2 Supply trends and final demand

(1) Outline of supply trends for final demand

① Supply trends for the quarter

The outline of the supply trends for final demand for the third quarter of 2007 is as follows:

Overall industrial supply for consumption remained flat at 0.0% compared to the previous quarter, because personal consumption remained flat at 0.0% (id.), although government consumption decreased by 0.1% (id.), down for the first time in two quarters.

Overall industrial supply for investment decreased by 3.3% (id.), down for the first time in four quarters, due to decreases in private housing (by 10.3% (id.)) and public investment (by 4.7% (id.)), both down for the second consecutive quarter, and a decrease in private corporation facilities (by 0.5% (id.)), down for the first time in two quarters.

Exports increased by 3.0% (id.), up for the first time in two quarters, while imports decreased by 0.2% (id.), down for the first time in two quarters.

IT-related consumption increased by 7.3% (id.), up for the second consecutive quarter, and IT-related investment increased by 2.9% (id.), up for the third consecutive quarter.

<table>
<thead>
<tr>
<th>Changes in the Indices of All Industries (Final demand components)</th>
<th>(2000=100, Ratios to the previous year (quarter))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total of final demand sector</td>
<td></td>
</tr>
<tr>
<td>Mining and manufacturing (Goods)</td>
<td>1.5</td>
</tr>
<tr>
<td>Tertiary industries (Services)</td>
<td>1.7</td>
</tr>
<tr>
<td>Consumption</td>
<td>1.5</td>
</tr>
<tr>
<td>Mining and manufacturing (Goods)</td>
<td>1.7</td>
</tr>
<tr>
<td>Tertiary industries (Services)</td>
<td>1.1</td>
</tr>
<tr>
<td>(Special) IT-related</td>
<td>0.9</td>
</tr>
<tr>
<td>Government consumption</td>
<td>1.6</td>
</tr>
<tr>
<td>Investment</td>
<td>2.6</td>
</tr>
<tr>
<td>Public investment</td>
<td>4.2</td>
</tr>
<tr>
<td>Private housing</td>
<td>3.5</td>
</tr>
<tr>
<td>Private corporation facilities</td>
<td>5.1</td>
</tr>
<tr>
<td>Mining and manufacturing (Goods)</td>
<td>4.9</td>
</tr>
<tr>
<td>Construction</td>
<td>6.9</td>
</tr>
<tr>
<td>Tertiary industries (Services)</td>
<td>3.3</td>
</tr>
<tr>
<td>(Special) IT-related</td>
<td>4.7</td>
</tr>
<tr>
<td>Exports</td>
<td>4.1</td>
</tr>
<tr>
<td>Mining and manufacturing (Goods)</td>
<td>3.5</td>
</tr>
<tr>
<td>Tertiary industries (Services)</td>
<td>5.8</td>
</tr>
<tr>
<td>Imports</td>
<td>5.4</td>
</tr>
<tr>
<td>Mining and manufacturing (Goods)</td>
<td>6.1</td>
</tr>
<tr>
<td>Tertiary industries (Services)</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Notes:
1. For details of revision of the base year to YR2000, and the definition of “IT-related consumption” and “IT-related investment” in the indices of all industrial supply, see “Outline and Creation Method of the Indices of All Industrial Supply” in the main text.
2. As the indices of all industrial supply are calculated using various statistical data, preliminary figures are used for some basic data. Therefore, it should be noted that the indices of the previous quarter have been corrected to the revised figures.
3. The ratios to the previous year are original indices, and others are based on seasonally adjusted indices.
Source: “The Indices of All Industries (Final demand components)” (Estimated values).
② Trends in IT-related consumption and investment

IT-related personal consumption for the third quarter of 2007 increased by 7.3% compared to the previous quarter, up for the second consecutive quarter. Non-IT-related consumption decreased by 0.3% (id.), down for the first time in two quarters.

IT-related investment for private corporation facilities increased by 2.9% (id.), up for the third consecutive quarter, due to increases in personal computers, etc. Non-IT-related investment decreased by 1.1% (id.), down for the first time in two quarters.

Changes in IT-related Consumption

Index level (2000=100, Seasonally adjusted)

Note: IT-related consumption is consumption related to cellular telephones, personal handy-phone systems (PHS), personal computers, fixed telecommunications and mobile telecommunications that are supplied for personal consumption.

Source: “The Indices of All Industries (Final demand components)” (Estimated values)

Changes in IT-related Investment

Index level (2000=100, Seasonally adjusted)

Note: 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, facsimile machines, electronic switching systems, digital transmission equipment, fixed communication equipment, personal handy-phone systems (PHS), basic exchange for mobile customer premises equipment, general purpose computers, mid-range computers, personal computers, external storage, input-output units, terminal equipment, software development and program creation (subcontracts) that are supplied to private corporation facilities.

Source: “The Indices of All Industries (Final demand components)” (Estimated values)
Trends in personal consumption seen from the demand-side statistics

【Analysis Point 1】
Disparity has emerged between the demand-side statistics (Family Income and Expenditure Survey) and National Accounts

【Characteristics】
・Disparity has emerged between the total consumption expenditure based on the Family Income and Expenditure Survey and the final consumption expenditure of households in the Quarterly Estimates of National Accounts.
・The Family Income and Expenditure Survey directly reflects the current conditions but contains sampling errors.

Fig. II-1-12: Changes in Personal Consumption based on National Accounts and Family Income and Expenditure Survey (2000=100)

Notes: 1. Indices with nominal (seasonally adjusted) value of 2000 as 100.
2. The total consumption expenditure is obtained by multiplying per-capita consumption expenditure (obtained by dividing consumption expenditure per household (excluding transfer expenditure) based on the Family Income and Expenditure Survey by number of household; seasonally adjusted by the X-12-ARIMA method) by population.
Source: "National Accounts" (Cabinet Office), "Family Income and Expenditure Survey" (Ministry of Internal Affairs and Communications), "National Census" (Ministry of Internal Affairs and Communications) and "Population Estimates" (Ministry of Internal Affairs and Communications)

【Analysis Point 2】
Sample replacement revealed short- to mid-term variations in consumption expenditure in the Family Income and Expenditure Survey.

【Characteristics】
・Samples of the Family Income and Expenditure Survey are replaced every month by one-third for one-person households and by one-sixth for two or more person households.
・Sample replacement may cause variations in consumption expenditure with a cycle of at least several months.
・Per-capita consumption expenditure for two or more person households dropped in 2001 and 2002.

Fig. II-1-13: Changes in Per-Capita Consumption Expenditure for One and Two or More Person Households

Note: Nominal values. Per-capita consumption expenditure (obtained by dividing consumption expenditure per household (excluding transfer expenditure) by average size of household) is seasonally adjusted by the X-12-ARIMA method.
Source: "Family Income and Expenditure Survey" (Ministry of Internal Affairs and Communications)
【Analysis Point 3】
Variations due to sample replacement can be observed in the attributes of two or more person households in the Family Income and Expenditure Survey.

