Reference 2

Report on Economic Trends in the ICT Industry

Fourth Quarter of 2008 (October–December)

March 2009

Policy Research Department, Institute for Information and Communications Policy

Economic Research Office, Global ICT Strategy Bureau

Ministry of Internal Affairs and Communications

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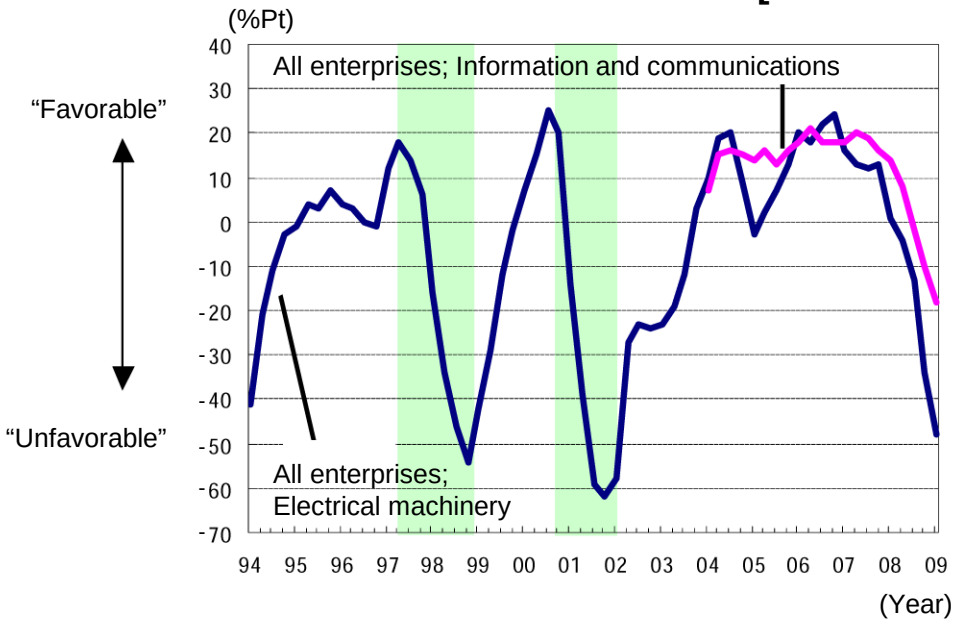
1. Trends in the ICT Industry

1-1. Business Confidence

- The December 2008 Tankan survey conducted by the Bank of Japan (BOJ) revealed that business conditions for all enterprises related to electrical machinery plunged to –34%, down 21 points over the September 2008 survey.
  - The outlook also dropped to –48%.
- Business conditions for all enterprises in information and communications were –10%, down 8 points.
  - Within this industry, communications turned negative to –3%, down 7 points. The forecast was also on the decline at –1%.
  - Information services remained positive at +2%, although it did fall by 9 points. However, the outlook for information services worsened to –11%.
- Business conditions in the electrical machinery industry deteriorated for enterprises of all sizes, i.e., large-sized, medium-sized, and small enterprises. Moreover, they all expected unfavorable conditions to continue in the future. In information and communications, conditions for large-sized enterprises only remained positive, while medium-sized and small enterprises faced worsening conditions. Future expectations of all enterprises declined.

[Business Conditions DI]



Note: Figures began to be calculated on a new basis in December 2003. Figures for March 2009 are forecasts made at the time of the December 2008 survey. The shading represents periods of recession.
Source: BOJ, *Short-Term Economic Survey of Enterprises in Japan*

(Diffusion index of "Favorable" minus "Unfavorable"; % points)

		2007				2008				2009
		Mar	June	Sep	Dec	Mar	June	Sep	Dec	Mar
All enterprises	Electrical machinery	16	13	12	13	1	-4	-13	-34	-48
	Information and communications	18	20	19	16	14	8	-2	-10	-18
	Communications	26	24	22	13	13	6	4	-3	-1
	Information services	28	30	30	30	28	23	11	2	-11
	Other information and communications	5	6	4	1	-1	-8	-19	-25	-32
Large-sized enterprises	Electrical machinery	20	21	24	21	10	3	-9	-37	-39
	Information and communications	33	33	37	35	34	25	9	1	-8
	Communications	34	37	35	30	29	34	25	21	18
	Information services	41	41	49	49	42	32	13	2	-11
	Other information and communications	21	18	22	18	23	13	-3	-10	-13
Medium-sized enterprises	Electrical machinery	11	7	8	9	2	-6	-16	-37	-52
	Information and communications	12	13	10	6	1	-1	-11	-18	-26
	Communications	26	23	20	12	7	0	-3	-11	-4
	Information services	21	22	18	21	19	20	13	4	-12
	Other information and communications	-2	1	-2	-8	-16	-21	-34	-40	-45
Small enterprises	Electrical machinery	15	11	6	10	-5	-10	-15	-30	-53
	Information and communications	10	13	9	6	9	1	-4	-13	-20
	Communications	12	4	5	-13	-5	-23	-4	-27	-23
	Information services	19	26	19	20	23	17	8	-2	-9
	Other information and communications	0	3	-2	-4	-2	-10	-14	-20	-31

Note: The figures for March 2009 are forecasts made at the time of December 2008 survey.
Source: BOJ, *Short-Term Economic Survey of Enterprises in Japan*

1-2. Activities

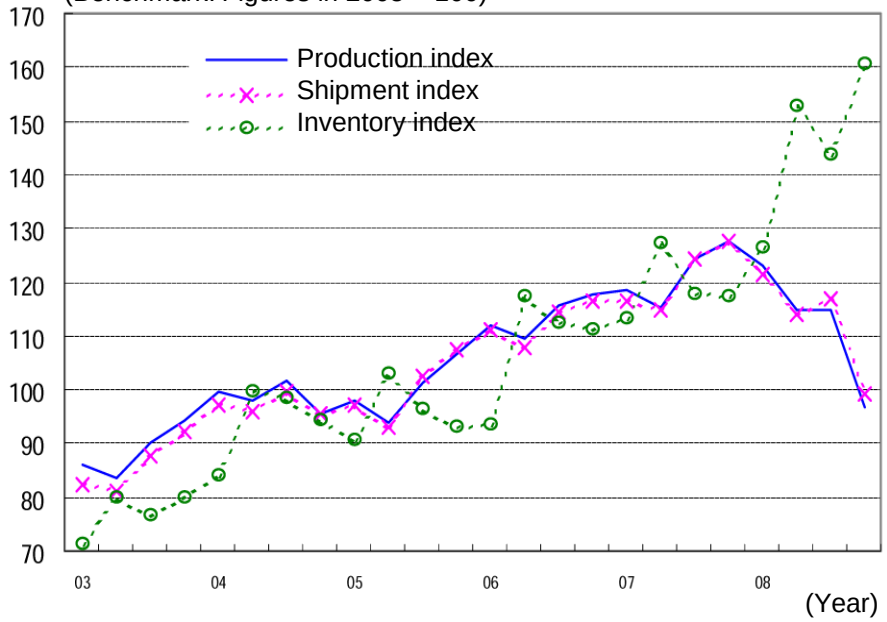
(1) Trends in ICT Manufacturing1: Overall Production, Shipment and Inventory Indices

- Inventory of ICT manufacturing remained at a high level.
- The inventory growth rate increased for the fifth consecutive quarter. Production and shipment indices fell more sharply than in the previous quarter.
  - During the October–December 2008 period, year-on-year change in the inventory index leapt up to +36.8%.
  - Year-on-year change in the manufacturing index and shipment index fell to –24.2% and –22.4%, respectively.

Note: Each index for ICT manufacturing represents the sum of indices of articles presumably related to ICT, from among articles categorized in *Indices of Industrial Production* compiled by the Ministry of Economy, Trade and Industry (METI). In conjunction with the revision of the benchmark year for indices of industrial production to 2005, the articles adopted were changed (see p. 46).

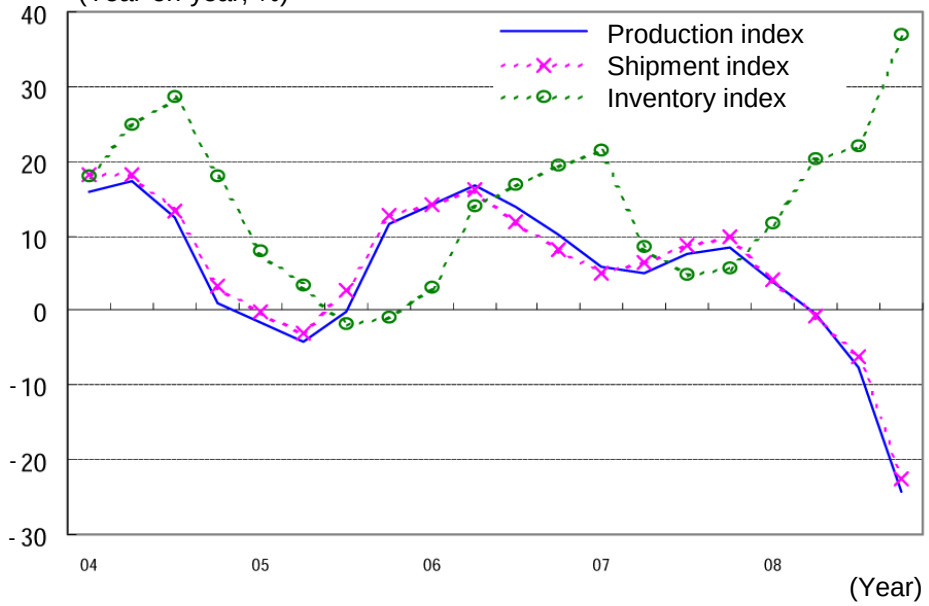
[Production, Shipment and Inventory Indices of ICT Manufacturing]

(Benchmark: Figures in 2005 = 100)



Note: Figures were calculated based on the unit coefficients of the industrial production index, shipment index and inventory index.
Source: METI, *Indices of Industrial Production*

(Year-on-year; %)



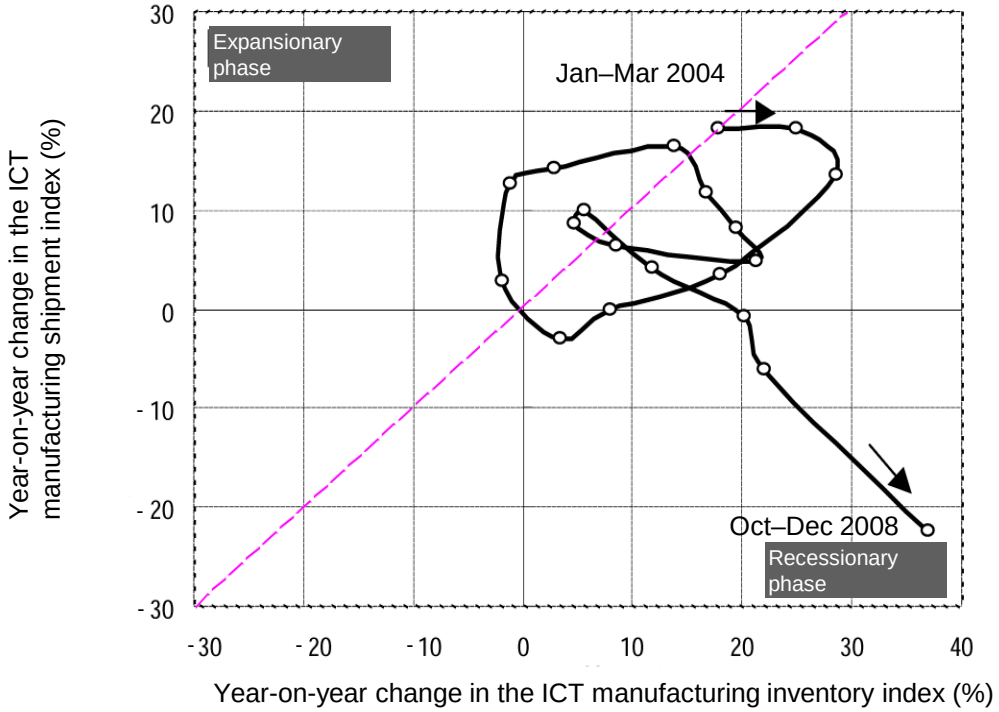
Note: Figures were calculated based on the unit coefficients of the industrial production index, shipment index and inventory index.
Source: METI, *Indices of Industrial Production*

1-2. Activities

(1) Trends in ICT Manufacturing: Overall Inventory Cycle

- Year-on-year change in the shipment index decreased for the third consecutive quarter. Year-on-year change in the inventory index was greater than the figure for the previous quarter.
- In the inventory cycle chart, the October–December 2008 period falls to the lower right, below the 45-degree line, that is, far from the area indicating expansion.
  - ⇒ The surge in the inventory growth rate for this period, as for the July–September 2008 period, is attributed to sluggish demand, both at home and abroad, due to the global economic slowdown.

[Inventory Cycle Chart (ICT Manufacturing)]



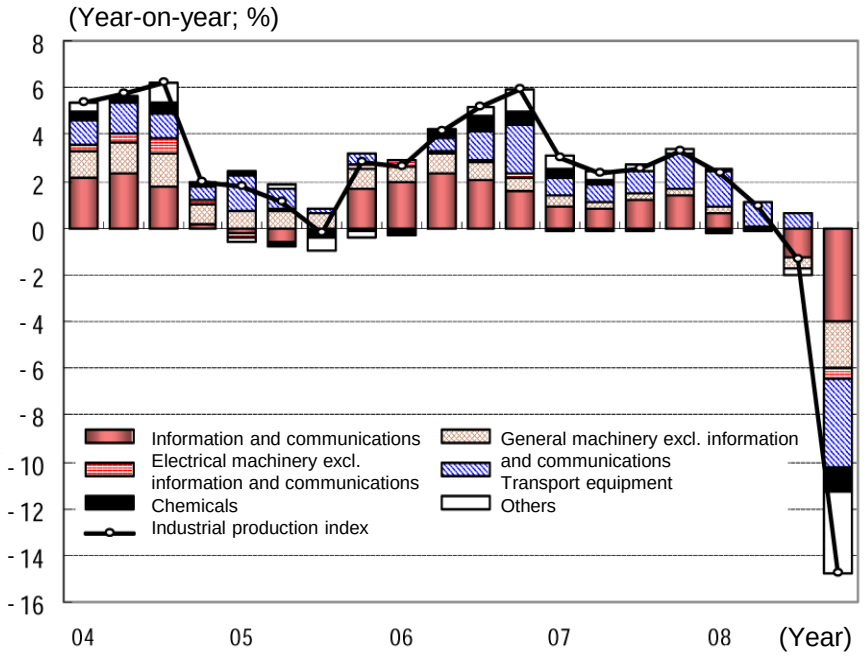
Note: Year-on-year changes were calculated based on the unit coefficients of the industrial shipment index and inventory index.
Source: METI, *Indices of Industrial Production*

1-2. Activities

(1) Trends in ICT Manufacturing: Impact on Overall Manufacturing

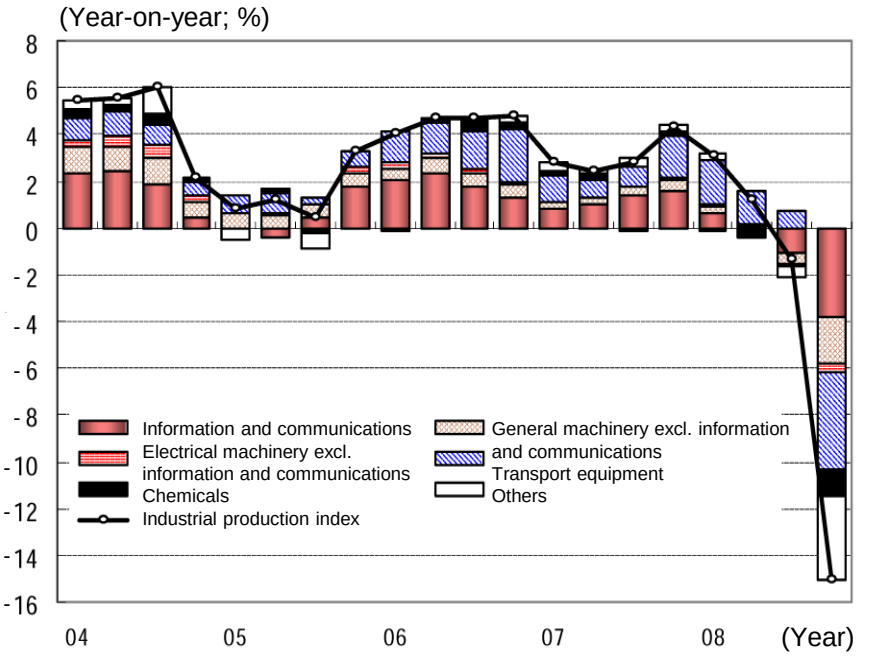
- The contribution of the ICT manufacturing production index to year-on-year change in the industrial production index (–14.8% for the October–December 2008 period), which indicates the impact of ICT manufacturing on overall manufacturing, was –4.0%. ICT manufacturing made a negative contribution for the third consecutive quarter. Its contribution was at the same level as that of transport equipment (–3.8%).
- Similarly, regarding the shipment index, the contribution of the ICT manufacturing shipment index to the year-on-year change in the industrial shipment index (–15.0% for the October–December 2008 period) was –3.8%. Like the production index, the shipment index was negative for the third quarter in a row.

