2. Trends in supply and final demand
(1) Outline of supply for the year 2000

As both private and government consumption increased by 2.1% over the previous year, the overall industry supply intended for consumption increased 2.1%, bringing an increase for two consecutive years.

Though public investment decreased by 6.4%, private enterprise facilities increased 5.3% and private housing increased 1.8%, the overall industry supply for investment increased by only 0.9% for two consecutive years.

Furthermore, IT-related investment for the year 2000 showed an increase for the second consecutive year, expanding by 14.3% over the previous year.

Transition of supply from all industries for consumption and investment (estimate)

<table>
<thead>
<tr>
<th>Industry Type</th>
<th>1995</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1995 = 100, ratio compared to the previous year, seasonally adjusted)
Trends in IT-related investment

(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, digital transmission units, fixed communication device, PHS and mobile telephones, pocket bells, base station communication device, general purpose computers, mid-range computers, personal computers, external storage, input-output device, terminal unit, software development and program creation (subcontract) which are also supplied to private enterprises.

Source: Mining and Manufacturing Industry Total Supply Table, Indices of Tertiary Industry Activity, Statistics on Total Construction (Ministry of Land, Infrastructure and Transportation), Construction Price Index (Construction Price Survey Group), Input-Output Table, 1995 (Ministry of Public Management, Home Affairs, Posts and Telecommunications)

(Note) The All-Industry Supply Index is an estimated index based on a weighted average of the statistical index provided by the supply side, namely the Mining and Manufacturing Total Supply Table, Construction Industry Activity Index, and Indices of Tertiary Industry Activity, calculated by the output of the 1995-Input-Output Table to observe the level of consumption and investment.
(2) Supply intended for consumption and consumption trends

Supply intended for consumption

Reviewing the trends in private consumption for the year 2000 from supply index of the entire industry (estimate) for private consumption, supplies from the mining and manufacturing industry and from tertiary industries were 4.7% and 1.5% above the previous year respectively, resulting in a 2.1% increase in total, for the second consecutive year. In the October to December quarter, supply from both the mining and manufacturing industry and from the tertiary industry was flat, which resulted in a 0.0% level of change in total consumption compared with the previous quarter.

Furthermore, though IT-related consumption for the year 2000 rose significantly by 21.5% over the previous year, it showed a decline of 1.0% for the October to December quarter in comparison with the previous quarter.

Trends in supply index of the entire industry intended for private consumption (estimate)
(seasonally adjusted, 1995=100)

Source: Mining and Manufacturing Industry Total Supply Table, Indices of Tertiary Industry Activity, Input-Output Table 1995(Ministry of Public Management, Home Affairs, Posts and Telecommunications)
Trends in consumption related to IT

(Note) IT-related consumption for personal consumption includes facsimile, PHS/mobile telephone, pocket bells, cordless telephones, personal computers, domestic telecommunications business (except mobile communication) and mobile communication business.

Source: Mining and Manufacturing Industry Total Supply Table, Indices of Tertiary Industry Activity, Input-Output Table (Ministry of Public Management, Home Affairs, Posts and Telecommunications)
Comparison of the all-industry supply index (estimated) and family budget trend

On comparing the trends in private consumption (All-Industry Supply Index, estimated value) in the statistics for supply based on quantity and actual consumption in the family income and expenditure survey based on the amount spent, the factors behind the gap between them need to be clarified in order to view the two as complementary issues.

The three major factors in the gap are, 1) difference in item compositions, 2) difference in statistical characteristics, and 3) difference in the index brought about by the actuation of the nominal amount and the quantitative index.

For instance, examining the trends by expense of items, differences may be seen among such items, which have a high composition ratio, such as foodstuffs, transportation/communication etc. For example, foodstuffs in the family income and expenditure survey include fresh food, whereas in the all-industry supply index they do not. As a result, there is a significant difference in the composition ratio for each expense item.

Furthermore, in the family income and expenditure survey, when the nominal amount is actuated by the consumer price index, there is a gap between the deflator for the items that are lowering their prices and the purchase price.

