in private equipment investment. The ratio of information-related investment to private equipment investment has been gradually increasing. The ratio increased by 1.3 point from the preceding quarter to 26.7%, the highest ever.

Trends in private equipment investment and information-related investment

Note: We narrowly defined information-related investment as investment in computers, peripheral devices, office equipment, and communications equipment. We excluded precision instruments, which the US includes in information equipment. With regard to software, we only included the software ordered to outside suppliers.

Source: "Comprehensive Table of Industrial Supply" and "Indices of Tertiary Industry Activities"; "Comprehensive Construction Statistics" (Ministry of Construction); "Construction Price Index" (Construction Price Survey Group); and "Input-Output Table for 1995" (Management and Coordination Agency).
Note: Ratio of information-related investment = information-related investment / private equipment investment × 100. We calculated the information-related investment and the private equipment investment in 1995 based on the Input-Output Table for 1995. Then we calculated both investments after 1995 by multiplying each investment by each growth rate estimated from the index of all industries' supply.

Source: "Comprehensive Table of Industrial Supply" and "Indices of Tertiary Industry Activities"; "Comprehensive Construction Statistics" (Ministry of Construction); "Construction Price Index" (Construction Price Survey Group); and "Input-Output Table for 1995" (Management and Coordination Agency).

Note: To find levels of consumption and investment, we calculated the indices of all industries' supply by averaging statistical indicators concerning suppliers, such as the Comprehensive Table of Industrial Supply, the Indices of Construction Activities, and the Indices of Tertiary Industry Activities. We weighted the indices with output in the Input-Output Table for 1995.
(2) Estimate of in-house software production and Japan-US comparison of information-related investment

We estimated in-house software production and package software production. If we include them in information-related investment, 1999's ratios of information-related investment to private equipment investment and to final demand increased by 1.6 point and 0.3 point respectively. However, the ratios still do not reach the US levels.

**Japan-US comparison of information-related investment ratios**

- **Ratio of information-related investment to private equipment investment**

* All software consists of software ordered to outside suppliers, package software, and software produced in-house.

- **Ratio of goods investment to private equipment investment**

- **Ratio of software investment to private equipment investment**
Ratio of information-related investment to final demand

Note: Ratio of information-related investment = information-related investment / private equipment investment (final demand) × 100. We, like the US, defined information-related investment as investment in computers, peripheral devices, office equipment, communications equipment, and precision instruments.

Source: "Comprehensive Table of Industrial Supply" and "Indices of Tertiary Industry Activities"; "Comprehensive Construction Statistics" (Ministry of Construction); "Construction Price Index" (Construction Price Survey Group); "Input-Output Table for 1995" (Management and Coordination Agency); "Actual State of Information Technology in Japan (Survey of Information Technology)"; "Survey of Selected Service Industries" (Ministry of International Trade and Industry); "Basic Statistical Survey of Wage Structure" and "Monthly Statistical Survey of Labor" (Ministry of Labor); "Indices of Service Charges to Enterprises" (Bank of Japan); and "Survey of Current Business" (U.S. Department of Commerce).
(3) Trends in information-related consumption

Personal consumption increased 0.6% from the preceding quarter. Of the increase, an increase of 0.5% was caused by information-related consumption. The ratio of information-related consumption to the total personal consumption rose to 6.4% from 2.1% in January-March quarter of 1995.

Effect of information-related consumption

- Indices (seasonally adjusted; 1995=100)
- Contribution to change on preceding quarter

Note: Information-related personal consumption is purchase of facsimiles, PHS and cellular phones, pocket pagers, cordless phones, personal computers, domestic telecommunications services, and mobile phone services.

Source: "Comprehensive Table of Industrial Supply" and "Indices of Tertiary Industry Activities"; and "Input-Output Table for 1995" (Management and Coordination Agency).

Ratio of information-related consumption to personal consumption

Note: Ratio of information-related consumption to personal consumption = (index of information-related consumption divided by weight of information-related consumption) / (index of all industries' supply for personal consumption divided by weight of all industries' supply for personal consumption).

Source: "Comprehensive Table of Industrial Supply" and "Indices of Tertiary Industry Activities"; and "Input-Output Table for 1995" (Management and Coordination Agency).
Trends in the export and import of information-related items

Imports of information-related producer goods have been increasing more rapidly than those of other producer goods since the second half of 1999. Imports of information-related capital goods have been increasing more rapidly than those of other capital goods since the second half of 1998.

Exports of information-related capital goods have been decreasing from the peak in 1997. They are declining more rapidly than exports of other capital goods. Since 1999 exports of information-related producer goods have been increasing more rapidly than those of other producer goods. Exports of information-related items are giving a boost to the total exports of producer goods.

Export and import of information-related goods (seasonally adjusted; 1995=100)

- Import of producer goods
□ Import of capital goods

Increase of 16.7% on preceding quarter

□ Export of producer goods

Decrease of 0.9% on preceding quarter
Export of capital goods

Note:
1. Information-related producer goods are:
   Resistor, fixed capacitor, transformer, quartz oscillator, connector, printed circuit board, magnetic head, Braun tube
   for computer, silicon diode, transistor, photoelectric transformation element, linear semiconductor integrated circuit,
   bipolar semiconductor integrated circuit, metal oxide semiconductor integrated circuit (memory), metal oxide
   semiconductor integrated circuit (logic element), hybrid integrated circuit, silicone wafer, alkali storage battery,
   lithium battery, and parts of computer.

2. Information-related capital goods are:
   Wire and cable for communications, optical fiber for wire and cable, static indirect copying machine, digital color
   copying machine, button phone equipment, facsimile, electronic switch, digital transmitter, point-to-point
   communication equipment, PHS and cellular phone, base station communication equipment, general-purpose
   computer, mid-range computer, personal computer, external memory, input/output device, and terminal equipment.

Source: "Breakdown List of Industrial Shipment" and "Comprehensive Table of Industrial Supply"