[Contribution to Year-on-Year Change in Industrial Production Index: by Business Category]



Note: The bars represent the contribution made to the year-on-year change in the industrial production index. (The plotted line represents the total.)
"Others" includes: iron and steel; non ferrous metals excl. information and communications; fabricated metals; precision instruments; ceramics, stone and clay products; petroleum and coal products; plastic products; pulp, paper and paper products; textiles; other manufacturing; and mining.
Source: METI, *Indices of Industrial Production*

[Contribution to Year-on-Year Change in Industrial Shipment Index: by Business Category]



Note: The bars represent the contribution made to the year-on-year change in the industrial shipment index. (The plotted line represents the total.)
"Others" include: iron and steel; non ferrous metals excl. information and communications; fabricated metals; precision instruments; ceramics, stone and clay products; petroleum and coal products; plastic products; pulp, paper and paper products; textiles; other manufacturing; and mining.
Source: METI, *Indices of Industrial Production*

1-2. Activities

(1) Trends in ICT Manufacturing: Production Index by Goods

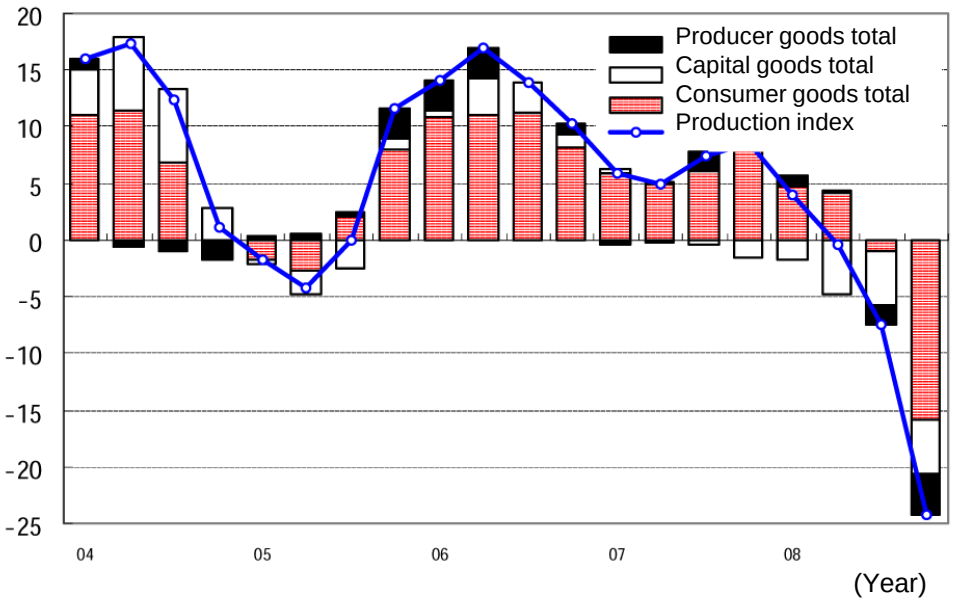
- Looking at the effect of the respective categories of goods on the growth of the ICT manufacturing production index, producer goods has by far made the most significant contribution during recent quarters.
  - The contribution of producer goods to the year-on-year change in the ICT manufacturing production index (–24.2%; see p. 4) was –15.8%. This figure was large enough to cause the overall production index to fall for the second consecutive quarter.
  - The contribution of capital goods was –4.9%, while the contribution of consumer goods was –3.5%.

[Production Index for ICT Manufaturing: by Goods]

(Benchmark: Figures in 2005 = 100)

Note: Figures were calculated based on the unit coefficients of the industrial production index.
Source: METI, *Indices of Industrial Production*

(Year-on-year; %)



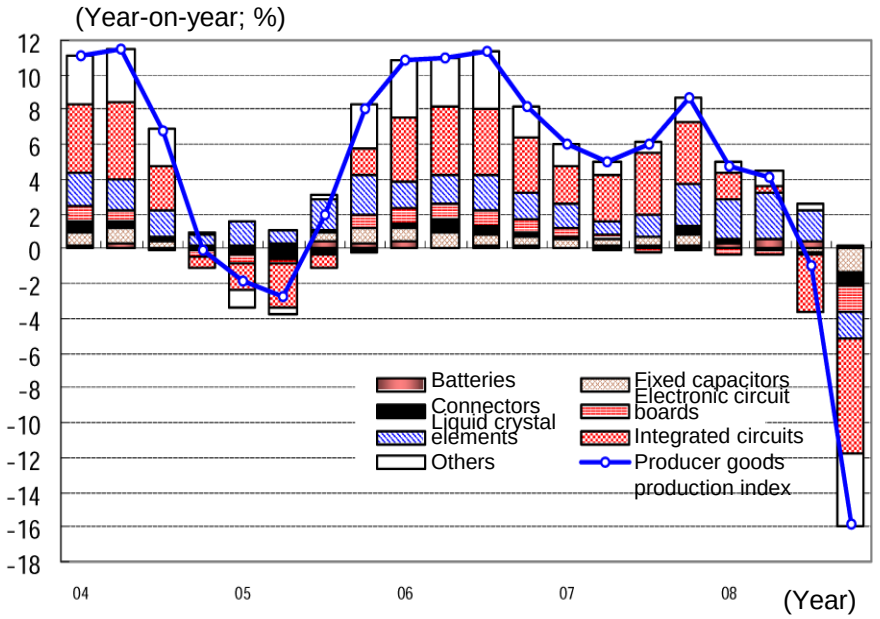
Note: The bars represent the contribution made to the year-on-year change in the production index. (The plotted line represents the total.)
Figures were calculated based on the unit coefficients of the industrial production index.
Source: METI, *Indices of Industrial Production*

1-2. Activities

(1) Trends in ICT Manufacturing: Production Index by Article (1/2)

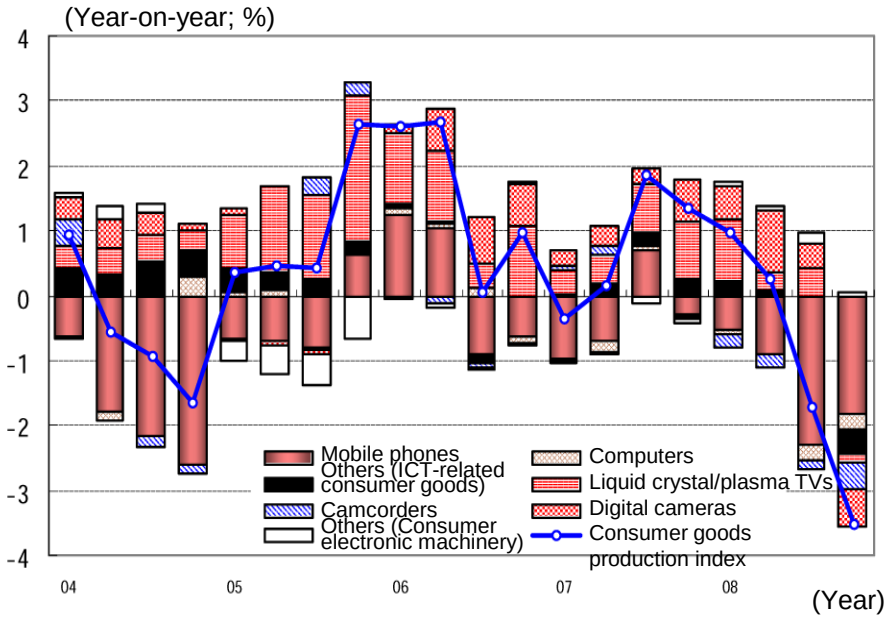
- Breaking down the contribution of producer goods (–15.8%; see the previous page), ICs accounted for the greatest contribution of –6.6%.
  - Liquid crystal elements, which had been heading upward in the previous quarter, turned down to reach –1.4%.
- Breaking down the contribution of consumer goods (–3.5%; see the previous page), the negative contribution of mobile phones (–1.8%) and that of digital cameras (–0.6%) stand out.
  - Although contribution of mobile phones was negative for the fifth consecutive quarter, the fall was not as sharp as the previous quarter.

[Contribution of Producer Goods Production Index (Breakdown)]



Note: The bars represent the contribution made to the year-on-year change in the production index. (The plotted line represents the total.)
Figures were calculated based on the unit coefficients of the industrial production index.
"Others" refers to the sum of backlights for liquid crystal panels, resistors, transformers, crystal oscillators/composite parts, switches for communications/electronic devices, switching supplies, PDP modules, silicon diodes, rectifying devices, transistors, light-emitting diodes, laser diodes, couplers/interrupters, silicon wafers, and the difference value.
"Difference value" means the difference between the sum of contribution of the respective products and the grand total.
Source: METI, *Indices of Industrial Production*

[Contribution of Consumer Goods Production Index (Breakdown)]



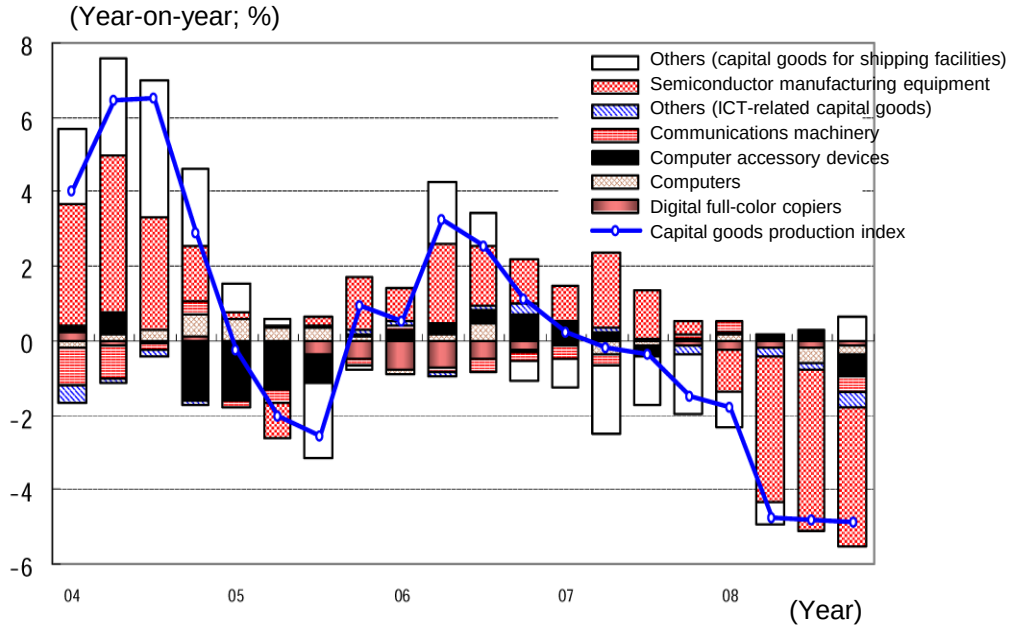
Note: The bars represent the contribution made to the year-on-year change in the production index. (The plotted line represents the total.)
Figures were calculated based on the unit coefficients of the industrial production index.
"Others (ICT-related consumer goods)" refers to the sum of car navigators and the difference value. "Others (Consumer electronic machinery)" refers to the sum of DVDs and the difference value. "Difference value" means the difference between the sum of the contribution of the respective categories and the grand total.
Source: METI, *Indices of Industrial Production*

1-2. Activities

(1) Trends in ICT Manufacturing: Production Index by Article (2/2)

- Breaking down the contribution of capital goods (–4.9%; see p. 7), “others (capital goods for shipping facilities)” was the only category that made a positive contribution, at 0.6%. Semiconductor manufacturing equipment made the largest negative contribution at –3.7%, although this was less than the previous quarter (–4.3%).
  - Breaking down the category of “others (capital goods for shipping facilities),” the contribution of flat panel & display manufacturing equipment was +1.1% and that of semiconductor & IC measuring instruments was –0.5%.
- Semiconductor manufacturing equipment has made a negative contribution for four quarters in a row, which has driven down the capital goods production index.

[Contribution of Capital Goods Production Index (Breakdown)]



Note: The bars represent the contribution made to the year-on-year change in the production index. (The plotted line represents the total.) Figures were calculated based on the unit coefficients of the industrial production index.
“Others (ICT-related capital goods)” refers to the sum of communication wires/cables, communication cable optical fiber products, system cash registers, projectors, industrial TV sets, and the difference value. “Others (capital goods for shipping facilities)” refers to the sum of flat panel & display manufacturing equipment, semiconductor & IC measuring instruments, and the difference value.
“Difference value” means the difference between the sum of the contribution of the respective categories and the grand total.

Source: METI, *Indices of Industrial Production*

1-2. Activities

(1) Trends in ICT Manufacturing: Shipment Index by Goods

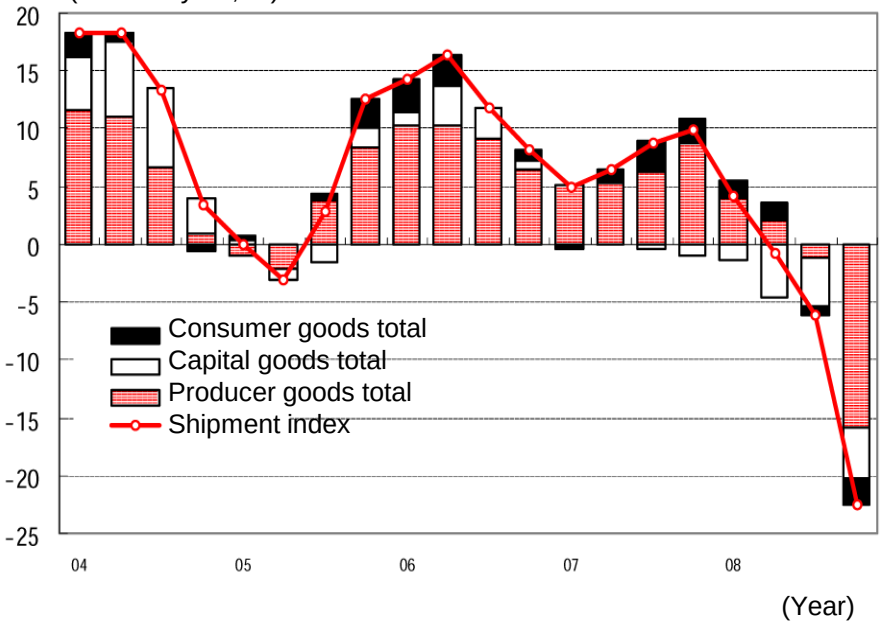
- The contribution of producer goods shipment to the year-on-year change in the ICT manufacturing shipment index (–22.4%; see p. 4) dropped further to –15.8%, from –1.1% for the July–September 2008 period.
  - The negative contribution of consumer goods shipment increased to –2.2% from –0.7% for the July–September 2008 period.
  - The negative contribution of capital goods shipment slightly increased from –4.3% (July–September 2008 period) to –4.4%.

[Shipment Index for ICT Manufacturing: by Goods]

(Benchmark: Figures in 2005 = 100)

Note: Figures were calculated based on the unit coefficients of the industrial shipment index.
Source: METI, *Indices of Industrial Production*

(Year-on-year; %)



Note: The bars represent the contribution made to the year-on-year change in the shipment index. (The plotted line represents the total.)
Figures were calculated based on the unit coefficients of the industrial shipment index.
Source: METI, *Indices of Industrial Production*

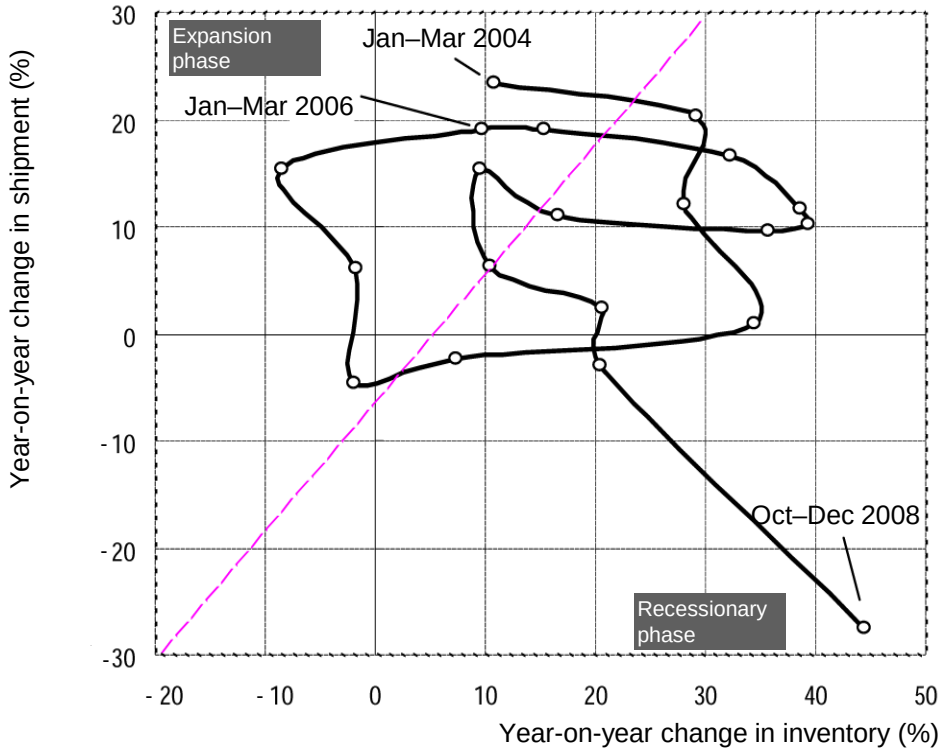
Reference

Inventory Cycle for the Electronic Parts/Devices (*1)

- With regard to electronic parts/devices, year-on-year change in shipment for the October–December 2008 period was –27.6%, a further fall from –3.1% for the previous quarter.
  Meanwhile, year-on-year change in inventory surged to +44.3% from +20.4% for the previous quarter.
  ⇒ Demand was sluggish, both at home and abroad, due to the global economic slowdown.

Note: Articles covered under the electronic parts/devices are also covered by ICT manufacturing, with some exceptions (see p. 48).

[Inventory Cycle Chart (Electronic Parts/Devices)]



Source: METI, *Indices of Industrial Production*

1-2. Activities

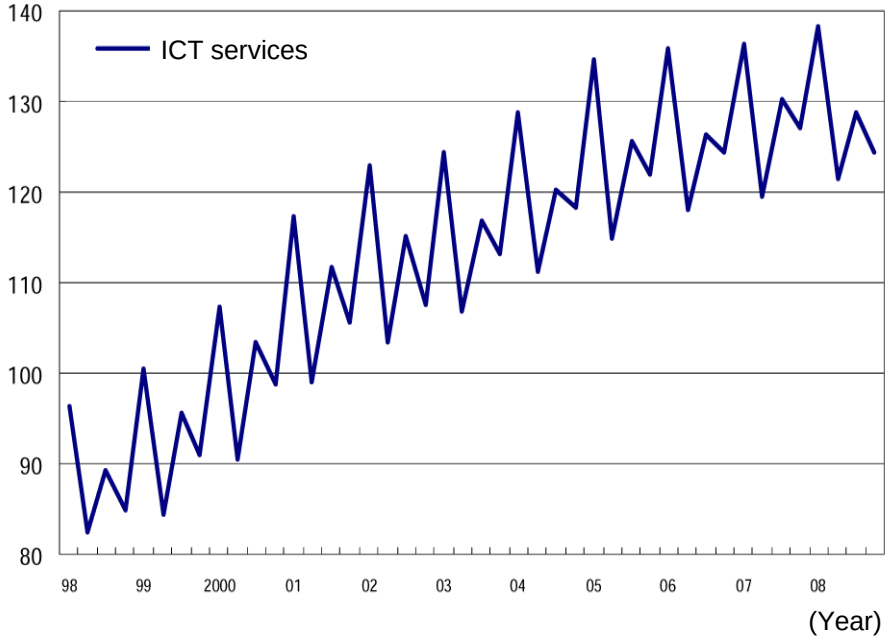
(2) Trends in ICT Services1: Overall Activity Index

- Having already slowed its upward climb, the activity index for ICT services fell for the most recent quarter.
- During the October–December 2008 period, the year-on-year change in the activity index dropped further to –2.2% from 1.1% for the previous quarter.