Changes in the all industry supply intended for private consumption index and actual consumer spending (1995=100, seasonally adjusted)

![Graph showing changes in the all-industry supply intended for private consumption index and actual consumer spending.](image)

Source: Mining and Manufacturing Industry Total Supply Table, Indices of Tertiary Industry Activity, Family Income and Expenditure Survey, Consumer Price Index, Input-Output Table, 1995 (Ministry of Public Management, Home Affairs, Posts and Telecommunications)
Factors in the gap, considering the characteristics of the Family Income and Expenditure Survey and the All-Industry Supply Index

Changes in the component ratio by item

(Note) the transition of the composition ratio by year are extended estimates derived by the actual cost item index for each composition ratio of the family budget and all supply as of 1995.

Source: Mining and Manufacturing Industry Total Supply Table, Indices of Tertiary Industry Activity, Family Income and Expenditure Survey, Consumer Price Index, Input-Output Table, 1995 (Ministry of Public Management, Home Affairs, Posts and Telecommunications)
Changes in the all-Industry Supply Index for personal consumption and actual consumer spending by item

(Note) In order to organize the divergence factors of the trend by expense items, three types of classifications have been made. The type being introduced here is Type (1) (items in which the divergence expanded from 1999 to 2000). For reference, those portions in which the divergence between total supplies and the Family Income and Expenditure Survey is expanding is indicated with a ◊.

Source: Mining and Manufacturing Industry Total Supply Table, Indices of Tertiary Industry Activity, Statistics on Total Construction (Ministry of Land, Infrastructure and Transportation), Construction price index (Construction Price Survey Group), Input-Output Table, 1995 (Ministry of Public Management, Home Affairs, Posts and Telecommunications)
Supply intended for investment and investment trend

Supply activities intended for investment

Reviewing the investment trends for the year 2000 from the All-Industry Supply Index (estimate) for investment, though public investment dropped 6.4% compared to the previous quarter, with the help of the fact that active investment related to IT of private enterprise facilities and private housing have increased by 5.3% and 1.8% respectively compared to the previous quarter, resulting in an increase of 0.9% for the second consecutive year.

For the October to December quarter, although private housing increased by 1.7%, public investment dropped for the second consecutive quarter, this time by 5.4%, and private enterprise facilities dropped for the first time in 6 quarters by 0.6% which resulted in an overall decrease of 2.2%, the first decrease after 4 quarters.

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Changes in the All-Industry Supply Index (estimate) intended for investment by demand

Source: Mining and Manufacturing Industry Total Supply Table, Indices of Tertiary Industry Activity, Statistics on Total Construction (Ministry of Land, Infrastructure and Transportation), Construction Price Index (Construction Price Survey Group), Input-Output Table, 1995 (Ministry of Public Management, Home Affairs, Posts and Telecommunications)
Background to the increase in business investment

The recovery of corporate revenue is contributing to the steady upward trend in investment for private enterprise facilities. In terms of industry as a whole, the break-even point ratio started to decline from the October to December quarter of 1998, which indicated an improvement in the corporate revenue constitution. Through the recovery of corporate revenue from the end of 1999, cash flow started to increase as well, financial institutions began to improve through debt compression, etc., and plant and equipment investment also recovered.

In the July to September quarter of 2000, the break-even point ratio for all industries finally went on the upturn. Nevertheless, in non-manufacturing industries, it is difficult for cash flow to contribute directly to plant and equipment investment as it does in manufacturing industries and careful attention must be paid to future trends.

Trends in the break-even point ratio (seasonally adjusted)

(Note) Break-even point ratio = (fixed cost / marginal profit ratio) / sales amount
Source: Quarterly Financial Statements Statistics of Corporations (Ministry of Finance)
Trends in cashflow, business investment, and long-term outstanding liabilities
(ratio compared to the corresponding quarter of the previous year)

(Note) 1. Cash flow = current profits - 0.5 + depreciation, long-term outstanding liabilities = bonds payable + long term debts payable.
2. The ratio of the corresponding quarter of the previous year for each item is obtained by the moving average of the later two quarters.
Source: Quarterly Financial Statements Statistics of Corporations (Ministry of Finance)
Influence of IT-related investment on labor productivity

The tendency of IT-related investment ratio for the investment areas are, in general, taking an upward trend when the areas of investment are divided into the following 4 categories: IT product manufacturer, IT product user (manufacturer), IT product user (non-manufacturer), and IT infrastructure. In particular, IT-related investment has risen significantly from 1998 to the first half of 1999 for IT product manufacturers and from the first half of 1995 to 1997 for IT infrastructure.

