2. Supply trends and final demand

(1) Outline of supply trends for final demand

① Supply trends for the quarter

【Characteristics】

・ Supply for final demand increased by 0.7% from the previous quarter, up for the fifth consecutive quarter.

・ Overall industrial supply for consumption increased by 0.6% from the previous quarter, up for the first time in two quarters, due to an increase in personal consumption for the fifth consecutive quarter (up by 0.6% (id.)).

・ Overall industrial supply for investment declined by 0.8% from the previous quarter, down for the first time in three quarters, as public investment and private housing both decreased, despite a 3.5% increase in private corporate facilities (up from the previous quarter for the third consecutive quarter).

・ Exports increased by 1.0% from the previous quarter, up for the fifth consecutive quarter, and imports also increased for the fourth consecutive quarter, up by 3.7% (id.).

・ IT-related consumption increased by 7.7% from the previous quarter, up for the first time in two quarters, and IT-related investments increased by 1.8% (id.), up for the third consecutive quarter.

Changes in the Indices of All Industries (Final Demand Components)

(2005 = 100, Ratios to the previous year (quarter))

<table>
<thead>
<tr>
<th></th>
<th>2008 Ratio to the previous year</th>
<th>2009 Ratio to the previous year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total of final demand sector</td>
<td>-2.1</td>
<td>1.7</td>
<td>-9.1</td>
<td>1.2</td>
<td>0.7</td>
</tr>
<tr>
<td>Mining and manufacturing (Goods)</td>
<td>-4.2</td>
<td>-2.9</td>
<td>-4.1</td>
<td>-2.8</td>
<td>-2.3</td>
</tr>
<tr>
<td>Tertiary industries (Services)</td>
<td>-0.7</td>
<td>-3.8</td>
<td>-0.2</td>
<td>-0.6</td>
<td>-1.0</td>
</tr>
<tr>
<td>Consumption</td>
<td>-0.9</td>
<td>2.2</td>
<td>-0.6</td>
<td>1.0</td>
<td>0.7</td>
</tr>
<tr>
<td>Personal consumption</td>
<td>-1.2</td>
<td>-5.4</td>
<td>-0.7</td>
<td>-1.1</td>
<td>1.5</td>
</tr>
<tr>
<td>Mining and manufacturing (Goods)</td>
<td>-0.6</td>
<td>-10.5</td>
<td>-2.1</td>
<td>-3.4</td>
<td>2.7</td>
</tr>
<tr>
<td>Tertiary industries (Services)</td>
<td>-1.3</td>
<td>-3.7</td>
<td>-0.3</td>
<td>-0.7</td>
<td>0.2</td>
</tr>
<tr>
<td>Special IT-related</td>
<td>-2.2</td>
<td>-3.5</td>
<td>-1.5</td>
<td>-3.4</td>
<td>2.0</td>
</tr>
<tr>
<td>Government consumption</td>
<td>-0.4</td>
<td>1.2</td>
<td>-0.6</td>
<td>1.0</td>
<td>0.7</td>
</tr>
<tr>
<td>Investment</td>
<td>-4.6</td>
<td>-14.6</td>
<td>-1.1</td>
<td>-2.2</td>
<td>-0.2</td>
</tr>
<tr>
<td>Public investment</td>
<td>-3.7</td>
<td>2.8</td>
<td>-0.6</td>
<td>-1.4</td>
<td>-0.4</td>
</tr>
<tr>
<td>Private housing</td>
<td>-9.7</td>
<td>-12.4</td>
<td>-5.5</td>
<td>0.8</td>
<td>2.3</td>
</tr>
<tr>
<td>Private corporation facilities</td>
<td>-3.6</td>
<td>-20.5</td>
<td>-1.0</td>
<td>-3.2</td>
<td>-3.3</td>
</tr>
<tr>
<td>Mining and manufacturing (Goods)</td>
<td>-7.6</td>
<td>-31.1</td>
<td>-3.8</td>
<td>-5.8</td>
<td>-7.1</td>
</tr>
<tr>
<td>Construction</td>
<td>-7.6</td>
<td>-9.4</td>
<td>-1.2</td>
<td>-1.9</td>
<td>-5.0</td>
</tr>
<tr>
<td>Tertiary industries (Services)</td>
<td>3.9</td>
<td>15.0</td>
<td>-4.4</td>
<td>-1.8</td>
<td>-3.2</td>
</tr>
<tr>
<td>Special IT-related</td>
<td>2.8</td>
<td>-8.7</td>
<td>1.2</td>
<td>-2.4</td>
<td>2.7</td>
</tr>
<tr>
<td>Exports</td>
<td>-3.0</td>
<td>-24.4</td>
<td>-3.0</td>
<td>-4.4</td>
<td>-14.4</td>
</tr>
<tr>
<td>Mining and manufacturing (Goods)</td>
<td>-2.8</td>
<td>-26.4</td>
<td>-3.5</td>
<td>-3.9</td>
<td>-16.2</td>
</tr>
<tr>
<td>Tertiary industries (Services)</td>
<td>-3.6</td>
<td>-19.3</td>
<td>-2.3</td>
<td>-3.4</td>
<td>-11.5</td>
</tr>
<tr>
<td>Imports</td>
<td>-0.1</td>
<td>-14.4</td>
<td>-1.4</td>
<td>-1.1</td>
<td>-5.6</td>
</tr>
<tr>
<td>Mining and manufacturing (Goods)</td>
<td>0.4</td>
<td>-14.5</td>
<td>-1.9</td>
<td>-0.4</td>
<td>-5.7</td>
</tr>
<tr>
<td>Tertiary industries (Services)</td>
<td>-2.8</td>
<td>-12.3</td>
<td>-1.8</td>
<td>-3.5</td>
<td>-5.7</td>
</tr>
</tbody>
</table>