Note: "ICT service industry" refers to the sum of information and communications, advertising, and information-related equipment lease/rental in *Report on Indices of Tertiary Industry Activity compiled* by METI (see p. 47).

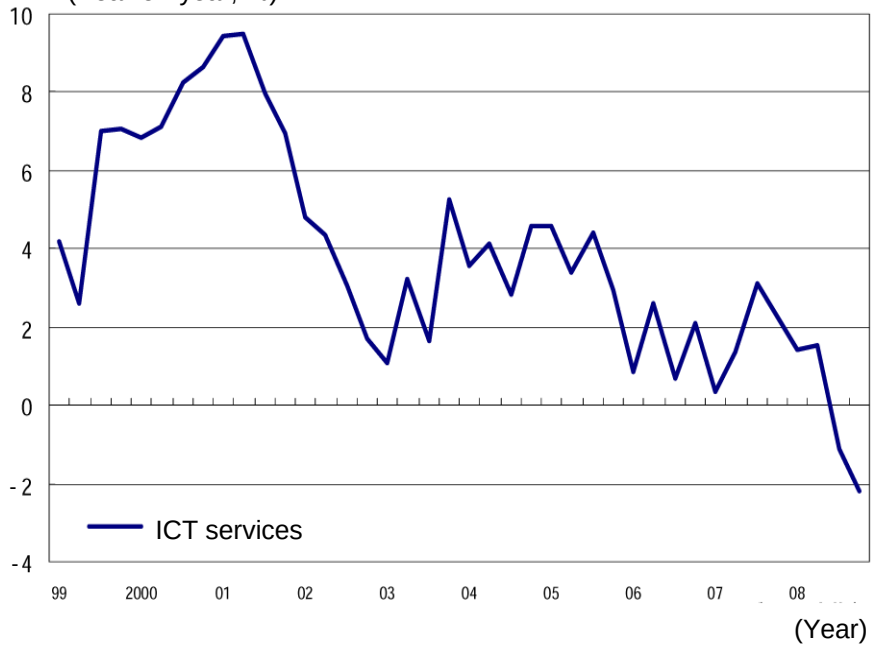
[Activity Index for ICT Services]

(Benchmark: Figures in 2000 = 100)



Note: Figures were calculated based on the original indices in *Report on Indices of Tertiary Industry Activity*.
Source: METI, *Report on Indices of Tertiary Industry Activity*

(Year-on-year; %)



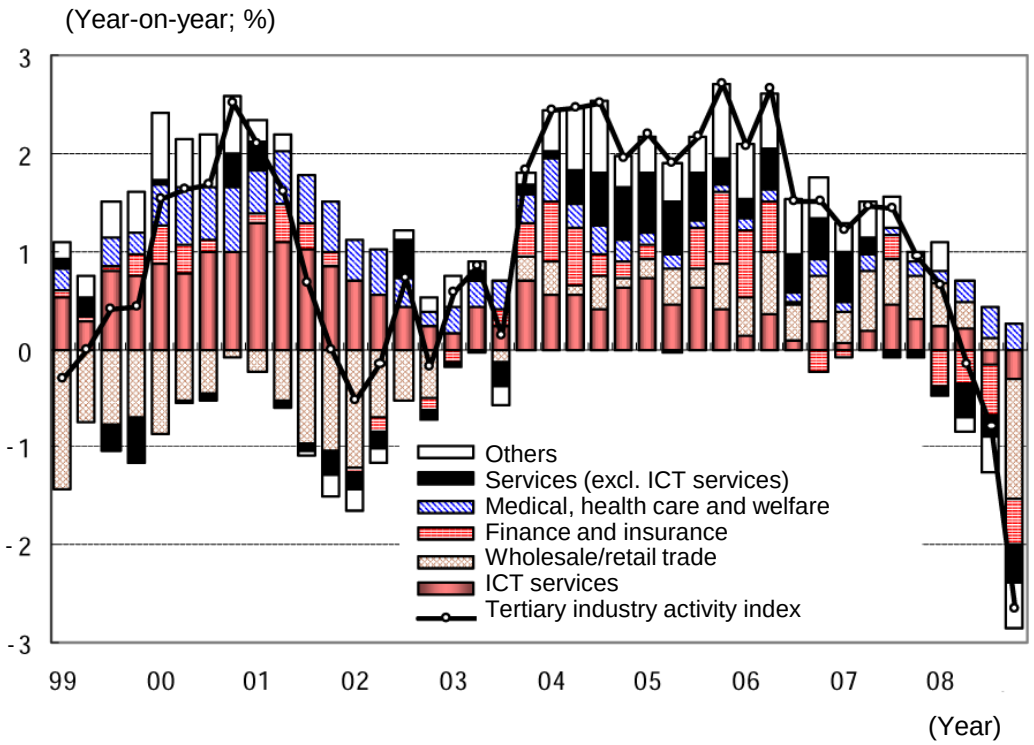
Note: Figures were calculated based on the original indices in *Report on Indices of Tertiary Industry Activity*.
Source: METI, *Report on Indices of Tertiary Industry Activity*

1-2. Activities

(2) Trends in ICT Services: Impact on Overall Services

- The contribution of the ICT services' activity index to the year-on-year change in the tertiary industry activity index (–2.7% for the October–December 2008 period), which indicates the impact of ICT services on overall services, was –0.3% for this period.
- For this period, ICT services made a negative contribution, driving down the tertiary industry activity index. Its contribution accounts for one-fourth of the contribution made by the dominant negative contributor, wholesale and retail trade (–1.2%).

[Contribution to Year-on-Year Change in Tertiary Industry Activity Index: by Business Category]



Note: The bars represent the contribution made to the year-on-year change in the tertiary industry activity index. (The plotted line represents the total.)
"Services (excl. ICT services)" represents businesses categorized into "services" (services for individuals, leasing, etc.) in the source category, minus ICT-related business categories.
"Others" includes: electricity, gas, heat supply and water; transport; real estate; eating and drinking places, accommodations; learning support; and compound services.

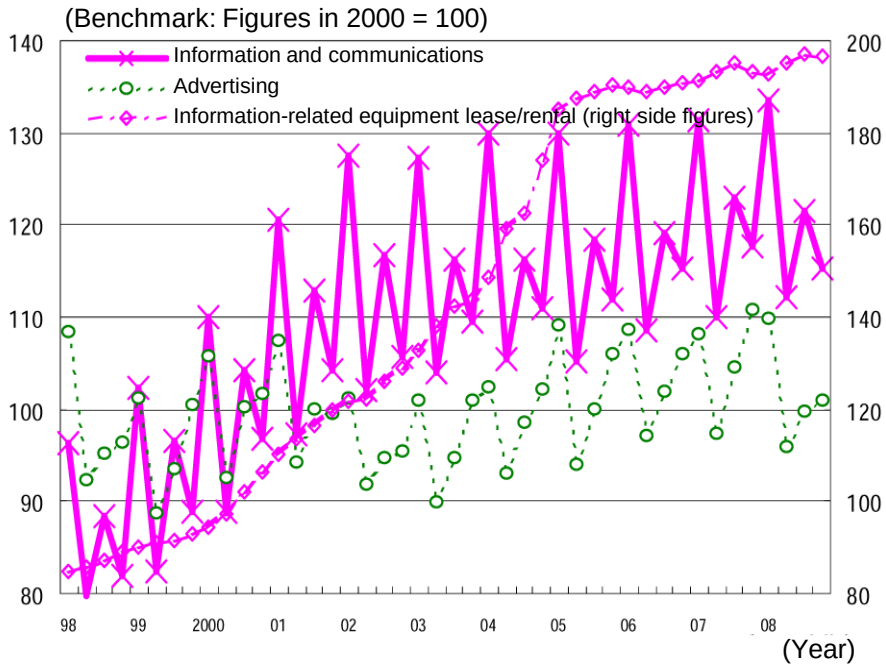
Source: METI, *Report on Indices of Tertiary Industry Activity*

1-2. Activities

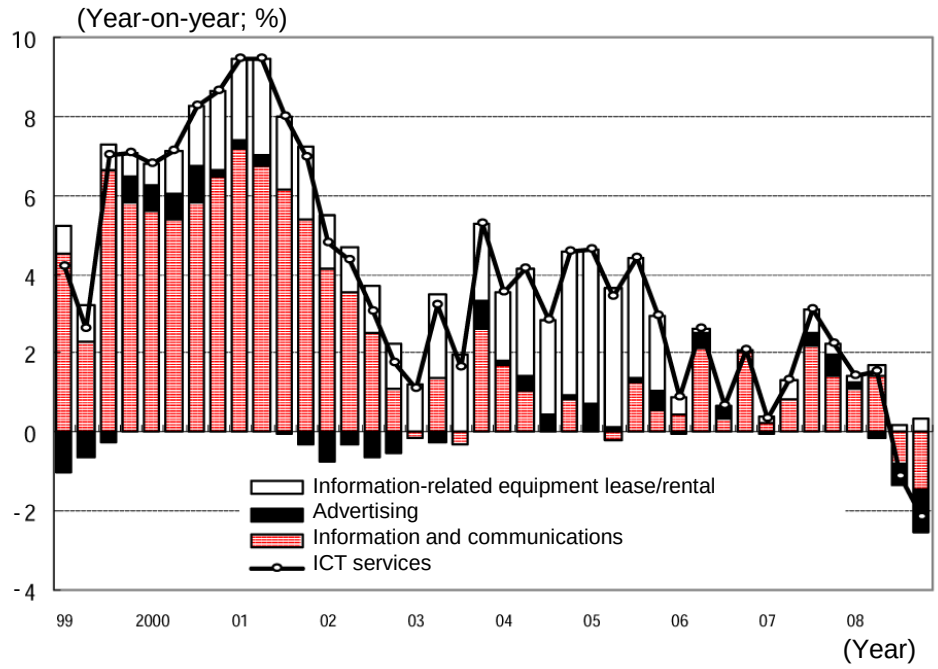
(2) Trends in ICT Services: Activity Index by Business Category

- Breakdown analysis of ICT services reveals that, while the activity index for information-related equipment lease/rental moderately rose for the October–December 2008 period, the activity index for information and communications and advertising fell more sharply than in the previous quarter.
  - The contribution of the information and communications activity index to the year-on-year change in the ICT services activity index (–2.2%; see p. 12) dropped further, to –1.4% from –0.8% for the previous quarter.
  - The negative contribution of advertising increased to –1.1%, from –0.5% for the previous quarter.
    ⇒ Car manufacturers and other enterprises suffering a downturn due to the financial crisis have been slashing advertising costs.
  - The contribution of information-related equipment lease/rental was +0.3%, a slight increase from +0.2% for the previous quarter.

[Activity Index for ICT Services: by Business Category]



Source: METI, *Report on Indices of Tertiary Industry Activity*



Note: The bars represent the contribution made to the year-on-year change in the ICT services activity index. (The plotted line represents the total.)
Figures were calculated based on the original indices.
Source: METI, *Report on Indices of Tertiary Industry Activity*

1-2. Activities

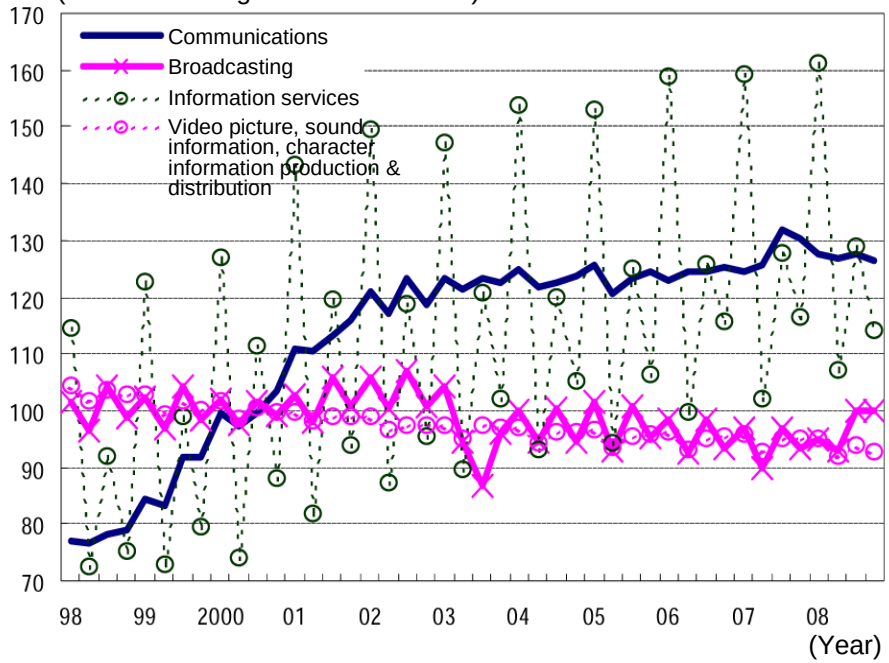
(2) Trends in ICT Services: Activity Index for Information and Communications (*1)

- Breakdown analysis of information and communications reveals that, while broadcasting maintained its uptrend for the October–December 2008 period, communications continued to fall and information services turned negative.
- In terms of contribution to the year-on-year change in the ICT services activity index (–2.2%; see p. 12), the negative contribution of communications slightly decreased to –1.0%, from –1.1% for the previous quarter.
  - The contribution of information services was –0.5%, turning negative from +0.3% for the previous quarter.
  - The contribution of broadcasting increased to +0.2%, while the contribution of video picture, sound information, character information production & distribution fell to –0.2%.

Note: "Information and communications" as referred to above is defined in the same terms as provided in METI's *Report on Indices of Tertiary Industry Activity*. It includes: communications; broadcasting; information services; and video picture, sound information, character information production & distribution.

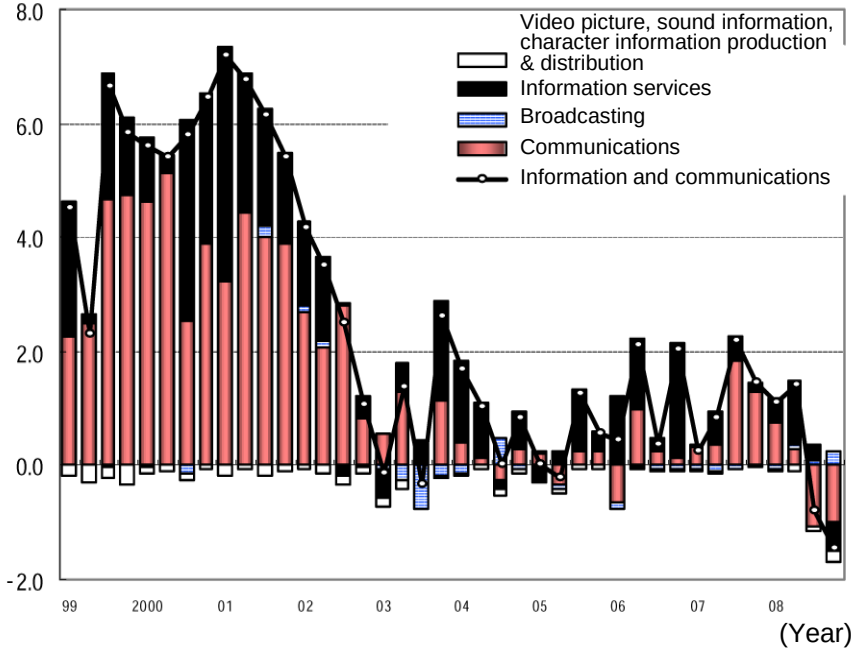
[Activity Index for Information and Communications (Breakdown)]

(Benchmark: Figures in 2000 = 100)



Note: Original indices
Source: METI, *Report on Indices of Tertiary Industry Activity*

(Year-on-year; %)



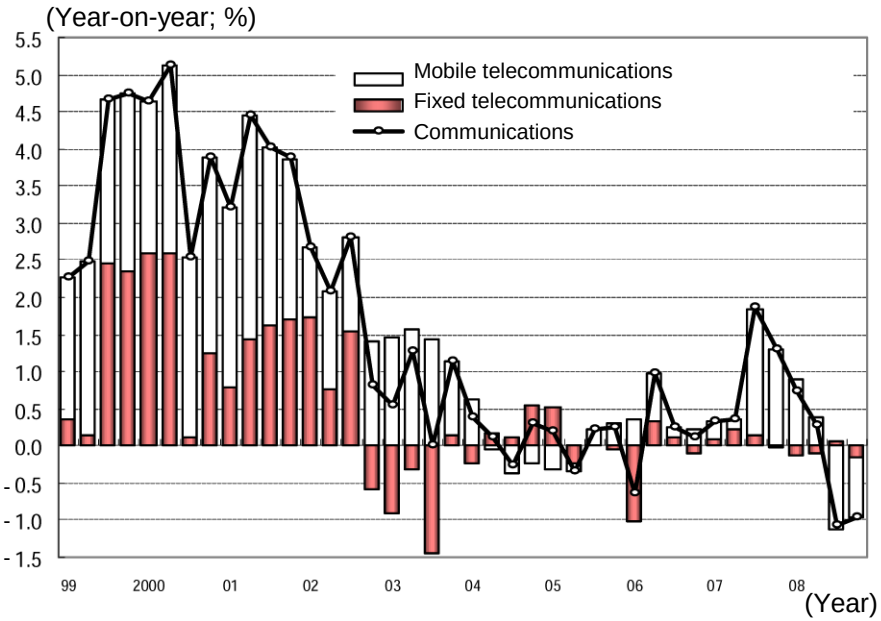
Note: The bars represent the contribution made to the year-on-year change in the ICT services activity index. (The plotted line represents the total.) Figures were calculated based on the original indices.
Source: METI, *Report on Indices of Tertiary Industry Activity*

1-2. Activities

(2) Trends in ICT Services: Activity Index for Communications and Information Services

- Breaking down the contribution of communications (–1.0%; see the previous page), the negative contribution of mobile telecommunications decreased to –0.8% from –1.1% for the previous quarter, while the contribution of fixed telecommunications turned negative to –0.2% from +0.1% for the previous quarter.
  - ⇒ In mobile telecommunications, ARPU (average monthly revenue per user) for data communications grew but ARPU for voice communications decreased. ARPU for the combined total of data and voice communications was on the decline.
- A breakdown analysis of the contribution of information services (–0.5%; see the previous page) reveals that the contribution of package software services at –0.7% drove down the entire industry. Additionally, the contribution of custom software services turned negative at –0.1%.
  - ⇒ Among the package software services, sales of game software decreased as few big-name titles were released for the year-end shopping season.
  - The contribution of "system management on commission, etc." and "other data processing and information services" was positive at +0.2% and +0.1%, respectively.