An estimate is given for the degree of contribution of active IT-related investment to the improvement in labor productivity by each investment area. The results are that IT-related capital factors have contributed to the improvement of labor productivity throughout the whole quarter for all investment areas. The IT-related capital factor is bigger for IT product manufacturers and IT infrastructure compared to IT product users. Furthermore, from 1995 on, labor productivity in IT infrastructure has shown significant increase. This is assumed to be a result of the increase in IT-related investment, such as in the case of the electronic exchange and base station communication devices needed as a result of the rapid increase in the demand for mobile communication devices. The increase in labor productivity of IT product users for both manufacturers and non-manufacturers is rather flat and the contribution of IT-related capital is also small.

Therefore, though the rate of contribution varies among investment areas, recent active IT-related investment is helping to push up labor productivity.
Changes in the investment ratio related to IT by investment area (business investment by private enterprises)
Degree of contribution compared to previous year

Degree of contribution compared to previous year (average of quarters from Jan. — Mar. 1995 through July — Sep. 2000)

<table>
<thead>
<tr>
<th></th>
<th>IT product manufacturer</th>
<th>IT user (manufacturer)</th>
<th>IT user (non-manufacturer)</th>
<th>IT infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage change of labor productivity from the previous year</td>
<td>1.51</td>
<td>6.18</td>
<td>1.29</td>
<td>6.09</td>
</tr>
<tr>
<td>Capital factor</td>
<td>1.02</td>
<td>2.13</td>
<td>0.94</td>
<td>0.73</td>
</tr>
<tr>
<td>IT-related capital factor</td>
<td>0.43</td>
<td>0.90</td>
<td>0.27</td>
<td>0.30</td>
</tr>
<tr>
<td>Hardware factor</td>
<td>0.25</td>
<td>0.63</td>
<td>0.17</td>
<td>0.23</td>
</tr>
<tr>
<td>Software factor</td>
<td>0.06</td>
<td>0.11</td>
<td>0.07</td>
<td>0.06</td>
</tr>
<tr>
<td>Communication instruments factor</td>
<td>0.11</td>
<td>0.16</td>
<td>0.03</td>
<td>0.04</td>
</tr>
<tr>
<td>General capital factor</td>
<td>0.59</td>
<td>1.23</td>
<td>0.68</td>
<td>0.46</td>
</tr>
<tr>
<td>Operation rate factor</td>
<td>0.17</td>
<td>0.41</td>
<td>0.06</td>
<td>-</td>
</tr>
</tbody>
</table>
| (Note) | 1. The definition of the subject of investment is IT product manufacturer: general machine industry, electric machine industry, precision instrument industry, IT user (manufacturer): manufacturers other than IT product manufacturers; IT product user (non-manufacturer): non-manufacturers other than IT, infrastructure: communication industries.

2. The estimated amount of capital stock by investment bodies for each item is created as follows:
- For all the items which correspond to the equipment of private enterprises, the weight of the All-Industry Supply Index will be divided by investment bodies by use of the fixed capital matrix given in the Input-Output Table, 1995.
- The investment amount by investment body is estimated by multiplying the all-industry supply index for each item.
- Based on the perpetual inventory system, the capital stock for each item is estimated from the
investment amount for each item by the investment body and the capital consumption ratio.

(4) Trends in export and import

Exports for the year 2000 increased by 5.4% from the previous year, an increase for the second consecutive year, owing to the increase in exports to Asia, though export to the EU and the US have decreased. Although ASEAN 9 showed a decrease for the October to December quarter of last year, the increase in other nations pushed the figure up by 0.5% compared to the previous year.

As for imports, though import from the US decreased the increase in imports from Asia and the EU resulted in a 14.8% increase compared to the previous year, an increase for the second consecutive year. For the October to December quarter of last year, imports increased in all regions, resulting in an increase of 5.6%, the third consecutive quarter-on-quarter increase.

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1. Shipment index destined for export by region is calculated by rearranging the foreign trade statistics into shipment index classifications and the import index by region is calculated by rearranging the foreign trade statistics into total supply index classifications.
2. Regional classifications are as follows:
   ASEAN 9: Singapore, Thailand, Malaysia, Brunei, Philippines, Indonesia, Vietnam, Laos, Myanmar
   East Asia: Korea, China, Taiwan, Hong Kong
   Middle East: Iran, Iraq, Bahrain, Saudi Arabia, Kuwait, Qatar, Oman, Israel, Jordan, Syria, Lebanon, UAE, Gaza, Yemen