【Characteristics】
・Per-capita consumption expenditure differs significantly by householder’s age group.
・Variations are observed not only in per-capita consumption expenditure by householder’s age but also in the population composition ratio by householder’s age, which are suspected to have been caused by sample replacement (uneven sample distribution).

Fig. II-1-14: Changes in Population Composition Ratio, etc. by Householder’s Age
① Per-capita consumption expenditure
② Population composition ratio

Notes: 1. Dashed lines are trend lines (regression lines).
2. Per-capita consumption expenditure (nominal value) is seasonally adjusted by the X-12-ARIMA method.
Source: “Family Income and Expenditure Survey” (Ministry of Internal Affairs and Communications)

【Analysis Point 4】
Variations in per-capita consumption expenditure and the attributes of households have significant correlations.

【Characteristics】
・Attributes such as number of households also show variations suspected to have been caused by sample replacement.

・When conducting regression analysis for respective householders’ age groups by using per-capita consumption expenditure as a dependent variable, some explanatory variables (the attributes of households) possess significance.

・Values on the trend line are presumed as attributes such as the number of households, and the (corrected) change rates of consumption expenditure based on the presumption are calculated by using coefficients of regression analysis, etc.

・As a result of such calculations, the correction factor was large during periods when variations in consumption expenditure due to sample replacement are suspected.
【Analysis Point 5】
Consumption expenditure contains errors with a cycle of at least several months.

【Characteristics】
・Comparing the total consumption expenditure based on the results of provisional calculations with the final consumption expenditure of households, the disparity diminishes during certain periods.
・Based on these, it can be concluded that there are errors with a cycle of at least several months in consumption expenditure caused by sample replacement (uneven distribution).

Fig. II-1-17: Changes in the Total Consumption Expenditure Corrected by Regression Analysis (2000=100)

Notes:
1. Indices with nominal (seasonally adjusted) value of 2000 as 100.
2. The total consumption expenditure is obtained by multiplying per-capita consumption expenditure (excluding transfer expenditure; seasonally adjusted by the X-12-ARIMA method) by population for one-person households and two or more person households. The total consumption expenditure (corrected) is obtained by multiplying per-capita consumption expenditure for two or more person households by the correction factor based on provisional calculations.

Source:
"National Accounts" (Cabinet Office), "Family Income and Expenditure Survey" (Ministry of Internal Affairs and Communications), "National Census" (Ministry of Internal Affairs and Communications) and "Population Estimates" (Ministry of Internal Affairs and Communications)
【Analysis Point 1】
The amount of capital investment for the 14th cycle had been on an upward trend but began to decrease in the second quarter of 2007.

【Characteristics】
- Average growth rate (geometric average using seasonally adjusted indices) of the amount of capital investment (all industries/all sizes of business)
  - The 12th cycle (expansion stage: 1993 IV → 1997 II; hereinafter the same): 0.92%
  - The 14th cycle (expansion stage: 2002 I → 2007 II; hereinafter the same): 1.34%
- Average growth rate of the amount of capital investment in the 14th cycle had been greater than in the 12th cycle but began to decrease recently.

【Analysis Point 2】
Capital investment in the 14th cycle can be observed in a wider variety of industries.

【Characteristics】
- Major industries with a higher contribution ratio by size of business to the average growth rate of all industries

<table>
<thead>
<tr>
<th></th>
<th>The 12th cycle</th>
<th>The 14th cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large-sized:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport</td>
<td>(0.33)</td>
<td>Information and communications (0.32)</td>
</tr>
<tr>
<td>Electrical machinery, equipment and supplies manufacturing</td>
<td>(0.10)</td>
<td>Services (0.23)</td>
</tr>
<tr>
<td>Medium-sized:</td>
<td></td>
<td>Electrical machinery, equipment and supplies manufacturing (0.18)</td>
</tr>
<tr>
<td>Services</td>
<td>(0.20)</td>
<td>Motor vehicles, parts and accessories manufacturing (0.12)</td>
</tr>
<tr>
<td>Small-to-medium-sized:</td>
<td></td>
<td>Small-to-medium-sized:</td>
</tr>
<tr>
<td>Services</td>
<td>(0.56)</td>
<td>Metal products manufacturing (0.10)</td>
</tr>
<tr>
<td>Transport</td>
<td>(0.10)</td>
<td></td>
</tr>
</tbody>
</table>

Notes: 1. The amount of capital investment is adjusted originally by the X-11 Default of X-12-ARIMA method.
2. Figures in parentheses are contribution ratios to the average growth rate of each cycle for all industries and all sizes of business.
3. The electrical machinery, equipment and supplies manufacturing industry includes the information and communication electronics equipment manufacturing industry.
4. Data for the information and communications industry is available from 2004- II. Up to 2004-I, the transport industry included the communications industry.
5. Large-sized enterprises: capital 1 billion yen or over, Medium-sized enterprises: capital 100 million to 1 billion yen, Small-to-medium-sized enterprises: capital 10 to 100 million yen.
Source: “Financial Statements Statistics of Corporations by Industry” (Ministry of Finance)
【Analysis Point 3】
Cash flow has continued to exceed the amount of capital investment throughout the 14th cycle, and the capital investment to cash flow ratio has been diminishing.

【Characteristics】
・Capital investment to cash flow ratio (all industries/all sizes of business)
  The 12th cycle: 97.5%
  The 14th cycle: 74.1%
・Capital investment in the 14th cycle has been more deliberate than in the 12th cycle.

Fig. II-2-14: Changes in Cash Flow and Amount of Capital Investment
(All industries/4-quarter backward-looking moving average)

Note: "Cash flow" = "Ordinary profit" × 0.5 + "Depreciation expense"
Source: “Financial Statements Statistics of Corporations by Industry” (Ministry of Finance)

【Analysis Point 4】
Trends in capital investment by industry classified into three patterns

<table>
<thead>
<tr>
<th>Pattern</th>
<th>The 12th cycle</th>
<th>Major industries</th>
<th>The 14th cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>①</td>
<td>Cash flow &gt; Amount of Capital investment</td>
<td>Motor vehicles, parts and accessories, General machinery manufacturing, etc.</td>
<td>Cash flow &gt; Amount of Capital investment</td>
</tr>
<tr>
<td></td>
<td>Deliberate</td>
<td>7 manufacturing industries and one non-manufacturing industry</td>
<td>Latest trend: Changed in the middle; Deliberate again</td>
</tr>
<tr>
<td>②</td>
<td>In the middle of the cycle: Cash flow &gt; Amount of Capital investment</td>
<td>Wholesale and retail trade, Iron and steel industry, etc.</td>
<td>Cash flow &gt; Amount of Capital investment</td>
</tr>
<tr>
<td></td>
<td>In the middle of the cycle: Deliberate</td>
<td>6 manufacturing industries and one non-manufacturing industry</td>
<td>Latest trend: Cash flow expanding in some industries</td>
</tr>
<tr>
<td>③</td>
<td>Amount of Capital investment &gt; Cash flow</td>
<td>Real estate industry, services industry, etc.</td>
<td>Cash flow &gt; Amount of Capital investment</td>
</tr>
<tr>
<td></td>
<td>Active</td>
<td>6 non-manufacturing industries</td>
<td>Latest trend: Amount of Capital investment exceeding cash flow in some industries</td>
</tr>
</tbody>
</table>