Notes:
1. As the indices of all industries (final demand components) are calculated using various statistical data, preliminary figures are used for some basic data. Therefore, note that the indices of the previous quarters have been corrected to the revised figures.
2. Ratios to the previous year are original indices and other figures are based on seasonally adjusted indices.
Source: “The Indices of All Industries Activity (Final demand components)” (Estimated values)
② Trends in IT-related consumption and investment

【Characteristics】

・ IT-related consumption for the second quarter of 2010 increased by 7.7% from the previous quarter, up for the first time in two quarters, while non-IT-related consumption declined by 0.2% (id.), down for the first time in five quarters.

・ IT-related investment for private corporation facilities for the second quarter of 2010 increased by 1.8% (id.), up for the third consecutive quarter. Non-IT-related investments also showed an increase for the second consecutive quarter, up by 4.2% (id.)

### Changes in IT-related Consumption

<table>
<thead>
<tr>
<th>Year</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>105</td>
<td>105</td>
<td>110</td>
<td>115</td>
</tr>
<tr>
<td>2006</td>
<td>95</td>
<td>95</td>
<td>90</td>
<td>85</td>
</tr>
<tr>
<td>2007</td>
<td>80</td>
<td>80</td>
<td>75</td>
<td>70</td>
</tr>
</tbody>
</table>

**Notes:**
1. IT-related consumption consists of that of mobile phones, car navigation systems, desktop computers, notebook computers, regional and long-distance telecommunications, ISP, mobile telecommunications, software products, and Internet-related services, all of which are supplied for personal consumption.

2. IT-related investments are investments related to communication wires and cables, power wires and optical fiber products for cables, digital and full color copying machines, key system telephone equipment, electronic switching systems, digital transmission equipment, fixed communication equipment, cellular telephone, basic exchanges for mobile customer premises equipment, general purpose computers, mid-range computers, desktop computers, notebook computers, external storage, input-output units, terminal equipment, system-use cash registers, projectors, industrial-use television equipment, software development and program creation (subcontracts) that are supplied to private enterprises.