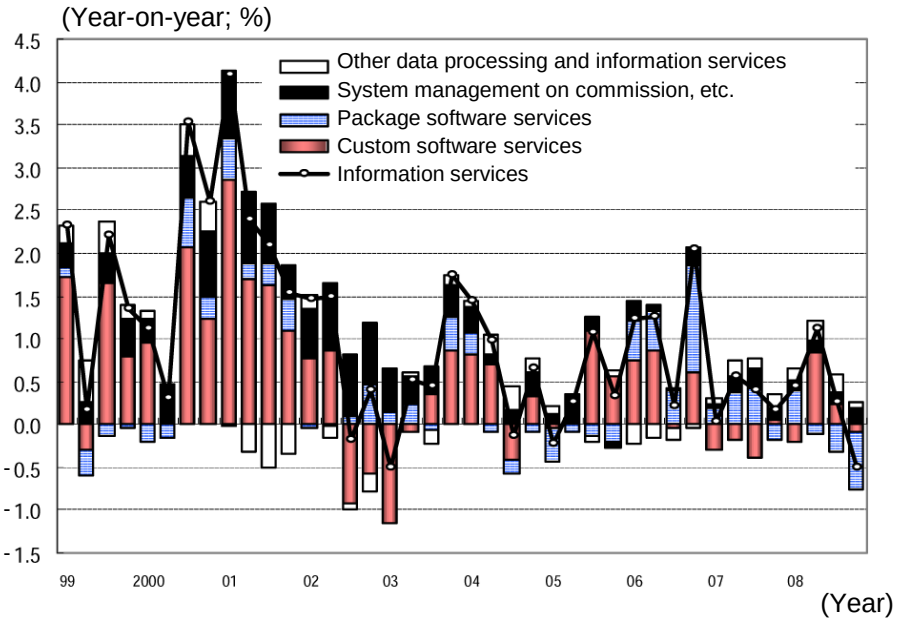
[Contribution of Communications (Breakdown)]



Note: The bars represent the contribution made to the year-on-year change in the ICT services activity index. (The plotted line represents the total.) Figures were calculated based on the original indices.

Source: METI, *Report on Indices of Tertiary Industry Activity*

[Contribution of Information Services (Breakdown)]



Note: The bars represent the contribution made to the year-on-year change in the ICT services activity index. (The plotted line represents the total.) Figures were calculated based on the original indices.

Source: METI, *Report on Indices of Tertiary Industry Activity*

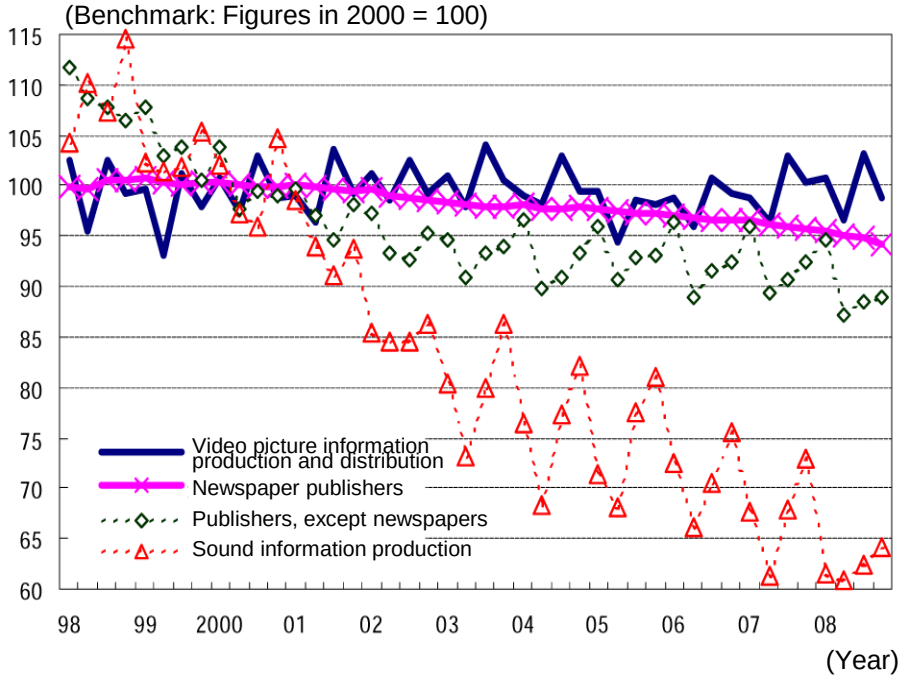
1-2. Activities

(2) Trends in ICT Services: Activity Index for Contents Industry (*1)

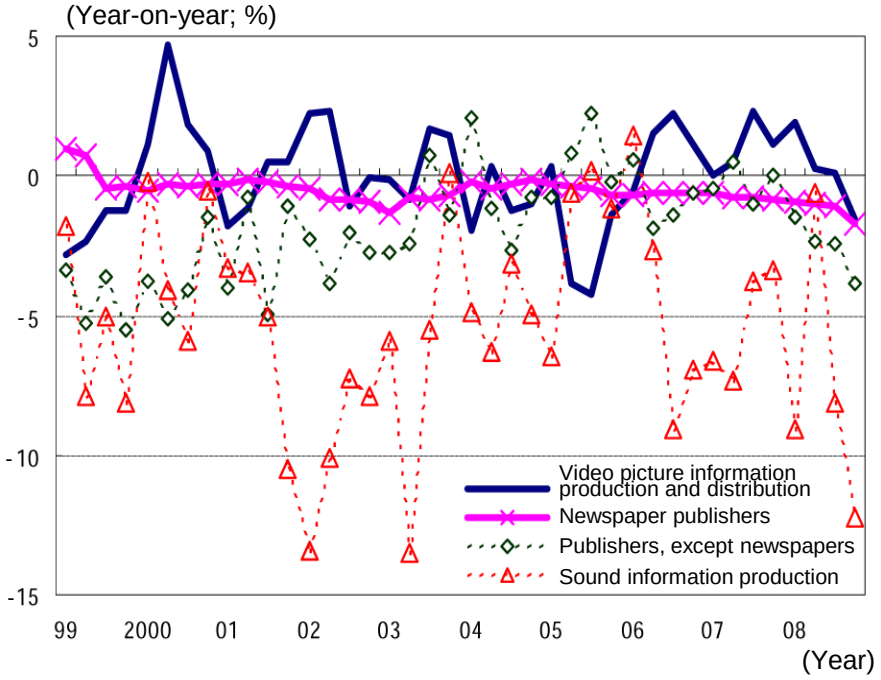
- Overall, the contents industry was in a slump.
  - In terms of year-on-year change in the activity index, video picture information production and distribution turned negative at –1.5%, from +0.1% for the previous quarter.
  - Newspaper publishers dropped further, to –1.7% from –1.1% for the previous quarter.
  - Publishers, except newspapers dropped further, to –3.8% from –2.5% for the previous quarter.
  - Sound information production dropped further, to –12.2% from –8.1% for the previous quarter.

Note: The "contents industry" as referred to above is defined in the same terms as "video picture, sound information, character information production & distribution" in METI's *Report on Indices of Tertiary Industry Activity*. It includes: video picture information production and distribution; sound information production; newspaper publishers; and publishers, except newspapers.

[Activity Index for Contents Industry (Breakdown)]



Note: Original indices
Source: METI, *Report on Indices of Tertiary Industry Activity*



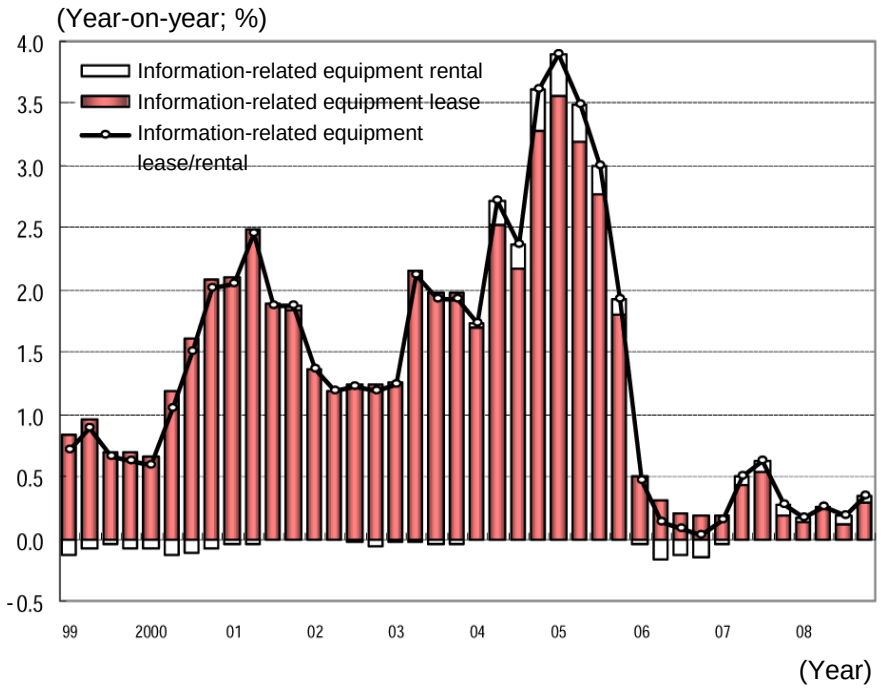
Note: Original indices
Source: METI, *Report on Indices of Tertiary Industry Activity*

1-2. Activities

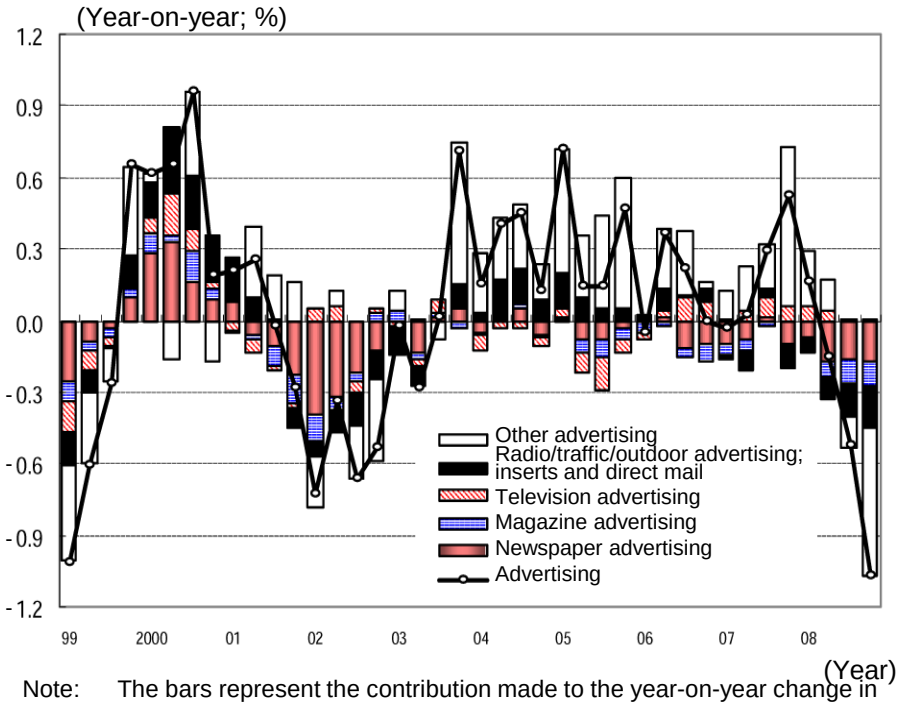
(2) Trends in ICT Services: Activity Index for Information-Related Equipment Lease/Rental and Advertising

- Breaking down the contribution of information-related equipment lease/rental to the year-on-year change in the ICT services activity index (+0.3%; see p. 14), the contribution of information-related equipment lease increased further, to +0.3% from +0.1% for the previous quarter.
  At the same time, the contribution of information-related equipment rental was positive at +0.05%, a smaller increase than that of the previous quarter (+0.07%).
- Breaking down the contribution of advertising (–1.1%; see p. 14), the contribution of other advertising (including Internet advertising) plunged to –0.6%. The contribution of radio/traffic/outdoor advertising, inserts and direct mail, newspaper advertising, and magazine advertising continued to fall, reaching –0.2%, –0.2%, and –0.1%, respectively.
  - Only television advertising increased its contribution, albeit very slightly at +0.004%.

[Contribution of Information-Related Equipment Lease/Rental (Breakdown)]



[Contribution of Advertising (Breakdown)]



Note: The bars represent the contribution made to the year-on-year change in the ICT services activity index. (The plotted line represents the total.)
Figures were calculated based on the original indices.

Source: METI, *Report on Indices of Tertiary Industry Activity*

1-3. Capital Investment Trends

- Capital investment in ICT-related business categories decreased year-on-year, except for investment in electrical machinery/tools manufacturing.
  - In terms of year-on-year change, electrical machinery/tools manufacturing dramatically increased to +19.6% from –3.8% for the previous quarter.
  - ICT machinery/tools manufacturing dropped sharply to –25.1%, falling for the sixth consecutive quarter.
  - Information and communications turned negative to –2.2% from +0.4% for the previous quarter.

[Capital Investment]

(Unit: ¥100 billion; %)

	2006			2007				2008			
	Apr–June	July–Sep	Oct–Dec	Jan–Mar	Apr–June	July–Sep	Oct–Dec	Jan–Mar	Apr–June	July–Sep	Oct–Dec
All industries	122.3	140.8	141.2	177.2	116.3	139.1	130.3	168.6	108.7	121.0	107.7
(Y-O-Y)	16.6	12.0	16.8	13.6	-4.9	-1.2	-7.7	-4.9	-6.5	-13.0	-17.3
Manufacturing	40.5	49.5	48.4	59.7	45.3	52.5	48.7	60.2	45.9	52.1	43.3
(Y-O-Y)	14.1	7.3	15.4	12.7	11.7	6.1	0.5	0.9	1.4	-0.9	-11.1
Electrical machinery + ICT machinery	9.8	12.2	9.7	12.8	10.5	11.4	9.1	13.3	11.0	10.7	8.3
(Y-O-Y)	25.1	31.2	21.7	15.1	7.6	-6.8	-6.8	3.3	4.1	-5.7	-8.1
Electrical machinery/tools manufacturing	3.8	5.3	4.0	4.9	4.3	5.3	3.5	5.8	5.7	5.1	4.1
(Y-O-Y)	13.4	41.8	24.9	8.7	14.4	0.8	-13.3	18.6	32.6	-3.8	19.6
ICT machinery/tools manufacturing	6.0	6.9	5.8	7.9	6.2	6.0	5.6	7.4	5.2	5.6	4.2
(Y-O-Y)	33.8	24.1	19.6	19.5	3.3	-12.7	-2.3	-6.2	-15.9	-7.3	-25.1
Non-manufacturing	81.7	91.3	92.8	117.6	71.0	86.6	81.6	108.4	62.8	69.0	64.4
(Y-O-Y)	17.9	14.8	17.5	14.1	-13.1	-5.1	-12.0	-7.8	-11.6	-20.3	-21.0
Transport/Communications	15.3	23.1	21.7	34.5	15.7	25.9	19.0	31.7	18.6	19.5	18.4
(Y-O-Y)	17.8	24.4	11.5	24.2	2.8	12.5	-12.3	-8.3	18.0	-24.9	-3.3
ICT	9.0	13.7	13.4	16.7	8.7	9.6	8.9	15.0	10.5	9.7	8.7
(Y-O-Y)	12.7	26.3	12.7	14.2	-3.0	-29.7	-33.5	-10.3	20.3	0.4	-2.2

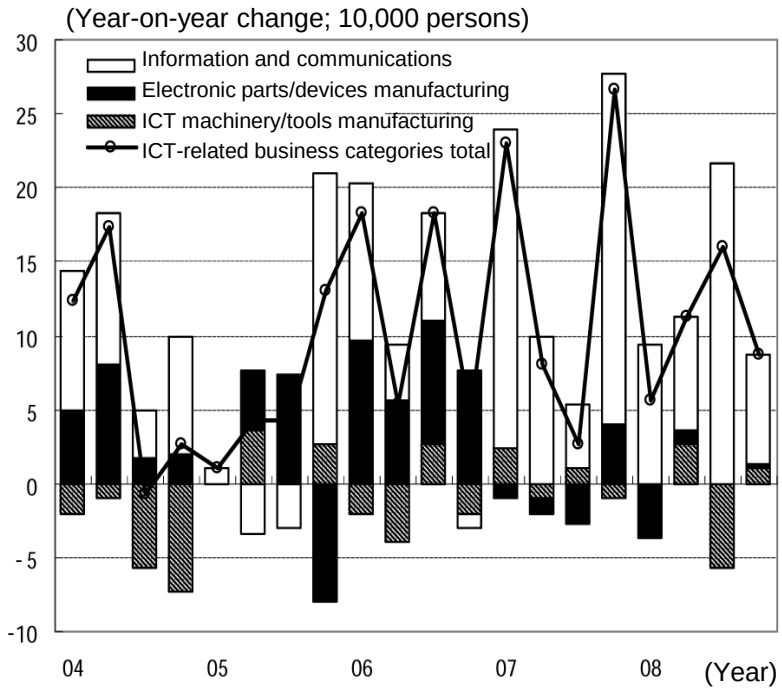
Note: Categorization of businesses was changed from the April–June 2004 period and onward.
Source: Ministry of Finance, *Financial Statements Statistics of Corporations by Industry*