Note: Two out of 23 industries, including the electrical machinery, equipment and supplies manufacturing industry (including the information and communication electronics equipment manufacturing industry), are not classified into any of the above-mentioned three patterns.
Source: “Financial Statements Statistics of Corporations by Industry” (Ministry of Finance)
【Analysis Point 5】
Capital investment without time lag in the 14th cycle

【Characteristics】
・Correlation between machinery orders, total supply of capital goods and capital investment from 2001 to the second quarter of 2007
  — Time lag of machinery orders against the total supply of capital goods: coincident
  — Time lag of the total supply of capital goods against capital investment: coincident
  — Time lag of machinery orders against capital investment: 1 quarter leading
  
Note: Machinery orders are private sector (excluding volatile orders).

・Compared to the past, recent capital investment accompanies less time lag to the leading indices such as machinery orders.

Fig. II-2-18: Changes in Machinery Orders, Total Supply of Capital Goods and Capital Investment (2000=100; Seasonally adjusted)

Note: The amount of capital investment is adjusted originally by the X-11Default of X-12-ARIMA method.
Source: “Orders Received for Machinery” (Cabinet Office), “Financial Statements Statistics of Corporations by Industry” (Ministry of Finance) and “Table of Total Supply of Mining and Manufacturing”
(2) Outline of export and import trends

① Export and import trends for the quarter

Looking at the trends in exports and imports for the third quarter of 2007 (on a quantity basis), exports as a whole increased by 3.0% compared to the previous quarter, due to increases in exports of goods (mining and manufacturing industries) by 3.3% (id.), and received services (tertiary industries) by 2.9% (id.). Imports as a whole decreased by 0.2% (id.), due to a decrease in service payments (tertiary industries) by 4.6% (id.), in spite of an increase in imports of goods (mining and manufacturing industries) by 1.1% (id.).

By region, exports of goods increased in the United States, Europe, ASEAN and East Asia. Imports of goods increased in East Asia, the United States, the Middle East and Europe, but decreased in ASEAN.

Changes in Exports by Region (Goods)

Index level (2000=100, Seasonally adjusted)

Changes in Imports by Region (Goods)

Index level (2000=100, Seasonally adjusted)

Notes:
1. The export index by region is estimated by rearranging the trade statistics with the shipment index group, and the import index by region is estimated by rearranging the trade statistics with the total supply index group.
2. The regional classification was amended according to the revision of the base year 2000. The names of each country or region are as follows:
   ASEAN: Singapore, Thailand, Malaysia, 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: “Breakdown List of Mining and Manufacturing Shipments”
“Table of Total Supply of Mining and Manufacturing” (Estimated values)
**Impact of the expansion of overseas production on Japan’s current account**

**Analysis Point 1**

**Trade balance: The expansion of overseas production reduces trade surplus.**

**Characteristics**

- The expansion of overseas production may work either to expand or reduce the trade surplus.
  - Major factors to expand trade surplus
  - Overseas production may increase procurement of parts and raw materials from Japan. (inducing exports)
  - Decreased exports from Japan may decrease Japan’s imports of raw materials. (converting imports)
  - Major factors to reduce trade surplus
  - Exports from overseas factories may decrease exports from Japan. (replacing exports)
  - Reimports of products manufactured overseas may increase. (reimporting)

- Based on these premises, the real trade balance was as low as 20.0% of the normal trade balance (estimated value without overseas production) in FY2005.

![Impact of Overseas Production on Japan’s Trade Balance](image)

Note: Rate of deviation = \( \frac{\text{Trade balance (Real)}}{\text{Trade balance (Normal)}} \times 100 \)

Source: "Balance of Payments statistics" (Bank of Japan) and "Basic Survey of Overseas Business Activities"

**Analysis Point 2**

**Trade balance: Japan’s trade surplus has been supported by trade with overseas subsidiaries.**

**Characteristics**

- Exports to overseas subsidiaries accounted for nearly 70% of the total amount of exports (FY2005), which suggests that overseas subsidiaries have still been highly dependent on Japanese-made parts, etc.
- Reimports from overseas subsidiaries accounted for nearly 40% of the total amount of imports (FY2005).
- The balance of trade with overseas subsidiaries has been positive, supporting Japan’s trade surplus.

![Changes in Trade Balance with Overseas Subsidiaries and Other Companies](image)

Note: Values for "With other companies (Crude oil)" adopt those for "HS 2709: Petroleum oils and oils obtained from bituminous minerals, crude.”
It is presumed that there are no reimports of crude oil from overseas subsidiaries.

Source: "Balance of Payments statistics" (Bank of Japan), "Trade Statistics of Japan" (Ministry of Finance) and "Basic Survey of Overseas Business Activities"
【Analysis Point 3】
Income balance: The rates of return on direct investment are high in Asia.

【Characteristics】
・Japan’s direct overseas investment has increased overseas assets, resulting in an increased return on direct investment (benefits) in income balance.
・The rates of return on direct investment are higher in Asia than in North America and Europe. This is partly due to preferential treatment, such as reduction of corporate taxes, offered by some Asian countries for the purpose of attracting foreign companies, mainly aiming for their countries’ economic development.

Fig. II-3-20: Comparison of Rates of Return on Direct Investment and Financial Data for Overseas Subsidiaries

Notes:
1. The rate of return on direct investment = Return on direct investment (profits) / Japan’s overseas asset balance (direct investment) × 100
2. The rate of return on direct investment is as of the end of the year.
3. Due to availability of data, financial data is for FY2004, when royalties were included in the survey items, and the data for Europe is for the EU.
Source: “Balance of Payments statistics” (Bank of Japan), “Japan’s International Investment Position” (Ministry of Finance) and “Basic Survey of Overseas Business Activities”

【Analysis Point 4】
Balance on services: The rate of royalties and license fees (credit) from overseas subsidiaries has become larger in Asia.

【Characteristics】
・Technology transfer from Japan backed by the expansion of overseas production brought about an increase in royalties and license fees (credit) within the balance on services. Receipts from companies other than overseas subsidiaries have also increased, almost maintaining an equilibrium condition.
・Exports of technology from Japan have been expanding in all regions. Increases were observed in the rate of exports of technology to overseas subsidiaries in Asia and to companies other than overseas subsidiaries in North America.