Source: “The Indices of All Industries Activity (Final demand components)” (Estimated values)
[Analysis point 1] ~ Capital investment in the manufacturing industry continues to decline, while that in the non-manufacturing industry increased recently. Declines in the non-manufacturing industry at an economic contraction stage are rapid, especially notably for medium and small-to medium-sized companies ~

[Characteristics]
• Capital investment in the manufacturing industry maintained a high level between the second quarter of 2007 to the third quarter of 2008, hitting a peak in the second quarter of 2008. However, it has been on a decline since then.
• Capital investment in the non-manufacturing industry has been declining after hitting a peak in the first quarter of 2007, but showed an increase in the first quarter of 2010, up for the first time in 12 quarters.
• Analyzing the growth of the amount of capital investment by contribution ratio, declines in the non-manufacturing industry at an economic contraction stage are rapid, especially notably for medium and small-to medium-sized companies. Large companies in the manufacturing industry are apt to show declines 4 to 5 quarters behind medium and small-to medium non-manufacturing companies.

Fig. II-2-12 Changes in Capital Investment Index (2005=100, 4-quarter backward moving average)

Source: “Financial Statements Statistics of Corporations by Industry” (Ministry of Finance)

Fig. II-2-13 Contribution to Capital Investment Growth (Year-on-year change, Contribution ratio to growth rate, 4-quarter backward moving average)

[Analysis point 2] ~ Capital investment of the transportation equipment industry and information and communication electronics equipment industry declined sharply since 2009 ~

[Characteristics]
• Capital investment is large in the information and communication electronics equipment industry, transportation equipment industry, chemical and allied products industry, and general-purpose, production, or business oriented machinery manufacturing industry.
• Capital investment of the transportation equipment industry and information and communication electronics equipment industry declined especially sharply since 2009, down to the same level as that in around 1985 in value terms.

Fig. II-2-14 Changes in Capital Investment of Major Manufacturing Industries (4-quarter backward moving average)

Note: Due to the revision of industrial classification since the second quarter of 2009, the category of the general-purpose, production, or business oriented machinery industry was newly established. The figures for this new industry category in or before the first quarter of 2009 are the total of the figures for the general machinery industry and those for the precision machinery industry of the old classification.

Source: “Financial Statements Statistics of Corporations by Industry” (Ministry of Finance)
【Analysis point 3】
～ Cash flows are also improving, together with recovering corporate earnings ～

【Characteristics】
・ Looking at time-series flows of internal funds necessary for capital investment, internal funds, which were only 7.8 trillion yen in the first quarter of 1987, hit a peak of 18.3 trillion in the third quarter of 2007, showing a 2.35-fold increase in nearly 20 years.
・ Due to a decline in earnings after the Lehman Shock, funds decreased as low as to 13.0 trillion yen in the third quarter of 2009, but turned to increase again and reached 16.3 trillion yen in the first quarter of 2010.
・ Since the fourth quarter of 1994, capital investment has been below the cash flow, and in particular, since the fourth quarter of 2009, capital investment has been even below the depreciation expenses for the second consecutive quarter.

![Fig. II-2-16 Changes in Cash Flows and Capital Investment](image)

Note: Cash flow = Ordinary profits × 0.5 + Depreciation expenses
Source: "Financial Statements Statistics of Corporations by Industry" (Ministry of Finance)

【Analysis point 4】
～ A sense of overcapacity has been weakening gradually, overcoming the worst stage ～

【Characteristics】
・ Production Capacity DI (TANKAN) shows that a sense of overcapacity heightened rapidly at the contraction stage during the 14th economic cycle. The deterioration was the fastest since the 11th economic cycle.
・ Overcapacity recorded the worst level of 21% points in the second quarter of 2009, but improved for three consecutive quarters from the third quarter of 2009, steadily showing a weakening trend.