1-4. Employment

(1) Number of Employed Persons

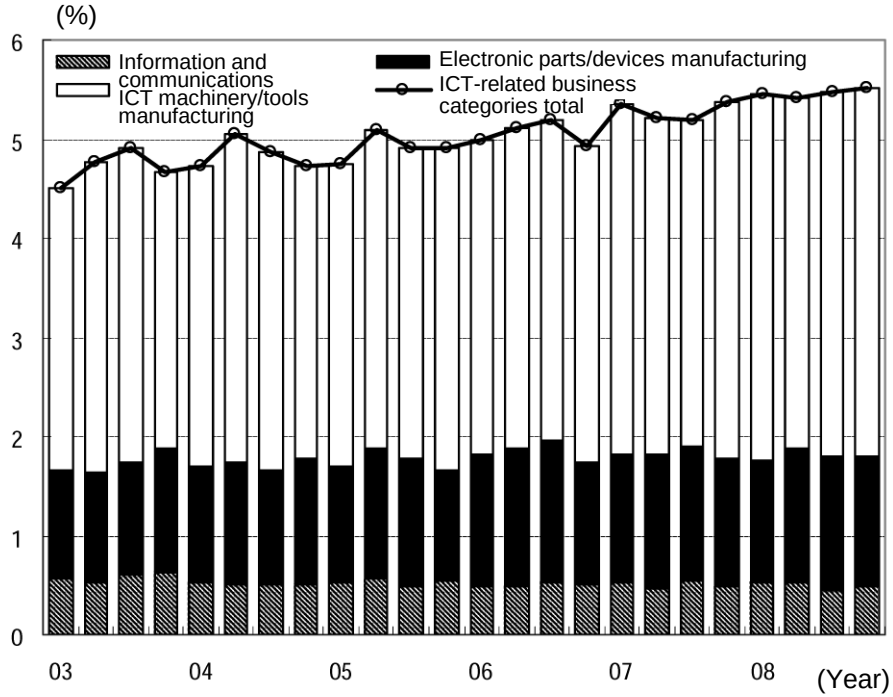
- Employment in ICT-related business categories is on the rise.
  - For the October–December 2008 period, the number of employed persons increased by 90,000 persons year on year, although the year-on-year increase was not as much as the previous quarter (up 160,000 persons).
  - In these categories, year-on-year change in employment in ICT machinery/tools manufacturing turned upward, with an increase of 10,000 employed persons from –60,000 for the previous quarter. The year-on-year increase of employment in information and communications decreased considerably to +70,000 employed persons from +220,000 for the previous quarter.
  - Employment in electronic parts/devices manufacturing leveled off.
- In terms of the number of employed persons, the share of ICT-related business categories of the total was about 5.5%, of which information and communications accounted for the highest share of 3.7%. Both figures rose slightly from the previous quarter.

[Number of Employed Persons in ICT-related Business Categories]



Source: MIC, *Labour Force Survey*

[Percentage of ICT-related Business Categories of Total Number of Employed Persons]



Note: Percentage of the total number of employed persons
Source: MIC, *Labour Force Survey*

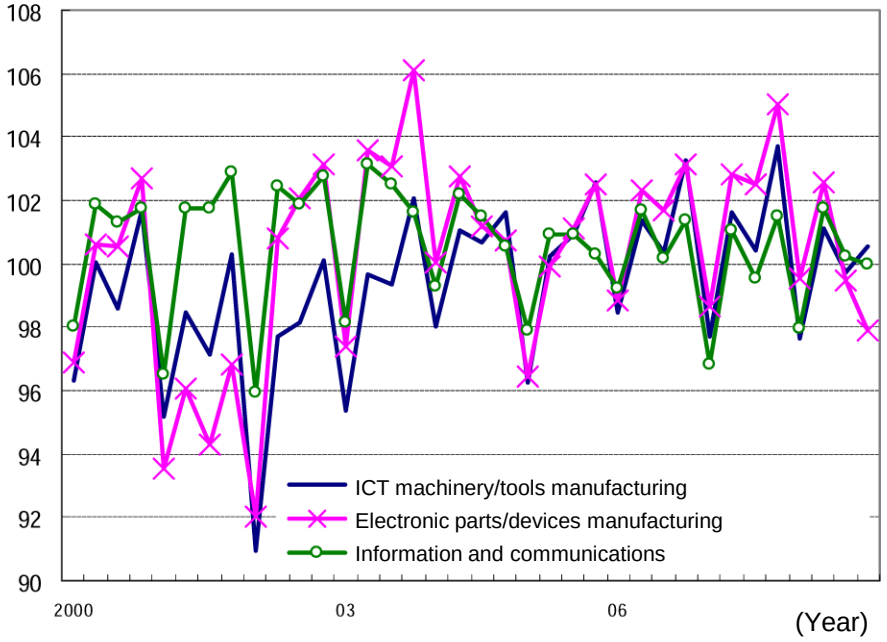
1-4. Employment

(2) Hours Worked: Total Hours Worked

- Total hours worked in ICT-related business categories for the October–December 2008 period decreased year on year for the business categories of ICT machinery/tools manufacturing, electronic parts/devices manufacturing, and information and communications.
  - In terms of year-on-year change in the total hours worked, the figure for ICT machinery/tools manufacturing was –3.1%, a further fall from –0.7% for the previous quarter.
  - Electronic parts/devices manufacturing dropped further, to –6.8% from –3.0% for the previous quarter.
  - Information and communications turned negative at –1.4%, from +0.7% for the previous quarter.

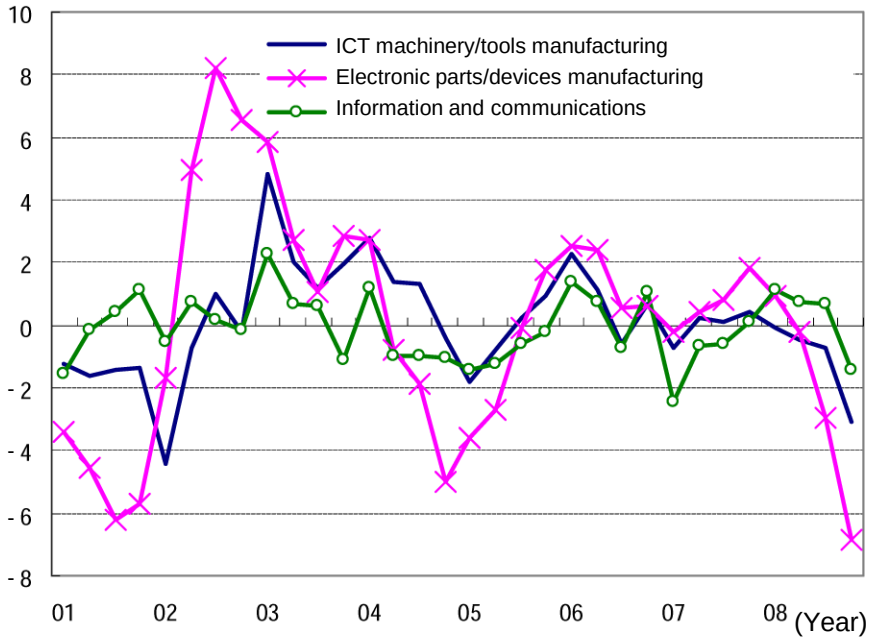
[Index of Total Hours Worked in ICT-related Business Categories]

(Benchmark: Figures in 2005 = 100)



Source: Ministry of Health, Labour and Welfare (MHLW), *Monthly Labour Survey*

(Year-on-year; %)



Source: Ministry of Health, Labour and Welfare (MHLW), *Monthly Labour Survey*

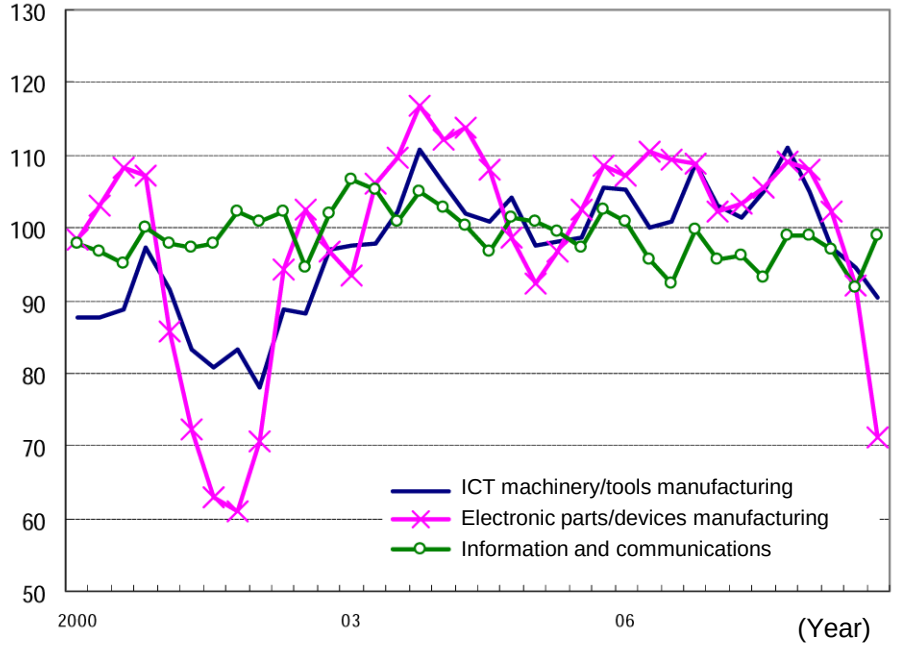
1-4. Employment

(2) Hours Worked: Non-Scheduled Working Hours

- Non-scheduled working hours in ICT-related business categories for the October–December 2008 period decreased year on year in ICT machinery/tools manufacturing and electronic parts/devices manufacturing, but leveled off in information and communications.
  - In terms of year-on-year change in non-scheduled working hours, ICT machinery/tools manufacturing dropped further to –18.6% from –10.0% for the previous quarter.
  - Electronic parts/devices manufacturing plunged to –34.7% year-on-year from –12.6% for the previous quarter.
  - Information and communications leveled off.

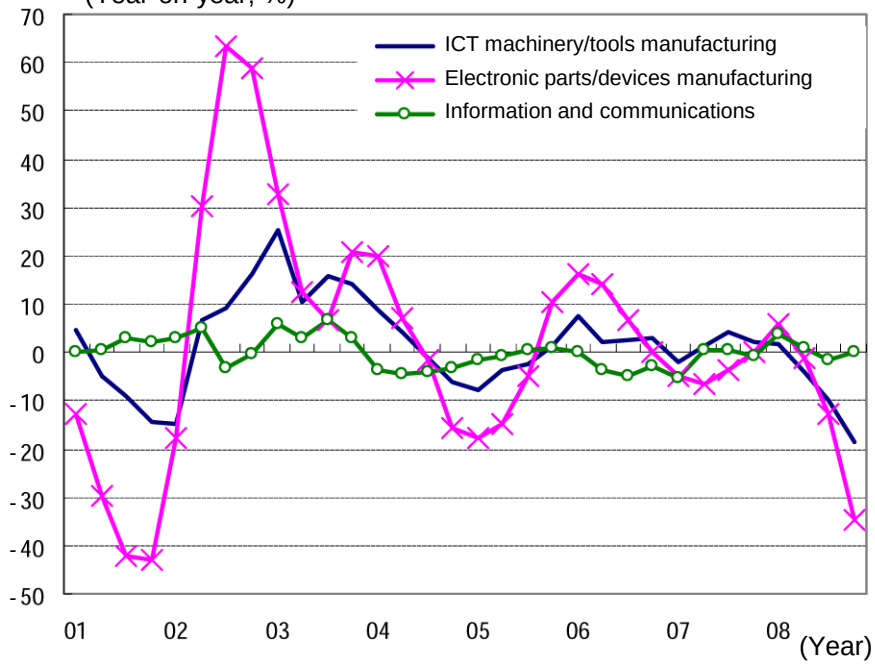
[Non-Scheduled Working Hours for ICT-related Business Categories]

(Benchmark: Figures in 2005 = 100)



Source: MHLW, *Monthly Labour Survey*

(Year-on-year; %)

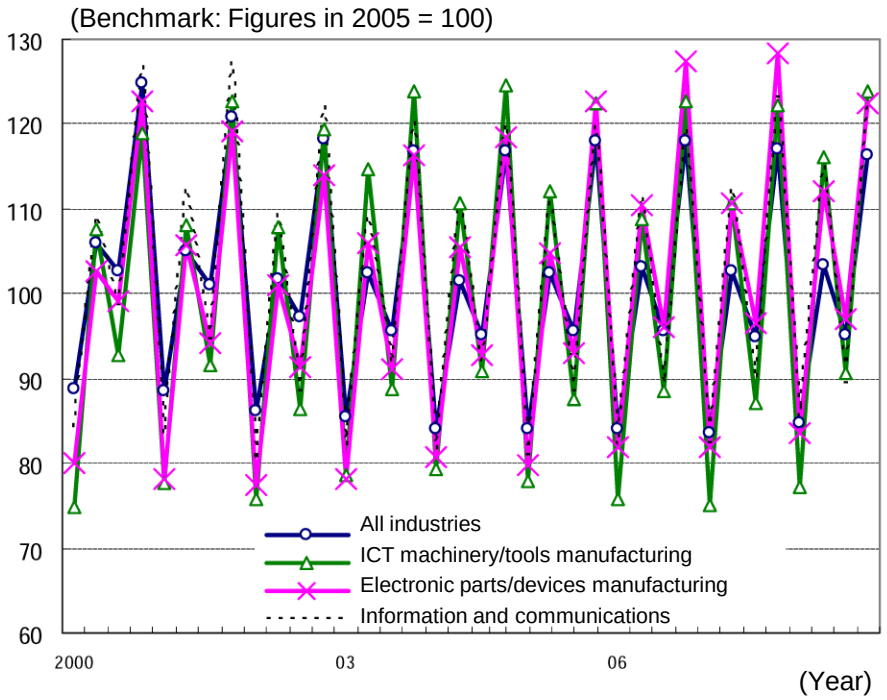


Source: MHLW, *Monthly Labour Survey*

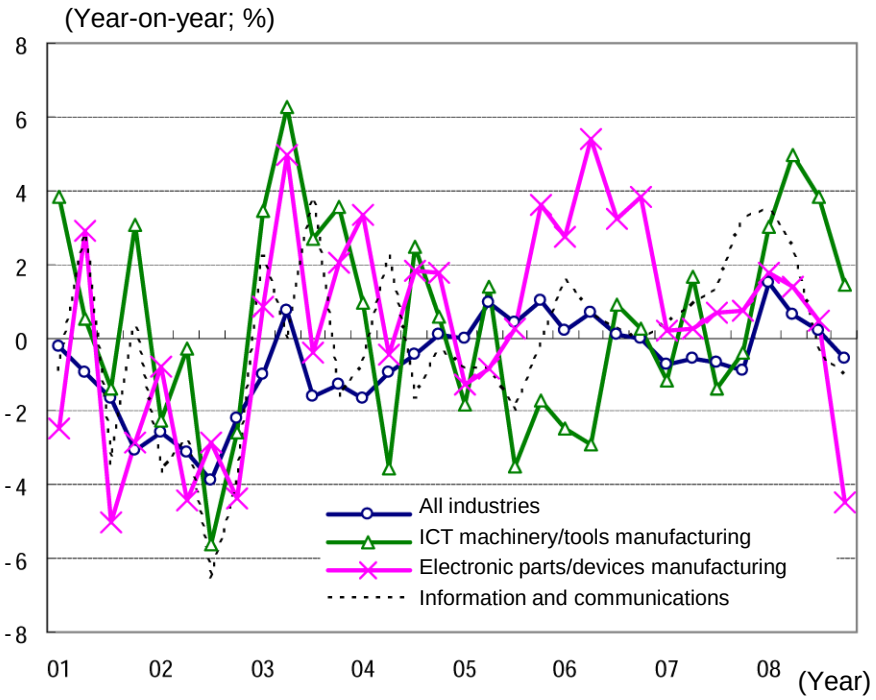
1-5. Wage Trends

- In ICT-related business categories for the October–December 2008 period, wages in ICT machinery/tools manufacturing increased year on year, while wages in electronic parts/devices manufacturing and information and communications decreased.
  - In terms of year-on-year change in wages, the figure for ICT machinery/tools manufacturing was +1.4%, an increase smaller than the +3.8% of the previous quarter.
  - Electronic parts/devices manufacturing turned negative at –4.5% from +0.4% for the previous quarter.
  - Information and communications dropped further, to –1.1% from –0.5% for the previous quarter.