Fig. II-3-24: Comparison of Japan’s Royalties and license fees (credit)

Notes:
1. The rate of royalties and license fees (credit) = Receipts from overseas subsidiaries / (Receipts from companies other than overseas subsidiaries + Receipts from overseas subsidiaries) × 100
2. Due to availability of data, royalty data for FY2004 is included in the survey items.
Source: “Balance of Payments statistics” (Bank of Japan) and “Basic Survey of Overseas Business Activities”
【Analysis Point 5】
Balance on services: Overseas subsidiaries in North America have come to be more dependent on technology transfer from Japan.

【Characteristics】
• Overseas subsidiaries in North America and Asia have come to be more dependent on technology transfer from Japan for enhancing their technologies. In particular, those in North America seem to show even stronger dependency on technology transfer from Japan.
• Technology transfer from Japan to North America has mainly been concentrated on the transportation equipment industry, which suggests the impact of severe development and sales competition between overseas subsidiaries and the local auto industry.

Fig. II-3-25: Comparison of Overseas Subsidiaries’ R&D Expenses and Royalties and license fees (credit) from Overseas Subsidiaries

Source: "Balance of Payments statistics" (Bank of Japan) and "Basic Survey of Overseas Business Activities"

【Analysis Point 6】
Balance on services: Exports of technology to North America have been concentrated on the transport equipment industry.

【Characteristics】
• Exports of technology to North America seem to have been concentrated on the transport equipment industry both for overseas subsidiaries and for other companies, while exports of technology to Asia seem to have been concentrated on the electrical machinery industry for overseas subsidiaries and on the transport equipment industry for other companies (FY2004).
• Japanese auto makers’ production share in North America has been increasing (1998: 18.9% → 2006: 28.9%).

Fig. II-3-26: Comparison by Industry of Royalties and license fees (credit) from Overseas Subsidiaries

Note: The electrical machinery industry includes the information and communication electronics equipment industry.
Source: "Basic Survey of Overseas Business Activities"
【Conclusion】

《Trade balance》
・The expansion of overseas production works to diminish trade surplus.
・Trade surplus has been supported by trade with overseas subsidiaries.

《Income balance》
・The rates of return on direct investment are high in Asia. This is partly due to preferential treatment, such as reduction of corporate taxes, offered by some Asian countries.

《Balance on services》
・The rate of royalties and license fees (credit) from overseas subsidiaries has become larger in Asia.
・Overseas subsidiaries in North America have come to be more dependent on technology transfer from Japan.
・Exports of technology to North America have been concentrated on the transport equipment industry. Exports of technology to Asia have been concentrated on the electrical machinery industry for overseas subsidiaries and on the transport equipment industry for other companies.
3. Trends by kind of industry
(1) Trends in the manufacturing industry
A. Iron and steel industry
– Production and shipments both increased for the first time in two quarters –
① Production increased by 0.8% compared to the previous quarter, up for the first time in two quarters, due to increases in crude steel, hot roll steel, etc. Shipments also increased by 0.5% (id.), up for the first time in two quarters, due to increases in steel pipes and tubes, hot roll steel, etc. Inventory also increased by 0.1% compared to the end of the previous quarter, up for the first time in two quarters, due to increases in crude steel, cold finished steel, etc.

② Sub-classification by industry
1) Production of crude steel increased by 2.4% compared to the previous quarter, up for the first time in two quarters.
2) Production of hot roll steel increased by 0.6% (id.), up for the first time in two quarters.
3) Production of steel pipes and tubes decreased by 0.9% (id.), down for the first time in two quarters.
4) Production of cold finished steel increased by 0.3% (id.), up for the first time in three quarters.
5) Production of metallic coated steel increased by 2.1% (id.), up for the first time in two quarters.
6) Production of steel castings and forgings increased by 0.4% (id.), up for the second consecutive quarter.

B. Non-ferrous metals industry
– Production and shipments both increased for the second consecutive quarter –
① Production increased by 1.1% compared to the previous quarter, up for the second consecutive quarter, due to increases in electric wires and cables and refining of non-ferrous metals. Shipments also increased by 1.9% (id.), up for the second consecutive quarter, due to increases in refining of non-ferrous metals, copper and copper-base alloys and aluminum rolling products, and electric wires and cables. Inventory decreased by 0.2% compared to the end of the previous quarter, down for the first time in two quarters, due to a decrease in refining of non-ferrous metals.

② Sub-classification by kind of industry
1) Production of refining of non-ferrous metals increased by 2.6% compared to the previous quarter, up for the second consecutive quarter, due to increases in electrolytic gold, etc. Shipments also increased by 5.2% (id.), up for the third consecutive quarter. Inventory decreased by 6.4% compared to the end of the previous quarter, down for the first time in two quarters.
2) Production of copper and copper-base alloys and aluminum rolling products remained flat at 0.0% compared to the previous quarter. Shipments increased by 1.7%, up for the first time in three quarters. Inventory also increased by 0.7% compared to the end of the previous quarter, up for the second consecutive quarter.
3) Production of electric wires and cables increased by 1.8% compared to the previous quarter, up for the second consecutive quarter, due to increases in optical fiber for communication wires and cables products, etc. Shipments increased by 1.4% (id.), up for
the second consecutive quarter. Inventory also increased by 0.3% compared to the end of the previous quarter, up for the second consecutive quarter.

4) Production of **non-ferrous metal castings** decreased by 0.1% compared to the previous quarter, down for the first time in two quarters, due to decreases in aluminum alloys castings, etc. Shipments also decreased by 0.2% (id.), down for the first time in two quarters.

C. Fabricated metals industry
– **Production decreased for the third consecutive quarter and shipments decreased for the first time in two quarters** –

① Production decreased by 2.2% compared to the previous quarter, down for the third consecutive quarter, due to decreases in equipment for heating and kitchens, fabricated structural metal products and metal products of buildings. Shipments also decreased by 1.7% (id.), down for the first time in two quarters, due to decreases in fabricated structural metal products, metal products of buildings, and equipment for heating and kitchens. Inventory decreased by 3.9% compared to the end of the previous quarter, down for the first time in three quarters, due to decreases in all industries, including equipment for heating and kitchens.

② **Sub-classification by kind of industry**

1) Production of **fabricated structural metal products** decreased by 5.8% compared to the previous quarter, down for the first time in two quarters, due to decreases in bridges and light structural-steel frames, etc. Shipments also decreased by 6.8% (id.), down for the first time in two quarters.

2) Production of **metal products of buildings** decreased by 2.4% (id.), down for the third consecutive quarter, due to decreases in aluminum sashes for wooden houses, aluminum doors, etc. Shipments also decreased by 2.3% (id.), down for the third consecutive quarter. Inventory decreased by 3.0% compared to the end of the previous quarter, down for the first time in two quarters.