![Fig. II-2-17 Changes in Production Capacity DI and Capital Investment Index (4-quarter backward moving average)](image)

Note: Production Capacity DI for all industries has been compiled since the fourth quarter of 1990. The data for the third quarter of 2010 are estimated figures.
Sources: "TANKAN" (Bank of Japan), "Financial Statements Statistics of Corporations by Industry" (Ministry of Finance)
【Analysis point 5】
～ Business confidence has been improving after experiencing the worst stage～

【Characteristics】
・Business Condition DI (Forecast) (TANKAN) did not turn positive even at the expanding stage during the 12th and 13th economic cycles, but turned positive from 2005 to 2007 during the 14th economic cycle.
・Business Condition DI (Forecast) recorded the worst level of -52% points in the first quarter of 2009 but has been recovering ever since.
・Business confidence shows a similar trend to that of capital investment.

Fig. II-2-18 Changes in Business Condition DI (Forecast) and Capital Investment Index (4-quarter backward moving average)

Note: Figures are forecasts as of the previous survey time.
Sources: "TANKAN" (Bank of Japan), "Financial Statements Statistics of Corporations by Industry" (Ministry of Finance)

【Analysis point 6】
～ The debt ratio has long been declining, especially notably in the non-manufacturing industry～

【Characteristics】
・Debts arise when funds for capital investment are procured externally. Time-series changes in debt ratios (obtained by dividing interest-bearing debts by equity capital) are as follows.
・The debt ratio for large manufacturing companies had continuously declined to below 50% until the expansion stage during the 14th economic cycle, but has been slightly increasing after entering the contraction stage.
・The debt ratio for medium and small-to medium-sized manufacturing companies had also declined almost constantly, becoming below 100% in the fourth quarter of 2007, but has been on a rise recently.
・The decline of the debt ratio for large non-manufacturing companies has accelerated since the 13th economic cycle and still continues. In the second quarter of 2009, their debt ratio became lower than that for medium and small-to medium-sized manufacturing companies.
・The debt ratio for medium and small-to medium-sized non-manufacturing companies declined sharply after the economic contraction during the 12th economic cycle. The ratio has been around 150% in recent years.

Fig. II-2-19 Changes in Debt Ratios (By industry and company size, 4-quarter backward moving average)

Source: "Financial Statements Statistics of Corporations by Industry" (Ministry of Finance)
【Analysis point 7】
~ After the burst of the bubble economy, the impact of cash flows and overcapacity on capital investment weakened for large manufacturing companies, while such impact increased for medium and small-to medium-sized manufacturing companies ~

【Characteristics】
・When estimating the impact on capital investment through regression analysis, it becomes clear that cash flows have significantly affected capital investment of the manufacturing industry.
・Comparing the situations before and after the burst of the bubble economy, the impact of cash flows and overcapacity on capital investment weakened for large manufacturing companies, while such impact increased for medium and small-to medium-sized manufacturing companies (see the main text).

Fig. II-2-21 Factor Analysis of Capital Investment Based on Regression Analysis Results
(Large manufacturing companies, 4-quarter backward moving average)

Note: Estimation formula: Capital investment (yearly change) = Cash flow (yearly change) (t-3) + Sense of overcapacity (t-1) + Corporate Goods Price Index (yearly change) + Business confidence (t-3) + Debt ratio (yearly change) + Long-term prime rate (yearly change) + Intercept
Sources: “Deposits and Loans Market Statistics,” “Domestic Corporate Goods Price Index,” and “TANKAN” (Bank of Japan), and “Financial Statements Statistics of Corporations by Industry” (Ministry of Finance)

・The impact of cash flows and other factors weakened for large manufacturing companies, partly due to the fact that capital investment by overseas subsidiaries has recently increased at a higher pace than domestic capital investment.
・The estimation results of regression analysis were unfavorable for the non-manufacturing industry. This may be because the non-manufacturing industry includes many types of businesses, such as the electricity industry, that need to make capital investment irrespective of economic conditions, mainly for the maintenance and renewal of facilities rather than for the capacity enhancement.