[Nominal Wage Index in ICT-related Business Categories]



Source: MHLW, *Monthly Labour Survey*



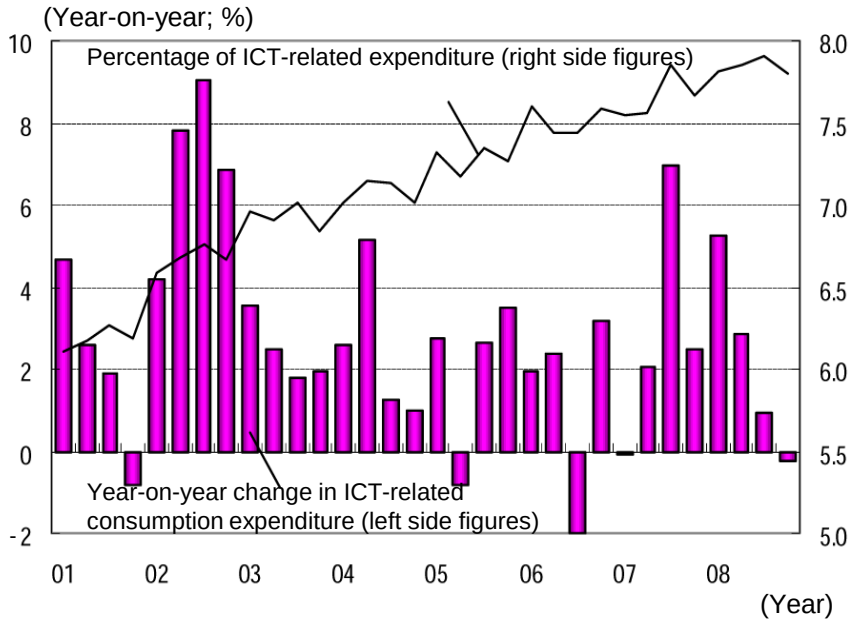
Source: MHLW, *Monthly Labour Survey*

2. Trends in ICT-related Demand

2-1. Consumption Trends

- ICT-related consumption expenditure (nominal) decreased for the first time in seven quarters.
  - Year-on-year change in ICT-related consumption expenditure was –0.2% for the October–December 2008 period.
  - The percentage of ICT-related expenditure of the total consumption expenditure had been rising before dropping for the most recent quarter (7.8% for the October–December 2008 period).
  - For the October–December 2008 period, mobile phone call charges and Internet access fees continued to increase, albeit at a slower pace, while ICT-related devices continued to trend downward.
  - Monthly ICT-related consumption expenditure per household averaged 24,000 yen.

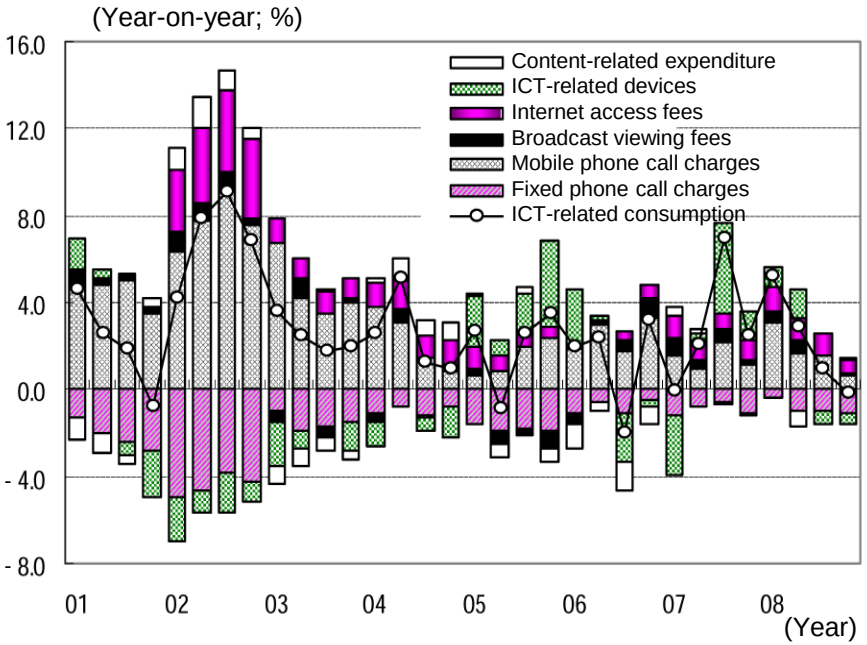
[ICT-related Consumption Expenditure]



Note: The percentage of ICT represents the percentage of ICT-related consumption expenditure of nominal consumption expenditure (of all households, including households engaged in agriculture, forestry and fisheries, across Japan).
"ICT-related consumption expenditure" is the sum of expenditures on: call charges (fixed-line and mobile calls combined); communications devices; personal computers; VCRs and the like; music/video media; cinema and theater tickets and the like; and books and other printed materials.

Source: MIC, *Family Income and Expenditure Survey*

[ICT-related Consumption Expenditure: by Item]



Note: The bars represent the contribution made to the year-on-year change in ICT-related consumption expenditure. (The plotted line represents the total.)
The "amount of consumption expenditure" refers to an average monthly expenditure of all households consisting of two or more persons, including households engaged in agriculture, forestry and fisheries, across Japan.
"ICT-related consumption expenditure" is the sum of expenditures on: call charges (fixed-line and mobile calls combined); communications devices; personal computers; VCRs and the like; music/video media; cinema and theater tickets and the like; and books and other printed materials.

Source: MIC, *Family Income and Expenditure Survey*

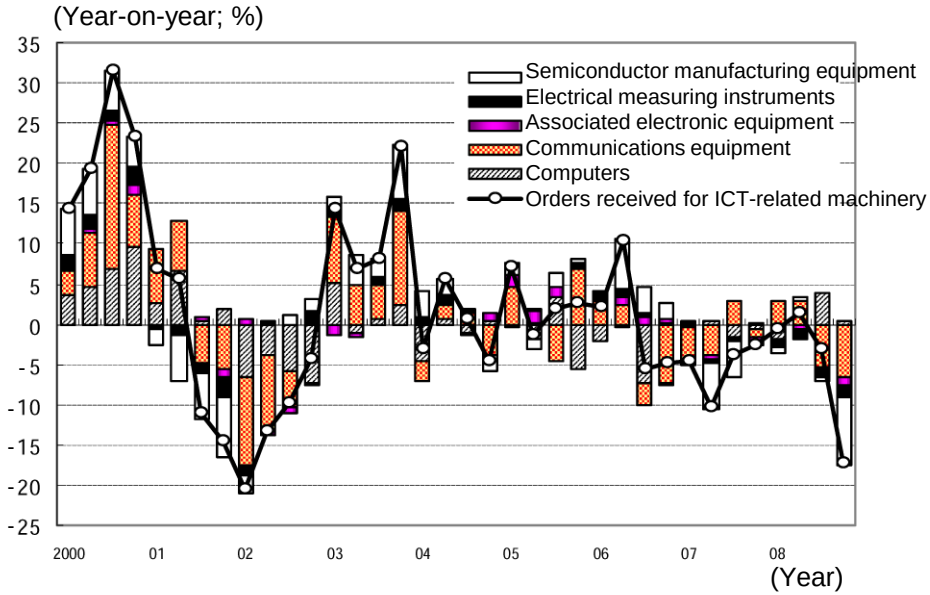
2-2. Investment Trends

- With regard to orders received for ICT-related machinery (private-sector demand, excluding volatile orders for ships and orders from electric power companies), which serve as a leading indicator for corporate investment in information technology, orders for computers remained in an uptrend while those for semiconductor manufacturing equipment and communications equipment plunged.
  - In terms of year-on-year change in contribution, computers scored +0.4%, an increase much smaller than the +3.9% of the previous quarter. The negative contribution of semiconductor manufacturing equipment and communications equipment increased to –8.4% (from –0.5% for the previous quarter) and –6.6% (from –5.4%), respectively.

  ⇒ As demand for semiconductor decreased due to the slowdown in consumption, major semiconductor manufacturers reduced capital investment.

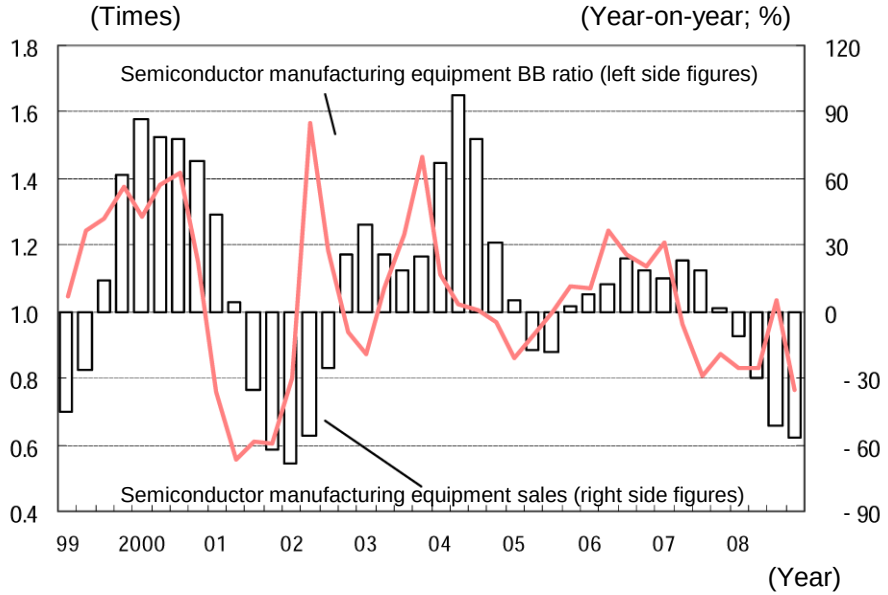
  ⇒ The decrease in orders for communications equipment is mostly attributed to a decrease in orders for mobile phones. As shipment plunged due to price hikes caused by a change in the sales system and slowdown in consumption caused by economic slowdown, mobile phone operators drastically reduced orders placed with handset manufacturers.
- BB (Book-to-Bill) ratio, which serves as a leading indicator for semiconductor-related capital investment, was +0.76%.
  - Year-on-year change in sales (a total of the averages of three months) fell further, to –57.1% from –51.7% for the previous quarter.

[Orders Received for ICT-related Machinery: by Machinery Classification]



Note: The bars represent the contribution made to the year-on-year change in orders received for ICT-related machinery.
"Orders received for ICT-related machinery" is the sum of orders received for computers, communications equipment, associated electronic equipment, electrical measuring instruments, and semiconductor manufacturing equipment, from among the broader category of orders received for machinery (private-sector demand, excl. volatile orders for ships and orders from electric power companies).
Source: Cabinet Office, *Orders Received for Machinery*

[Sales and BB Ratio for Semiconductor Manufacturing Equipment Made in Japan]



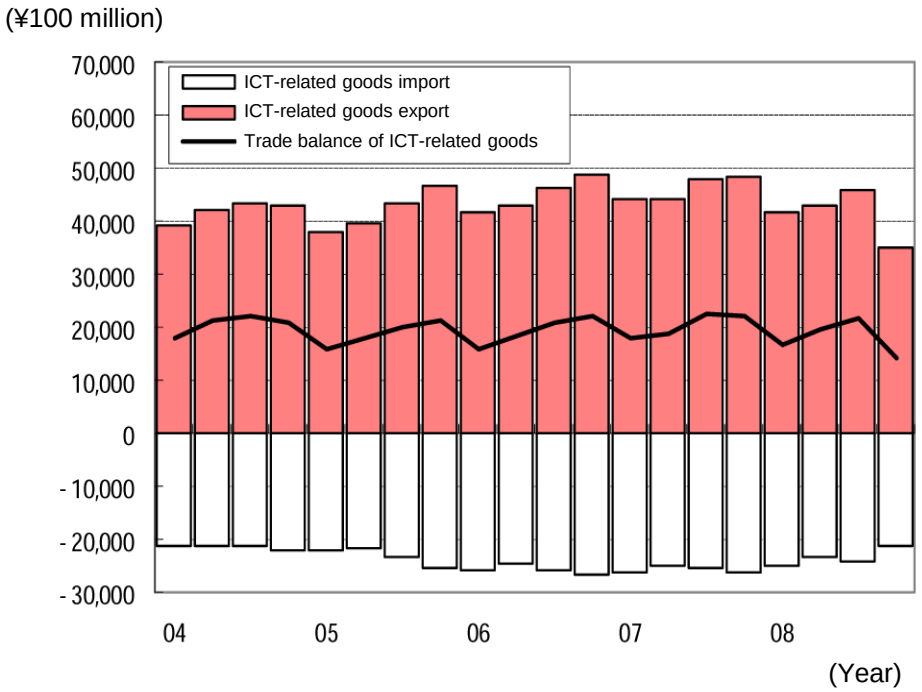
Note: Sales represent the year-on-year changes in the three-month moving average.
BB ratio = Orders received (3-month average) / Sales (3-month average)
Source: Semiconductor Equipment Association of Japan

2-3. Export/Import Trends

(1) Trade Balance of ICT-related Goods

- The trade balance of ICT-related goods (export minus import) continued to be in surplus.
  - For the October–December 2008 period, export was 3.5 trillion yen and import was 2.1 trillion yen, resulting in a surplus of 1.4 trillion yen.
  - Trade surplus for ICT-related goods fell below 1.5 trillion yen for the first time since the January–March 2002 period.

[Trade Balance of ICT-related Goods]



Source: MOF, *Trade Statistics of Japan*

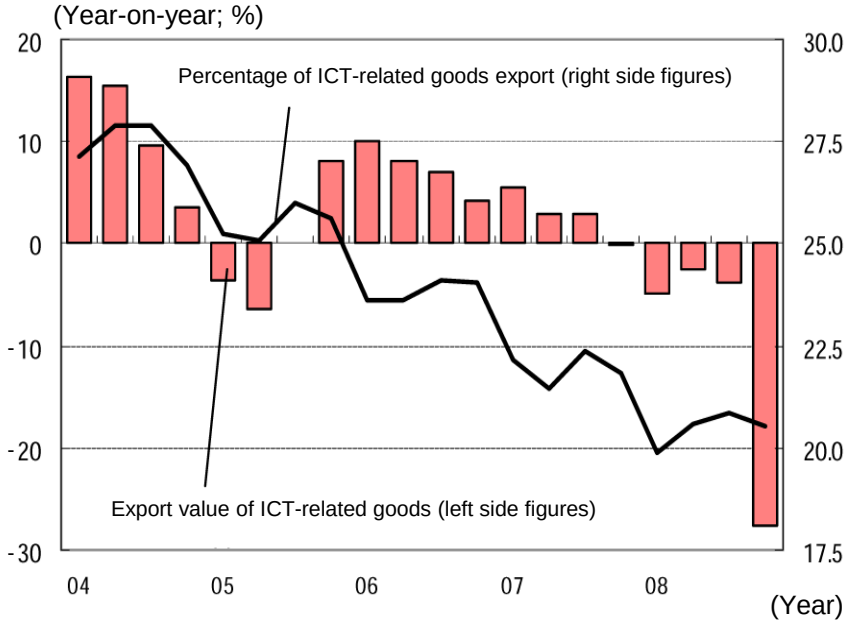
2-3. Export/Import Trends

(2) Trends in ICT-related Goods Export: Overall and by Article

- The percentage of ICT-related goods of total export is on the decline.
- The year-on-year change in the export value of ICT-related goods plunged to –27.6%, a negative figure for the fifth consecutive quarter.
  - All articles made negative contributions to the year-on-year change in the export value, which was–27.6%. Semiconductors, etc. made the largest negative contribution at –7.7%, followed by audio/visual apparatus (incl. parts) at –5.5%, computers (incl. units and parts) at –3.5%, scientific optical instruments at –3.2%, and telephony/telegraphy at –1.7%.

  ⇒ The negative contribution of semiconductors, etc. increased as mobile phone and computer production in Asian countries, particularly China, decreased, with a consequent drop in export to such countries.

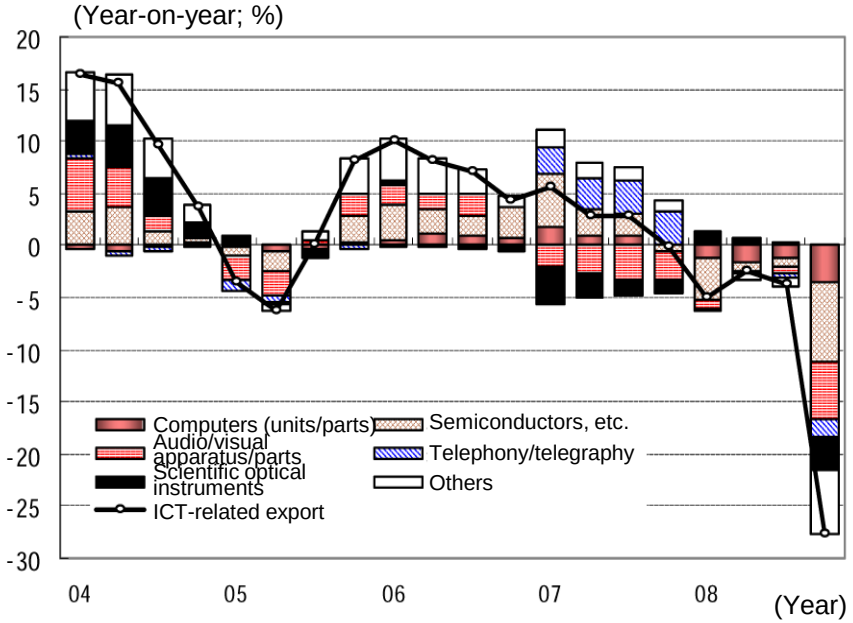
[Export Value of ICT-related Goods and Percentage of Total]



Note: ICT-related goods export represents the sum of export of: computers and units; parts of computer; visual apparatus; audio apparatus; parts of audio/visual apparatus; telephony/telegraphy; semiconductors, etc.; electrical measuring instruments; scientific optical instruments; blank/recorded media; electrical apparatus; and batteries and accumulators.
% of ICT-related goods export = Export value of ICT-related goods / Total export value

Source: Japan Tariff Association (MOF), *The Summary Report on Trade of Japan*

[ICT-related Goods Export: by Article]



Note: The bars represent the contribution made to the year-on-year change in ICT-related goods export. (The plotted line represents the total.)
ICT-related goods export represents the sum of export of: computers and units; parts of computer; visual apparatus; audio apparatus; parts of audio/visual apparatus; telephony/telegraphy; semiconductors, etc.; electrical measuring instruments; scientific optical instruments; blank/recorded media; electrical apparatus; and batteries and accumulators.