3) Production of **equipment for heating and kitchens** decreased by 12.2% compared to the previous quarter, down for the first time in two quarters, due to decreases in oil space heaters, bath tub gas water heaters, etc. Shipments decreased by 4.5% (id.), down for the first time in two quarters. Inventory also decreased by 6.7% compared to the end of the previous quarter, down for the second consecutive quarter.

4) Production of **other metal products** increased by 1.3% compared to the previous quarter, up for the first time in three quarters, due to increases in aluminum cans for beverages, transmission line hardware, etc. Shipments also increased by 0.9% (id.), up for the first time in two quarters. Inventory decreased by 0.4% compared to the end of the previous quarter, down for the third consecutive quarter.

D. General machinery industry
– **Production decreased for the first time in two quarters, due to decreases in boilers and power units, special industrial machinery, molds and dies, etc.** –

① In spite of increases in industrial robots, metal cutting machinery, etc., production decreased by 0.7% compared to the previous quarter, down for the first time in two quarters, due to decreases in boilers and power units, special industrial machinery, molds and dies, fans,
pumps and oil hydraulic equipment and metal forming machinery. Shipments increased by 0.5% (id.), up for the fourth consecutive quarter. Inventory decreased by 1.4% compared to the end of the previous quarter, down for the second consecutive quarter. The inventory ratio also decreased by 1.7% compared to the previous quarter, down for the first time in three quarters.

② Sub-classification by kind of industry

1) In spite of an increase in internal combustion engines for industry, production of **boilers and power units** decreased by 9.4% compared to the previous quarter, down for the first time in two quarters, due to decreases in steam turbines for general use, parts and accessories of boilers, water tube boilers, etc.

2) In spite of increases in injection molding machinery, etc., production of **special industrial machinery** decreased by 4.1% (id.), down for the first time in two quarters, due to decreases in semiconductor products machinery, flat-panel display manufacturing equipment, etc.

3) Production of **molds and dies** decreased by 9.4% (id.), down for the first time in two quarters, due to decreases in stamping dies and molds for plastic.

4) In spite of increases in oil hydraulic equipment and fans and blowers, production of **fans, pumps and oil hydraulic equipment** decreased by 3.3% (id.), down for the second consecutive quarter, due to decreases in compressors, pneumatic equipment, etc.

5) In spite of an increase in hydraulic presses, production of **metal forming machinery** decreased by 1.6% (id.), down for the first time in two quarters, due to decreases in mechanical presses and rolls for the steel industry.

6) Production of **industrial robots** increased by 11.0% (id.), up for the second consecutive quarter, due to increases in numerically controlled robots and playback robots.

7) In spite of decreases in machining centers and grinding machinery, production of **metal cutting machinery** increased by 5.4% (id.), up for the first time in three quarters, due to increases in numerically controlled lathes and special purpose machinery.

E. Electric machinery industry

– Production increased for the second consecutive quarter, due to increases in lithium ion storage batteries, separate type air conditioners, etc. –

① In spite of decreases in electrical measuring instruments, etc., production increased by 3.3% compared to the previous quarter, up for the second consecutive quarter, due to increases in batteries, associated electronic equipment, electrical stationary machinery, etc. Shipments also increased by 1.7% (id.), up for the second consecutive quarter, due to increases in batteries, associated electronic equipment, wiring devices and luminaries, etc., although there were decreases in electrical measuring instruments, etc. In spite of a decrease in household electrical machinery, inventory increased by 0.4% compared to the end of the previous quarter, up for the first time in three quarters, due to increases in batteries, electrical stationary machinery and wiring devices and luminaries. The inventory ratio increased by 1.1% compared to the previous quarter, up for the first time in three quarters.

② Sub-classification by kind of industry

1) In spite of decreases in lead acid storage batteries, etc., production of **batteries** increased
by 7.9% compared to the previous quarter, up for the first time in two quarters, due to increases in lithium ion storage batteries—with increasing demand for personal computers and cellular telephones, both for domestic use and for exports—and in alkaline storage batteries—with favorable demand for electric tools for export to the U.S.—as well as an increase in lithium batteries.

2) In spite of decreases in industrial-use television equipment, etc., production of associated electronic equipment increased by 16.2% (id.), up for the first time in two quarters, as medical X-ray systems increased due to increases in medical and dental X-ray equipment and X-ray medical CT equipment, both for domestic use and for exports. Ultrasonic instruments for medicine increased due to an increase in ultrasonic diagnostic equipment for export to the U.S., and electron microscopes also showed an increase.

3) Production of electrical stationary machinery increased by 6.6% (id.), up for the fourth consecutive quarter due to increases in nonstandard power distribution transformers, with increased orders from domestic power companies, etc., although there were decreases in arc-type electric welders due to decreased orders from domestic construction companies that build new homes and condominiums.

4) In spite of an increase in electric test and measuring equipment, production of electrical measuring instruments decreased by 11.3% (id.), down for the first time in three quarters, due to a decrease in semiconductor characteristic measuring equipment, with decreased demand for memory IC testers for Taiwan and South Korea and for domestic semiconductor makers, as well as a decrease in process measuring and control instruments for industry.

F. Information and communication electronics equipment industry

– Production increased for the second consecutive quarter, due to increases in personal computers and mid-range computers, etc.—

① Production increased by 6.1% compared to the previous quarter, up for the second consecutive quarter, due to increases in all industries, such as electronic computers, communication equipment and household electronic machinery. Shipments also increased by 5.9% (id.), up for the second consecutive quarter, due to increases in all industries, such as electronic computers, communication equipment and household electronic machinery. In spite of decreases in car navigation systems, etc., inventory increased by 8.3% compared to the end of the previous quarter, up for the first time in five quarters, due to increases in video cameras, DVD-videos, car stereos, etc. The inventory ratio decreased by 0.3% compared to the previous quarter, down for the first time in two quarters.

② Sub-classification by kind of industry

1) In spite of decreases in external storage unit, etc., production of electronic computers increased by 9.8% compared to the previous quarter, up for the first time in four quarters, as there were increases in input-output units as well as in personal computers, with favorable demand for new models from domestic corporations, and in mid-range computers due to increased orders from domestic electric power companies and transporters.

2) Although there was a decrease in key system telephone equipment, production of communication equipment increased by 8.1% (id.), up for the first time in two quarters,
due to increases in personal handy-phone systems as well as in cellular telephones, with increased production due to the release of new models, and in digital transmission equipment backed by favorable demand for export to Asia.

3) In spite of decreases in video cameras, etc., production of household electronic machinery increased by 1.7% (id.), up for the second consecutive quarter, due to increases in liquid crystal televisions, etc., as well as in digital cameras, with increased demand backed by favorable sales of new models, and car navigation systems, with increased production due to the release of new models.