Fig. II-2-22 Changes in Capital Investment by Overseas Subsidiaries
(4-quarter backward moving average)
Sources: “Quarterly Survey of Overseas Subsidiaries” (Ministry of Economy, Trade and Industry) and “Financial Statements Statistics of Corporations by Industry” (Ministry of Finance)

Fig. II-2-23 Changes in Capital Investment and Cash Flows of Electricity Industry
(4-quarter backward moving average)
Source: “Financial Statements Statistics of Corporations by Industry” (Ministry of Finance)
【Analysis point 8】
∼ Recovering corporate earnings increased companies’ financial power but companies are apt to accumulate funds in such forms as cash, deposits and securities and refrain from making capital investment ∼

【Characteristics】
• Corporate earnings, which once plunged due to the Lehman Shock, started to recover and have increased companies’ financial power.
• However, companies are apt to accumulate funds in such forms as cash, deposits, and securities and maintain a cautious stance for capital investment. The recovery of their financial power has not yet increased capital investment.

Fig. II-2-24 Fund Procurement and Fund Management
(Large manufacturing companies, total of 4-quarter backward differences between the beginning and the end of quarters)

Notes: 1. Upper chart: Fund procurement / Lower chart: Fund management
   2. Self-finance = Stated capital + Other net assets + Own shares + Stock options + Depreciation
   Source: “Financial Statements Statistics of Corporations by Industry” (Ministry of Finance)
Fig. II-2-25 Fund Procurement and Fund Management
(Medium and small-to medium-sized manufacturing companies, total of 4-quarter backward differences between the beginning and the end of quarters)

Fig. II-2-26 Fund Procurement and Fund Management
(Large non-manufacturing companies, total of 4-quarter backward differences between the beginning and the end of quarters)
Fig. II-2-27 Fund Procurement and Fund Management
(Medium and small-to medium-sized non-manufacturing companies, total of 4-quarter backward differences between the beginning and the end of quarters)
(2) Outline of exports and imports

Export and import trends for the quarter

【Characteristics】
・ Looking at the trends of exports for the second quarter of 2010 (on a quantity basis), in terms of the indices of all industries (final demand components), exports of goods (the mining and manufacturing industry) increased by 0.5% from the previous quarter and exports of services (the tertiary industry) increased by 3.9% (id.), resulting in a 1.0% increase (id.) for all exports.
・ By region, exports of goods to Europe and the Middle East increased, while those to the United States, ASEAN, and East Asia decreased.

Changes in Exports by Region (Goods, 2005 = 100, Seasonally adjusted)

【Characteristics】
・ Looking at the trends of imports for the second quarter of 2010 (on a quantity basis), in terms of the indices of all industries (final demand components), imports of goods (the mining and manufacturing industry) increased by 3.2% from the previous quarter and imports of services (the tertiary industry) increased by 2.4% (id.), resulting in a 3.7% increase (id.) for all imports.
・ By region, imports of goods from East Asia, Europe, and ASEAN increased, while those from the United States and the Middle East decreased.

Changes in Imports by Region (Goods, 2005 = 100, Seasonally adjusted)

Notes: 1. The export index by region is estimated by rearranging the trade statistics into shipment index groups, and the import index by region is estimated by rearranging the trade statistics into supply index groups.
2. The names of each country or region are as follows:
   ASEAN: Singapore, Thailand, Malaysia, the Philippines, Indonesia, Vietnam, Myanmar, Laos, Brunei and Cambodia
   East Asia: Republic of Korea, Taiwan and China (including Hong Kong)
   Middle East: Iran, Iraq, Bahrain, Saudi Arabia, Kuwait, Qatar, Oman, Israel, Jordan, Syria, Lebanon, the United Arab Emirates, Gaza and Yemen

Sources: “The Indices of Industrial Domestic Shipments and Exports”
“The Indices of Industrial Domestic Shipments and Imports” (both estimated values)