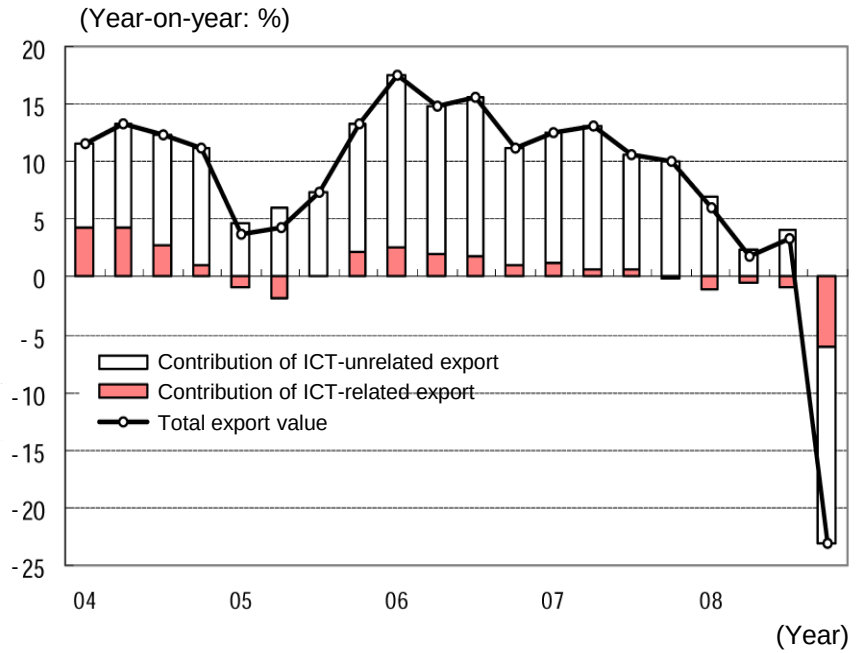
Source: MOF, *Trade Statistics of Japan*

2-3. Export/Import Trends

(2) Trends in ICT-related Goods Export: Impact on Overall Export

- The contribution of ICT-related goods to the year-on-year change in total export value (–23.1% for the October–December 2008 period), which indicates the impact of ICT-related goods export on overall export, was –6.0%. ICT-related goods made a negative contribution for the fifth consecutive quarter.

[Contribution of ICT-related Goods to Year-on-Year Change in Export Value]



Note: The bars represent the contribution made to the year-on-year change in total export value. (The plotted line represents the total.)
ICT-related goods export represents the sum of export of: computers and units; parts of computer; visual apparatus; audio apparatus; parts of audio/visual apparatus; telephony/telegraphy; semiconductors, etc.; electrical measuring instruments; scientific optical instruments; blank/recorded media; electrical apparatus; and batteries and accumulators.

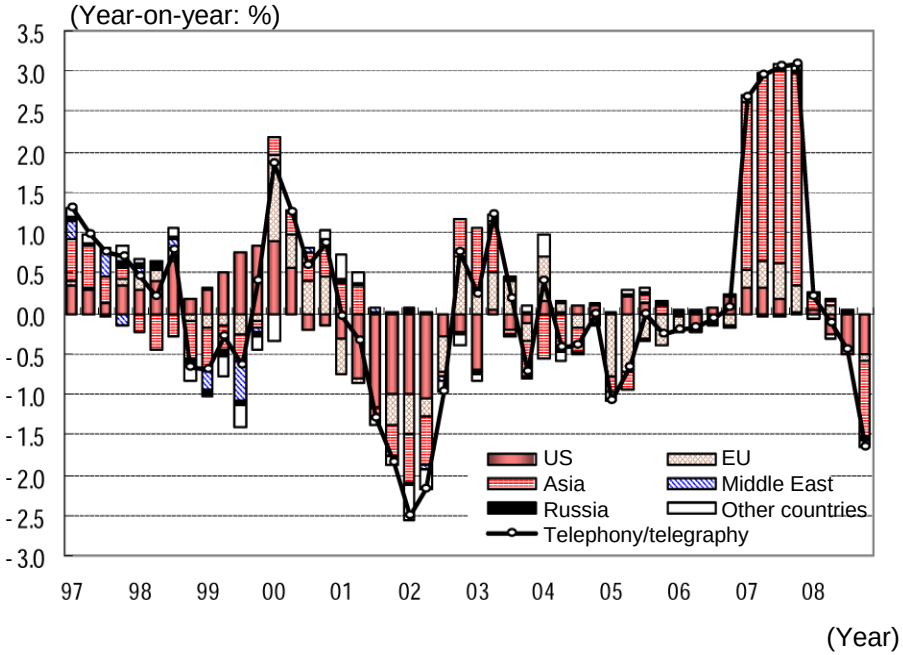
Source: MOF, *Trade Statistics of Japan*

2-3. Export/Import Trends

(2) Trends in ICT-related Goods Export: Export Value of Telephony/Telegraphy by Country/Region

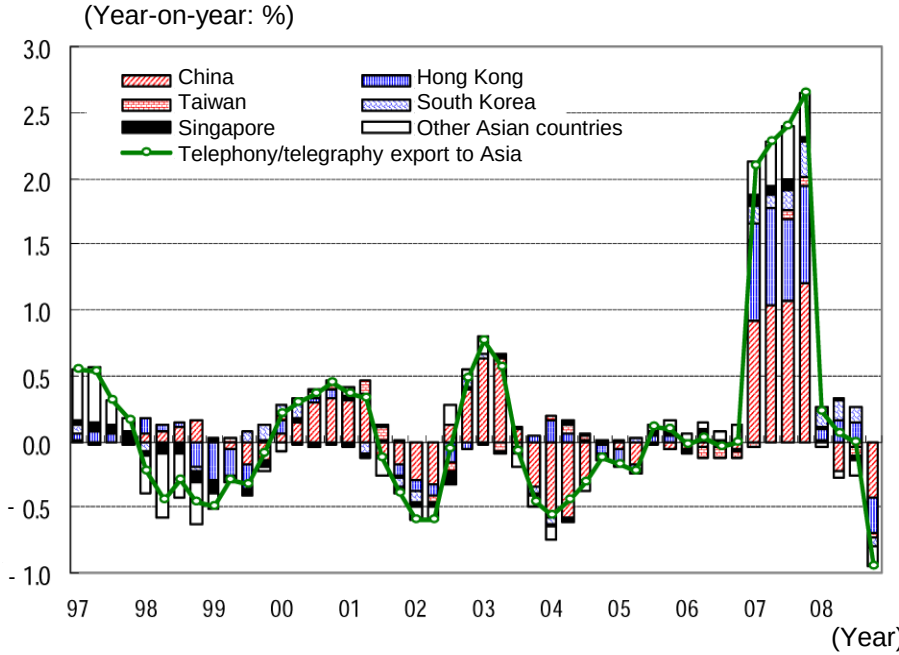
- Contribution of telephony/telegraphy to year-on-year change in ICT-related goods export (see p. 28) was negative for two quarters in a row, and fell further to –1.7% for the October–December 2008 period.
- In terms of contribution to total export by country/region, the negative contribution of export to Asian countries sharply increased while that of export to the United States remained almost at the same level as the previous quarter.
- As for contribution of export to Asian countries, the figure was negative for all countries. Particularly noteworthy are the negative contribution of export to China, which grew considerably, and export to Hong Kong, which turned negative.
  ⇒ Negative contribution of export to China grew due to a decrease in mobile phone production in China (a decrease in export of telephony/telegraphy parts).

[Contribution of Telephony/Telegraphy Export: by Country/Region]



Note: The bars represent the contribution made to the year-on-year change in ICT-related goods export. (The plotted line represents the total.)
Source: MOF, *Trade Statistics of Japan*

[Contribution of Telephony/Telegraphy Export to Asia (Breakdown)]



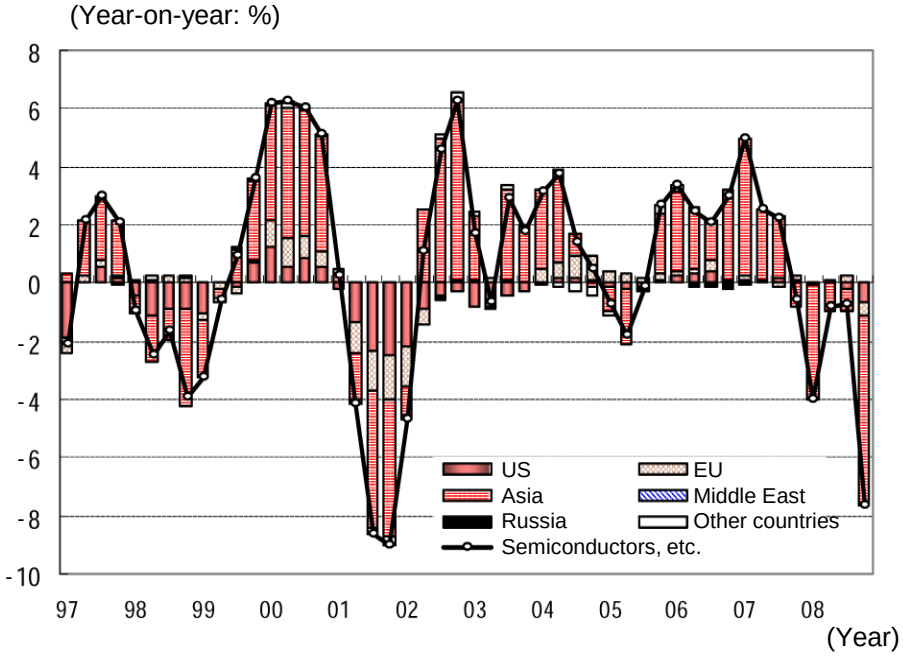
Note: The bars represent the contribution made to the year-on-year change in ICT-related goods export. (The plotted line represents the total.)
Source: MOF, *Trade Statistics of Japan*

2-3. Export/Import Trends

(2) Trends in ICT-related Goods Export: Export Value of Semiconductors, Etc. by Country/Region

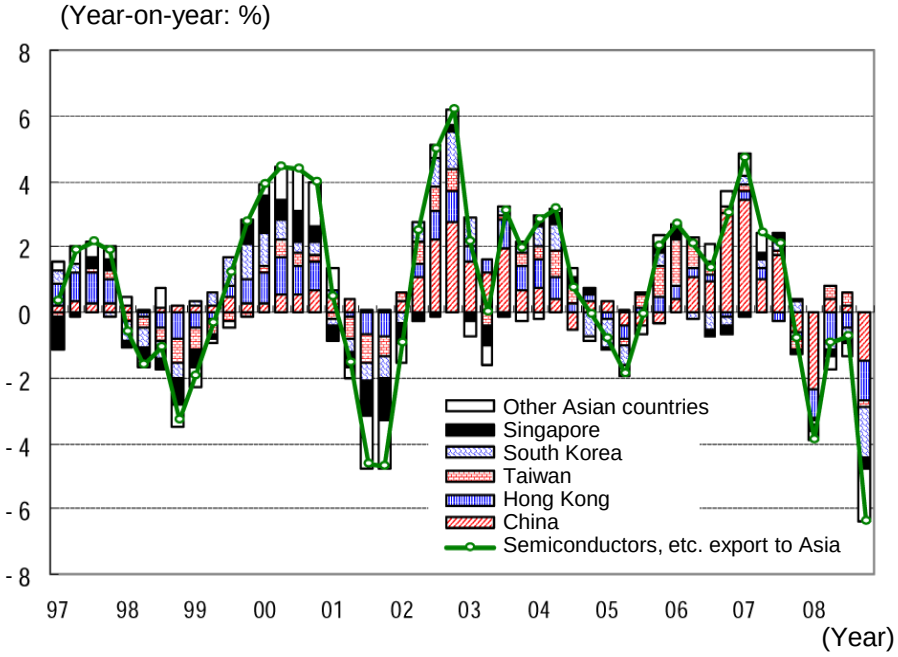
- The contribution of semiconductors, etc. to year-on-year change in ICT-related goods export (see p. 28) was negative for five quarters in a row. It was –7.7% for the October–December 2008 period, which is almost the same level as the April–June 2001 period right after the collapse of the IT bubble.
- In terms of contribution of export by country/region, contribution of export to Asian countries continued to be negative for the fifth consecutive quarter, growing sharply for this period. The negative contribution of export to the United States also grew.
- As for the contribution of export to Asian countries, the figure was negative for all countries. In particular, export to China, South Korea, Hong Kong and other Asian countries made a significant negative contribution.

[Contribution of Semiconductors, Etc. Export: by Country/Region]



Note: The bars represent the contribution made to the year-on-year change in ICT-related goods export. (The plotted line represents the total.)
Source: MOF, *Trade Statistics of Japan*

[Contribution of Semiconductors, Etc. Export to Asia (Breakdown)]



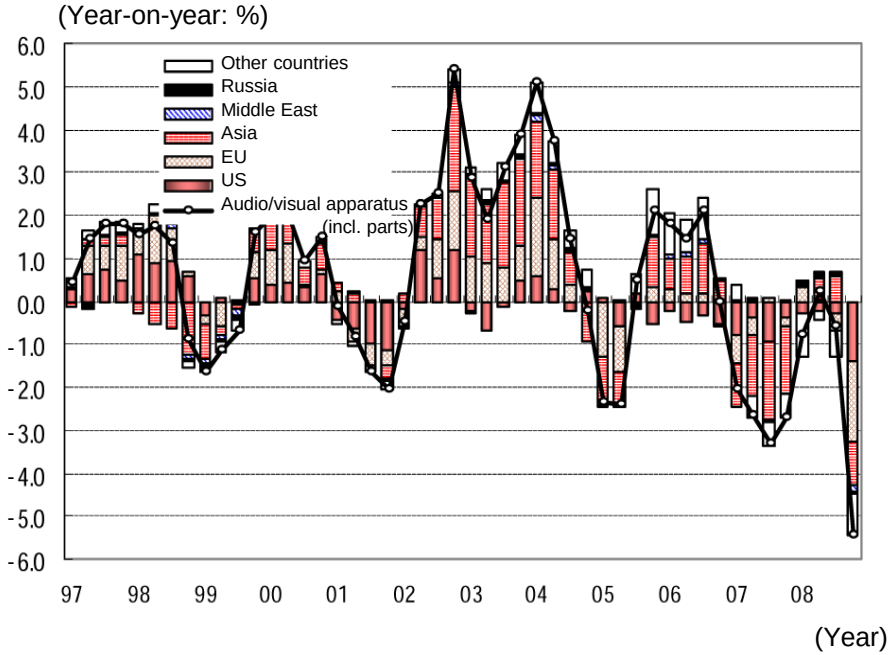
Note: The bars represent the contribution made to the year-on-year change in ICT-related goods export. (The plotted line represents the total.)
Source: MOF, *Trade Statistics of Japan*

2-3. Export/Import Trends

(2) Trends in ICT-related Goods Export: Export Value of Audio/Visual Apparatus (incl. Parts) by Country/Region

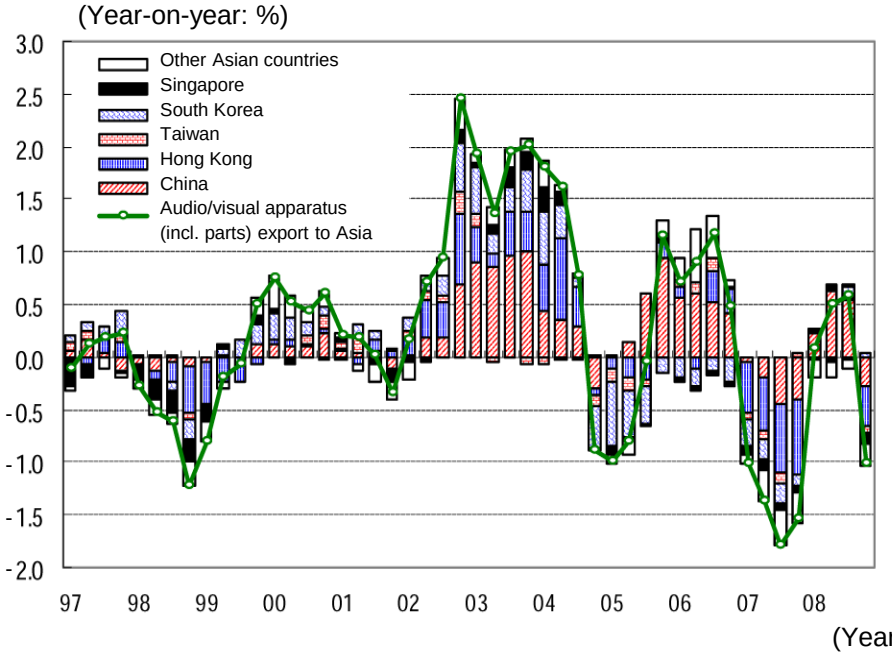
- The contribution of audio/visual apparatus (incl. parts) to year-on-year change in ICT-related goods export (see p. 28) was negative for two quarters in a row, and dropped sharply to –5.5% for the October–December 2008 period.
- In terms of contribution of export by country/region, export to the EU was the biggest negative factor, followed by export to the United States and Asia.
- As for the contribution of export to Asian countries, export to China and Hong Kong made particularly significant negative contributions.
- For this period, the negative contribution of export to Hong Kong and China stood out.

[Contribution of Audio/Visual Apparatus (incl. Parts) Export: by Country/Region]



Note: The bars represent the contribution made to the year-on-year change in ICT-related goods export. (The plotted line represents the total.)
Source: MOF, *Trade Statistics of Japan*

[Contribution of Audio/Visual Apparatus (incl. Parts) Export to Asia (Breakdown)]



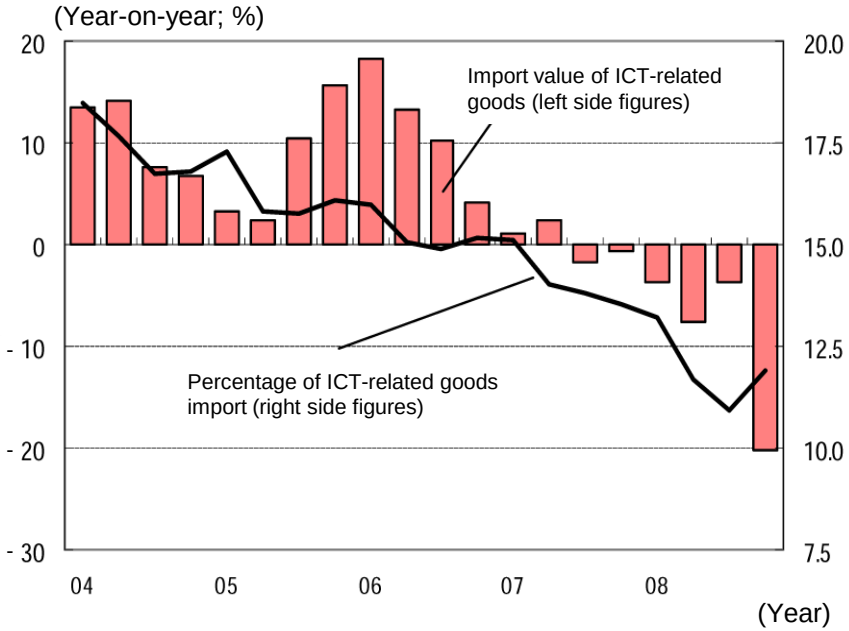
Note: The bars represent the contribution made to the year-on-year change in ICT-related goods export. (The plotted line represents the total.)
Source: MOF, *Trade Statistics of Japan*

2-3. Export/Import Trends

(3) Trends in ICT-related Goods Import: Overall and by Article

- The percentage of ICT-related goods imported to the total import is on the decline, but increased for the most recent period.
- Year-on-year change in the import value of ICT-related goods plunged to –20.3% (from –3.8% for the previous quarter), remaining negative for the sixth consecutive quarter.
  - All articles made negative contributions to the year-on-year change in import value of –20.3%. Semiconductors, etc. made the largest negative contribution at –8.5%, followed by audio/visual apparatus (incl. parts) at –3.2%, computers (incl. units and parts) at –3.0%, scientific optical instruments at –2.5%, and telephony/telegraphy at –1.4%. Telephony/telegraphy, which had turned upward for the previous quarter, resumed its downward trajectory.