G. Electronic parts and devices industry

– Production increased for the second consecutive quarter, due to increases in memory and logic ICs, etc.–

① In spite of a decrease in semiconductor parts, production increased by 8.4% compared to the previous quarter, up for the second consecutive quarter, due to increases in integrated circuits, electronic parts and semiconductor devices. Shipments increased by 10.0% (id.), up for the ninth consecutive quarter including a leveling-off, due to increases in integrated circuits and electronic parts, although there were decreases in semiconductor devices, etc. In spite of a decrease in integrated circuits, inventory remained flat at 0.0% compared to the end of the previous quarter, due to increases in electronic parts and semiconductor devices. The inventory ratio decreased by 9.4% compared to the previous quarter, down for the first time in seven quarters.

② Sub-classification by kind of industry

1) In spite of a decrease in micro computers, production of integrated circuits increased by 10.2% compared to the previous quarter, up for the second consecutive quarter, due to increases in metal oxide semiconductor ICs (memory) for cellular telephones and memory cards for Asia, in logic ICs for game machines, cellular telephones and liquid crystal televisions for domestic use, and in CCDs for digital cameras for Asia.

2) Although there were decreases in electronic circuit boards, etc., production of electronic parts increased by 7.1% (id.), up for the first time in three quarters, due to increases in active matrix LCDs (large) for car navigation systems for domestic use and for personal computers for China, in fixed capacitors for personal computers and cellular telephones for China and for digital household appliances for Europe and China, and in active matrix LCDs (middle and small) for cellular telephones, game machines, portable music players for domestic use and for Asia, etc.

H. Transport equipment industry

– Production and shipments both increased for the second consecutive quarter, due to increases in motor vehicle parts, etc.–

① In spite of decreases in industrial vehicles and motorcycles, production increased by 4.2% compared to the previous quarter, up for the second consecutive quarter, due to increases in motor vehicle parts, passenger cars, ships and ship engines, etc. Shipments increased by 1.8% (id.), up for the second consecutive quarter. Inventory also increased by 3.3% compared to the end of the previous quarter, up for the second consecutive quarter. The inventory ratio decreased by 8.2% compared to the previous quarter, down for the first time in two quarters.
Sub-classification by kind of industry

1) Production of passenger cars increased by 2.4% compared to the previous quarter, up for the second consecutive quarter. By goods, large passenger cars increased by 2.9% (id.), up for the second consecutive quarter, due to an increase in domestic demand with the release of new models, as well as an increase in exports to the U.S. Small passenger cars increased by 1.1% (id.), up for the first time in five quarters, due to increases in exports to the Middle East and the U.S., as well as an increase in domestic use. In contrast, midget passenger cars showed a decrease of 9.0% (id.), down for the fourth consecutive quarter, due to a decrease in domestic use.

2) Production of trucks increased by 4.5% (id.), up for the first time in four quarters. By goods, large trucks increased by 4.6% (id.), up for the first time in three quarters, due to increases both in domestic use and exports to the Middle East and East Asia. Midget trucks increased by 15.8% (id.), up for the second consecutive quarter, due to an increase in domestic use. In spite of a decrease in domestic use, small trucks increased by 1.2%, up for the first time in four quarters, due to increases in exports to the Middle East and Europe.

3) Production of motor vehicle parts increased by 4.6% (id.), up for the first time in three quarters, due to increases in all goods, such as drive, transmission and control parts, chassis and body parts, automobile air conditioners, etc.

4) Production of motorcycles decreased by 2.8% (id.), down for the first time in two quarters, due to a decrease in motorcycles (less than 125ml), although there was an increase in motorcycles (more than 125ml).

Number of registrations and reports of new vehicles

Looking at domestic demand for automobiles by the number of new registrations and reports of new vehicles, the number of new vehicles, as a whole, was 1.286 million (a decrease of 7.9% compared to the same quarter of the previous year), down for the sixth consecutive quarter. Within this number, passenger cars accounted for 1.052 million, a decrease of 5.9% (id.), down for the sixth consecutive quarter. Trucks accounted for 0.231 million, a decrease of 15.8% (id.), down for the fifth consecutive quarter. Buses accounted for four thousand, a decrease of 14.4% (id.), down for the sixth consecutive quarter.

I. Precision instruments industry

- Production increased for the first time in two quarters, due to increases in interchangeable lenses for cameras and analytical instruments, etc.

  1) In spite of a decrease in measuring machines and instruments, production increased by 1.0% compared to the previous quarter, up for the first time in two quarters, due to increases in optical apparatuses and parts, and watches and clocks. Shipments decreased by 7.3% (id.), down for the first time in three quarters, due to decreases in measuring machines and instruments, and optical apparatuses and parts, although there was an increase in watches and clocks. Inventory increased by 13.1% compared to the end of the previous quarter, up for the first time in three quarters, due to decreases in all goods, such as measuring machines and instruments, watches and clocks, and optical apparatuses and parts. The inventory ratio increased by 20.7% compared to the previous quarter, up for the first time in three quarters.

  2) Sub-classification by kind of industry
1) Production of **optical apparatuses and parts** increased by 10.0% compared to the previous quarter, up for the third consecutive quarter, due to an increase in interchangeable lenses for cameras backed by increased demand due to favorable sales of single-lens digital cameras, although there was a decrease in 35mm cameras. Shipments decreased by 11.6% (id.), down for the first time in three quarters. Inventory increased by 9.9% compared to the end of the previous quarter, up for the fourth consecutive quarter.

2) In spite of decreases in battery-driven type watches (complete), production of **watches and clocks** increased by 6.8% (id.), up for the first time in three quarters, due to an increase in battery-driven type watches (movements) for China. Shipments increased by 4.5%, up for the first time in five quarters. Inventory increased by 24.4% compared to the end of the previous quarter, up for the first time in three quarters.

3) In spite of an increase in analytical instruments, production of **measuring machines and instruments** decreased by 1.9% (id.), down for the second consecutive quarter, due to decreases in industrial measures, testing machines, and precision measuring machines and instruments. Shipments decreased by 9.8%, down for the first time in three quarters. Inventory increased by 11.6% compared to the end of the previous quarter, up for the first time in three quarters.

**J. Ceramics, stones and clay products industry**

**Production decreased for the first time in two quarters and shipments decreased for the third consecutive quarter, affected by the enforcement of the revised Building Standards Act**

① Production decreased by 1.6% compared to the previous quarter, down for the first time in two quarters, due to decreases in other ceramics, stone and clay products, glass and glass products, and ceramic wares and fine ceramics, as well as in cement and cement products. Shipments also decreased by 3.0% (id.), down for the third consecutive quarter, due to decreases in glass and glass products, ceramic wares and fine ceramics, and other ceramics, stone and clay products, as well as in cement and cement products. Inventory increased by 3.7% compared to the end of the previous quarter, up for the second consecutive quarter, due to increases in cement and cement products, ceramic wares and fine ceramics, and other ceramics, stone and clay products, as well as in glass and glass products.

② Sub-classification by kind of industry

1) Production of **glass and glass products** decreased by 1.1% compared to the previous quarter, down for the first time in two quarters, as sheet glass decreased, affected by replacement of materials (replacement of colors, etc.) and production adjustments, in addition to the production of goods for magnetic disk bases, which is not covered by the survey.

2) Production of **cement and cement products** decreased by 1.9% (id.), down for the second consecutive quarter, due to decreases both in cement and cement products, caused by sluggish demand for public works and the delay in applications for building confirmation due to the enforcement of the revised Building Standards Act.

3) Production of **ceramic wares and fine ceramics** decreased by 1.6% (id.), down for the first time in two quarters, as fine ceramics for structural use, as well as ceramic wares, decreased due to the decline in new housing construction starts and delay in applications.
for building confirmation caused by the enforcement of the revised Building Standards Act in June 2007.

4) Production of **other ceramics, stone and clay products** decreased by 2.3% (id.), down for the first time in seven quarters, due to decreases in gypsum board, solidity carbonaceous electrodes and abrasive products, although there were increases in refractory bricks, etc.

**K. Chemicals (excl. Drugs) industry**

- Production and shipments both decreased for the first time in three quarters, due to decreases in **industrial organic chemicals, plastic (materials), etc.** –
  ① Production decreased by 0.7% compared to the previous quarter, down for the first time in three quarters, due to decreases in industrial organic chemicals, plastic (materials) and sensitive materials for photography. Shipments also decreased by 3.9% (id.), down for the first time in three quarters, due to decreases in plastic (materials), cosmetics, industrial organic chemicals, etc. Inventory increased by 5.9% compared to the end of the previous quarter, up for the first time in three quarters, due to increases in cosmetics, plastic (materials), cyclic chemicals and synthetic dyes, etc.
  ② Sub-classification by kind of industry
    1) Production of **industrial organic chemicals** decreased by 6.5% compared to the previous quarter, down for the first time in three quarters, due to the following reasons: ethylene glycol decreased due to periodical repairs; acrylonitrile decreased as some establishments had troubles in their production facilities; synthetic acetone decreased due to periodical repairs.
    2) Production of **plastic (materials)** decreased by 1.3% (id.), down for the first time in three quarters, due to the following reasons: polyethylene decreased due to periodical repairs; polyvinyl chloride decreased as some establishments had troubles in their power supply; polycarbonate decreased due to periodical repairs.

**L. Petroleum and coal products industry**

- Production increased for the third consecutive quarter, due to increases in gas oil, heavy fuel oil B and C, etc. –
  ① Production increased by 0.4% compared to the previous quarter, up for the third consecutive quarter, due to increases in gas oil, heavy fuel oil B and C, naphtha, etc. Shipments decreased by 0.2% (id.), down for the first time in two quarters, due to decreases in kerosene, heavy fuel oil A, gasoline, etc. Inventory decreased by 8.1% compared to the end of the previous quarter, down for the second consecutive quarter, due to decreases in gasoline, kerosene, gas oil, naphtha, etc. The inventory ratio decreased by 0.2% compared to the previous quarter, down for the second consecutive quarter.
  ② Trends in major goods
    1) Production of **gasoline** decreased by 0.3% compared to the previous quarter, down for the first time in three quarters. Shipments decreased by 0.6% (id.), down for the first time in two quarters, due to consumers’ saving tendencies caused by rising retail prices. Inventory decreased by 14.4% compared to the end of the previous quarter, down for the second consecutive quarter.
    2) Production of **naphtha** increased by 3.8% compared to the previous quarter, up for the
third consecutive quarter. Shipments increased by 3.4% (id.), up for the first time in two quarters, as periodical repairs finished at petrochemical plants, which are major destinations for naphtha. Inventory decreased by 8.3% compared to the end of the previous quarter, down for the first time in two quarters.

3) Production and shipments of kerosene decreased by 8.5% and 10.8%, respectively, compared to the previous quarter, both decreasing for the first time in two quarters. This was because a larger number of establishments were undergoing periodical repairs and demand decreased due to the lingering summer heat. Inventory decreased by 14.8% compared to the end of the previous quarter, down for the second consecutive quarter.

4) Production and shipments of gas oil increased by 5.2% and 11.2%, respectively, compared to the previous quarter, both up for the first time in two quarters. This was because there was favorable demand for exports due to the upsurge in overseas products markets. Inventory decreased by 22.0% compared to the end of the previous quarter, down for the first time in three quarters.

5) Production and shipments of heavy fuel oil B and C increased by 6.7% and 1.8%, respectively, compared to the previous quarter, both up for the second consecutive quarter. This was because the demand for electricity increased due to the shutdown of nuclear power plants, in addition to a heat wave in the summer. Inventory increased by 16.3% compared to the end of the previous quarter, up for the first time in two quarters.

6) Production of coal products (coke) decreased by 0.5% compared to the previous quarter. Shipments decreased by 23.6% (id.), down for the second consecutive quarter, due to an increase in self-consumption at some establishments. Inventory decreased by 5.1% compared to the end of the previous quarter, down for the first time in two quarters.

M. Plastic products industry
– Production increased for the second consecutive quarter –

① Production increased by 0.1% compared to the previous quarter, up for the second consecutive quarter, due to an increase in manufacturing material-related production, although construction material-related production decreased and consumption material-related production remained flat. Shipments remained flat at 0.0% (id.), due to increases in manufacturing material-related production and consumption material-related production, although there was a decrease in construction material-related production. Although manufacturing material-related production remained flat, inventory decreased by 0.1% compared to the end of the previous quarter, down for the third consecutive quarter, due to decreases in construction material-related production and consumption material-related production.

② Production by use

1) In manufacturing material-related items, blow-molding of plastic containers increased by 3.0% compared to the previous quarter, up for the fourth consecutive quarter, as PET bottles for drinks increased due to the temperature being higher than usual. Plastic containers (excl. blow-molded) increased by 6.2% (id.), up for the first time in four quarters, due to increases in containers for drinks, etc. Plastic synthetic leather also increased by 1.1% (id.), up for the first time in three quarters, due to an increasing demand.
for auto equipment.

2) In consumption material-related items, plastic film and plastic sheets increased by 0.2% (id.), up for the first time in two quarters, due to an increasing demand for products for liquid crystal displays. Plastic foamed products also increased by 0.4% (id.), up for the first time in three quarters, due to an increase in plate products.

3) In construction material-related items, plastic pipes decreased by 8.2% (id.), down for the first time in three quarters, with a decrease in public works. Plastic plates decreased by 6.6% (id.), down for the second consecutive quarter, due to a decrease in plain plates. Plastic material for building decreased by 2.4% (id.), down for the first time in two quarters, due to a decline in new housing construction starts. Plastic reinforced products also decreased by 0.3%, down for the first time in two quarters, due to decreases in bathtubs, etc.

N. Pulp, paper and paper products industry
– Production increased for the first time in two quarters, and shipments decreased for the second consecutive quarter –
① Although paperboard decreased, production increased by 1.7% compared to the previous quarter, up for the first time in two quarters, due to increases in paper, converted and processed paper and pulp. In spite of increases in paperboard, converted and processed paper and pulp, shipments decreased by 0.1% (id.), down for the second consecutive quarter, due to a decrease in paper. In spite of decreases in paperboard and converted and processed paper, inventory increased by 2.5% compared to the end of the previous quarter, up for the first time in four quarters, due to increases in paper and pulp.

② Sub-classification by kind of industry
1) Production of paper increased by 2.5% compared to the previous quarter, up for the first time in two quarters, due to increases in communication paper, newsprint paper in rolls, coated printing paper, uncoated printing paper, and wrapping and packing paper. Shipments decreased by 0.9% (id.), down for the second consecutive quarter, due to decreases in household and sanitary paper, coated printing paper and uncoated printing paper. Inventory increased by 3.8% compared to the end of the previous quarter, up for the first time in four quarters.

2) Production of paperboard decreased by 0.1% compared to the previous quarter, down for the first time in two quarters. Shipments increased by 2.3% (id.), up for the second consecutive quarter, due to increases in container board and paperboards for paper containers. Inventory decreased by 4.4% compared to the end of the previous quarter, down for the first time in three quarters.

3) Production and shipments of converted and processed paper (corrugated cardboard sheets) increased by 1.0% and 0.9%, respectively, compared to the previous quarter, both up for the first time in three quarters.

O. Textiles industry
– Production and shipments both decreased, due to decreases in other textile products and woven fabrics, etc. –
① Production decreased by 1.3% compared to the previous quarter, down for the 42nd
consecutive quarter, due to decreases in other textile products, woven fabrics, etc. Shipments decreased by 2.2% (id.), down for the second consecutive quarter. Inventory increased by 2.2% compared to the end of the previous quarter, up for the first time in four quarters, due to increases in all industries excluding woven fabrics.

② Sub-classification by kind of industry

1) Production of man-made fibers decreased by 1.4% compared to the previous quarter, down for the first time in two quarters, due to a decrease in synthetic fibers (staple). Shipments decreased by 1.5% (id.), down for the first time in two quarters, due to a decrease in synthetic fibers (staple), although there was an increase in synthetic fibers (filament). Inventory increased by 0.7% compared to the end of the previous quarter, up for the first time in two quarters, due to an increase in synthetic fibers (staple), although there was a decrease in synthetic fibers (filament).

2) Production and shipments of spun yarn decreased by 3.8% and 6.2%, respectively, compared to the previous quarter, both down for the second consecutive quarter, due to decreases in woolen yarn and cotton yarn, although there was an increase in synthetic fiber yarn. Inventory increased by 4.3% compared to the end of the previous quarter, up for the first time in two quarters, due to increases in woolen yarn and synthetic fiber yarn, although there was a decrease in cotton yarn.

3) Production of woven fabrics decreased by 0.9% compared to the previous quarter, down for the second consecutive quarter, due to decreases in all goods excluding towel cloth. In spite of increases in synthetic fiber fabrics (staple), etc., shipments decreased by 2.3% (id.), down for the second consecutive quarter, due to decreases in woolen fabrics, cotton fabrics, etc. In spite of increases in synthetic fiber fabrics (filament), etc., inventory decreased by 0.7% compared to the end of the previous quarter, down for the fourth consecutive quarter, due to decreases in silk and spun silk fabrics, woolen fabrics, etc.

4) In spite of an increase in knitted fabrics outer wears, production of clothes remained flat at 0.0% compared to the previous quarter, due to decreases in woven fabrics outer wears, and hosiery, etc. Shipments decreased by 2.2% (id.), down for the second consecutive quarter, due to decreases in woven fabrics outer wears, and underwear, etc., although there was an increase in knitted fabrics outer wears. Inventory increased by 3.7% compared to the end of the previous quarter, up for the first time in four quarters, due to increases in all goods, including knitted fabrics outer wears.
(2) Trends in tertiary industries

A. Commerce

① The total sales amount for the wholesale industry was 118,635 trillion yen. Total sales increased by 3.6% compared to the same quarter of the previous year, up for the 16th consecutive quarter. This was because the machinery and equipment wholesale industry increased, due to favorable conditions of digital home appliances and electronic parts such as semiconductors, as well as active exports of passenger cars to the EU. Increases were also observed in the minerals and metals wholesale industry, etc., although there were decreases in the farm and aquatic products wholesale industries, etc.

② The total sales amount for large-scale wholesalers was 31,5164 trillion yen. Total sales increased by 2.3% (id.), up for the 14th consecutive quarter.

③ The total sales amount for the retail industry was 32,9520 trillion yen. Total sales decreased by 0.5% (id.), down for the fourth consecutive quarter, because the food and beverage retail industry decreased due to a backlash against high prices of vegetables in the same quarter of the previous year, the motor vehicles retail industry decreased due to sluggish demand for small passenger cars and minivans, and there were also decreases in the machinery and equipment retail industry and the fabrics, apparel and accessories retail industry, although the fuel retail industry and the other retail industries showed increases.

④ The total sales amount for large-scale retailers was 5,1219 trillion yen, decreasing by 0.5% (id.), down for the first time in three quarters.

⑤ The total sales amount of sales of goods and services for convenience stores was 1,9903 trillion yen, increasing by 2.1% (id.), up for the fourth consecutive quarter.

B. Specific service industries

・Business services

① The contract amount for commodity leases (based on acceptance inspection) decreased by 12.5% compared to the same quarter of the previous year, down for the second consecutive quarter, and the purchase amount for delivery items decreased by 12.8% (id.), also down for the second consecutive quarter.

② The total sales amount for the rental industry increased by 2.9% (id.), up for the fifth consecutive quarter.

③ The total sales amount for the information service industry increased by 2.9% (id.), up for the tenth consecutive quarter.

④ The total sales amount for advertising increased by 2.9% (id.), up for the first time in five quarters.

⑤ The total amount handled by the credit card services increased by 6.8% (id.), up for the 52nd consecutive quarter. By type of business, sales credit business increased by 10.6% (id.), up for the 52nd consecutive quarter, while consumer credit business decreased by 9.4% (id.), down for the fifth consecutive quarter.

⑥ The total amount of orders received in engineering services decreased by 2.6% (id.), down for the first time in two quarters. The breakdown shows that domestic demand decreased by 7.7% (id.), down for the first time in two quarters, while foreign demand increased by 7.7% (id.), up for the third consecutive quarter.
• **Personal services**

① In the leisure and amusement services, theaters, performances, companies promoting professional sports and performances, amusement parks and theme parks, golf driving ranges and golf courses increased, while there were decreases in pachinko parlors, movie theaters and bowling alleys.

② In the culture and lifestyle services, wedding ceremony halls, funeral services and cram schools increased, while foreign language conversation classes, culture centers and fitness clubs decreased.