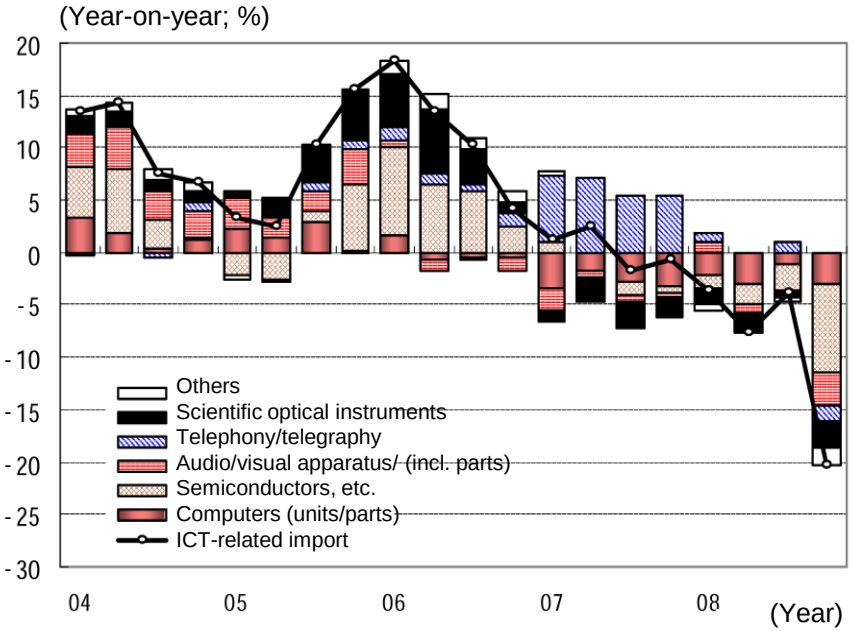
[Import Value of ICT-related Goods and Percentage of Total]



Note: ICT-related goods import represents the sum of import of: computers and units; parts of computer; audio/visual apparatus; telephony/telegraphy; semiconductors, etc.; electrical measuring instruments; and scientific optical instruments.
% of ICT-related goods import = Import value of ICT-related goods / Total import value

Source: Japan Tariff Association (MOF), *The Summary Report on Trade of Japan*

[Trends in ICT-related Goods Import: by Article]



Note: The bars represent the contribution made to the year-on-year change in ICT-related goods import. (The plotted line represents the total.)
ICT-related goods import represents the sum of import of: computers and units; parts of computer; audio/visual apparatus; telephony/telegraphy; semiconductors, etc.; electrical measuring; and scientific optical instruments.

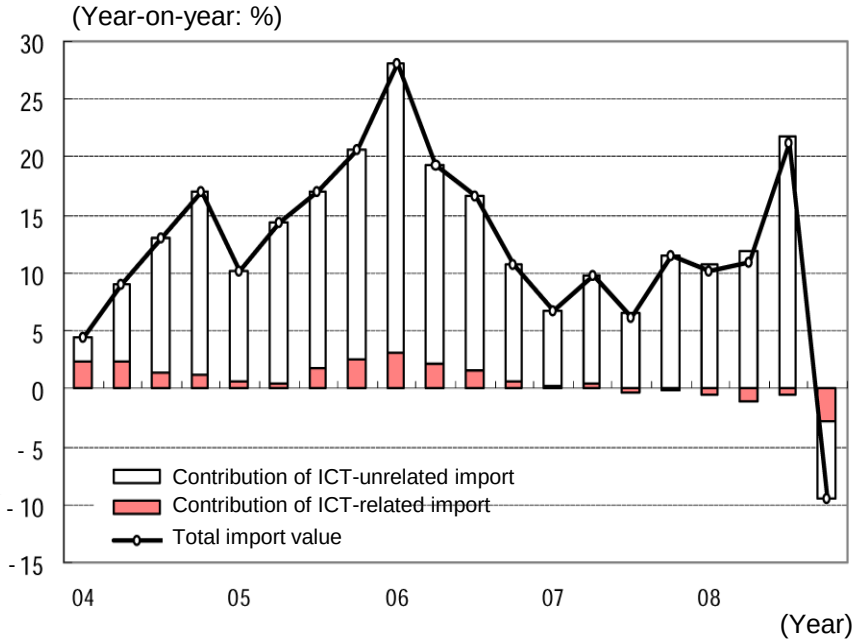
Source: MOF, *Trade Statistics of Japan*

2-3. Export/Import Trends

(3) Trends in ICT-related Goods Import: Impact on Overall Import

- The contribution of ICT-related goods to the year-on-year change in total import value (–9.5% for the October–December 2008 period), which indicates the impact of ICT-related goods import on overall import, was –2.7%. ICT-related goods made a negative contribution for the sixth consecutive quarter.
- The contribution of ICT-related goods has been on the decline since peaking in the January–March 2006 period and has scored negative figures for recent quarters. It dropped sharply for this period.

[Contribution of ICT-related Goods to Year-on-Year Change in Import Value]



Note: The bars represent the contribution made to the year-on-year change in total import value. (The plotted line represents the total.)
ICT-related goods import represents the sum of import of: computers and units; parts of computer; audio/visual apparatus; telephony/telegraphy; semiconductors, etc.; electrical measuring instruments; and scientific optical instruments.

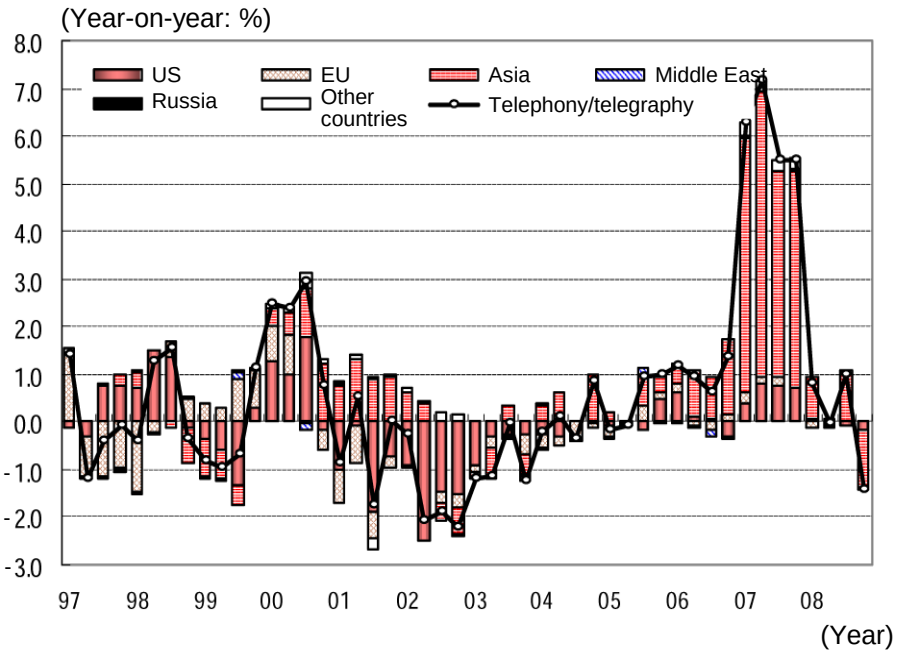
Source: MOF, *Trade Statistics of Japan*

2-3. Export/Import Trends

(3) Trends in ICT-related Goods Import: Import Value of Telephony/Telegraphy by Country/Region

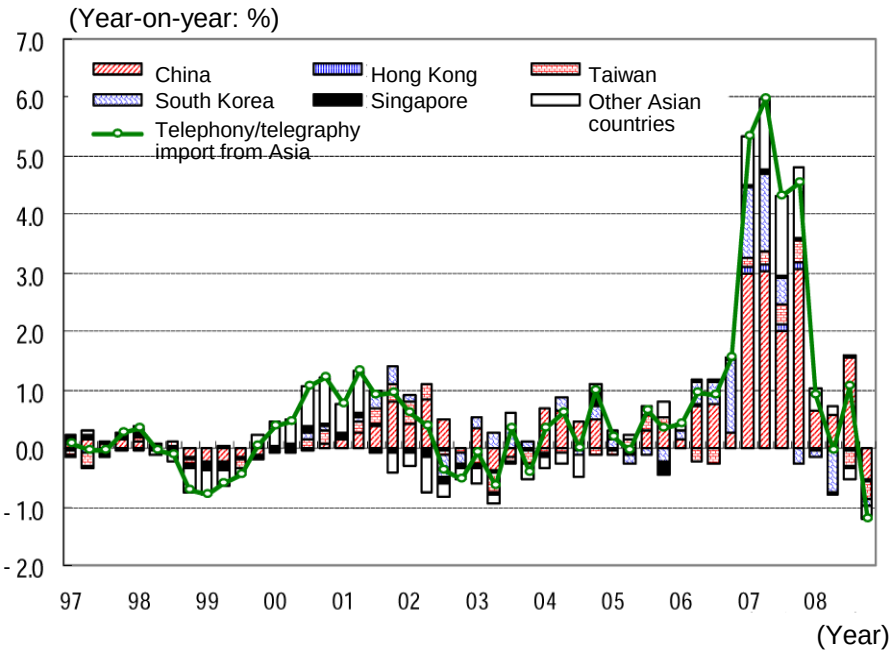
- The contribution of telephony/telegraphy to the year-on-year change in ICT-related goods import (see p. 33) turned upward for the previous quarter, but resumed its downward trajectory for this period, showing a figure of –1.4%.
- In terms of the contribution of import by country/region, the contribution of import from Asian countries plunged to –2.2%.
- Regarding the contribution of import from Asian countries, the figure was negative for all countries. In particular, the negative contribution of import from China stands out.

[Contribution of Telephony/Telegraphy Import: by Country/Region]



Note: The bars represent the contribution made to the year-on-year change in ICT-related goods import. (The plotted line represents the total.)
Source: MOF, *Trade Statistics of Japan*

[Contribution of Telephony/Telegraphy Import from Asia (Breakdown)]



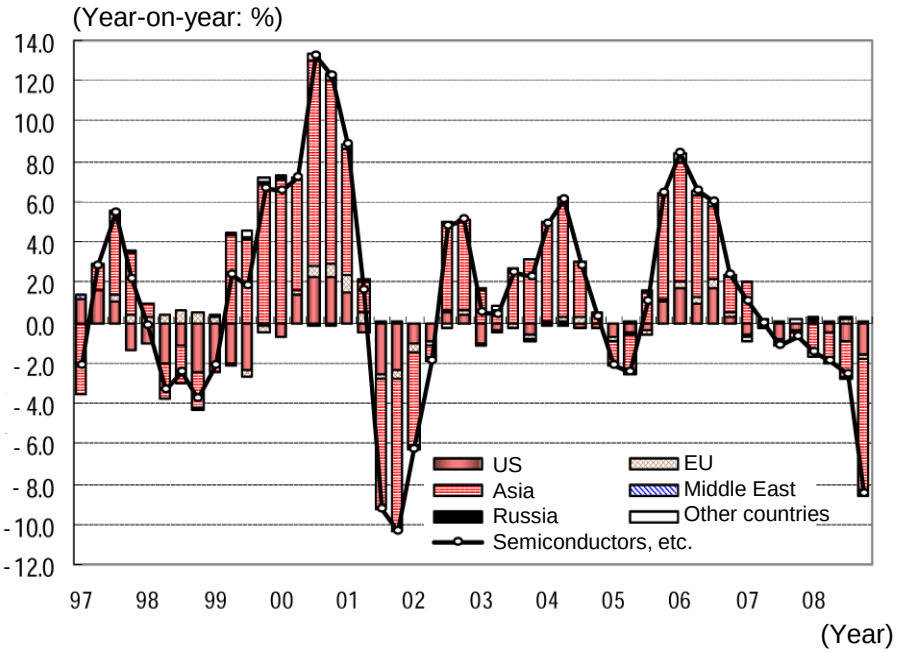
Note: The bars represent the contribution made to the year-on-year change in ICT-related goods import. (The plotted line represents the total.)
Source: MOF, *Trade Statistics of Japan*

2-3. Export/Import Trends

(3) Trends in ICT-related Goods Import: Import Value of Semiconductors, Etc. by Country/Region

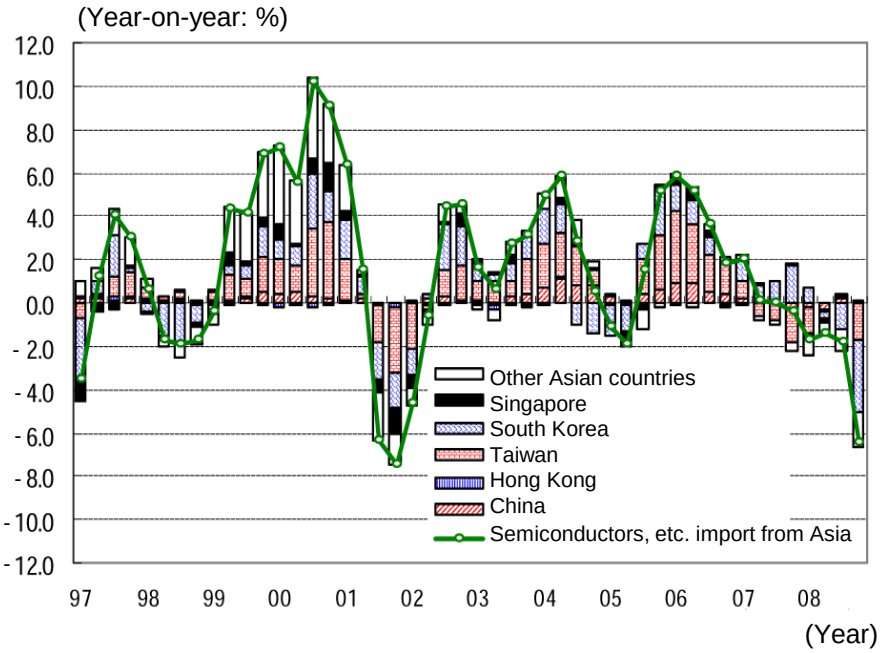
- Contribution of semiconductors, etc. to the year-on-year change in ICT-related goods import (see p. 33) was negative for the sixth consecutive quarter (–8.5% for the October–December 2008 period). Although the negative contribution had grown for the past four consecutive quarters, the fall for this period was even sharper.
- In terms of the contribution of import by country/region, the negative contribution of import from Asian countries grew sharply to –6.5%. The negative contribution of import from the United States also stands out.
- As for the contribution of import from Asian countries, the negative contribution of import from South Korea and Taiwan stand out.

[Contribution of Semiconductors, Etc. Import by Country/Region]



Note: The bars represent the contribution made to the year-on-year change in ICT-related goods import. (The plotted line represents the total.)
Source: MOF, *Trade Statistics of Japan*

[Contribution of Semiconductors, Etc. Import from Asia (Breakdown)]



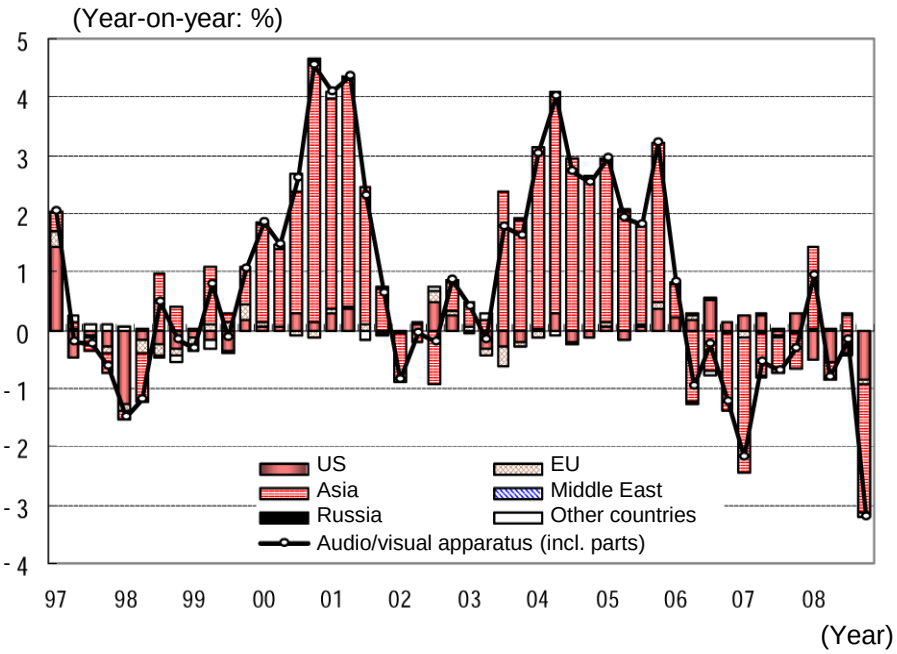
Note: The bars represent the contribution made to the year-on-year change in ICT-related goods import. (The plotted line represents the total.)
Source: MOF, *Trade Statistics of Japan*

2-3. Export/Import Trends

(3) Trends in ICT-related Goods Import: Import Value of Audio/Visual Apparatus (incl. Parts) by Country/Region

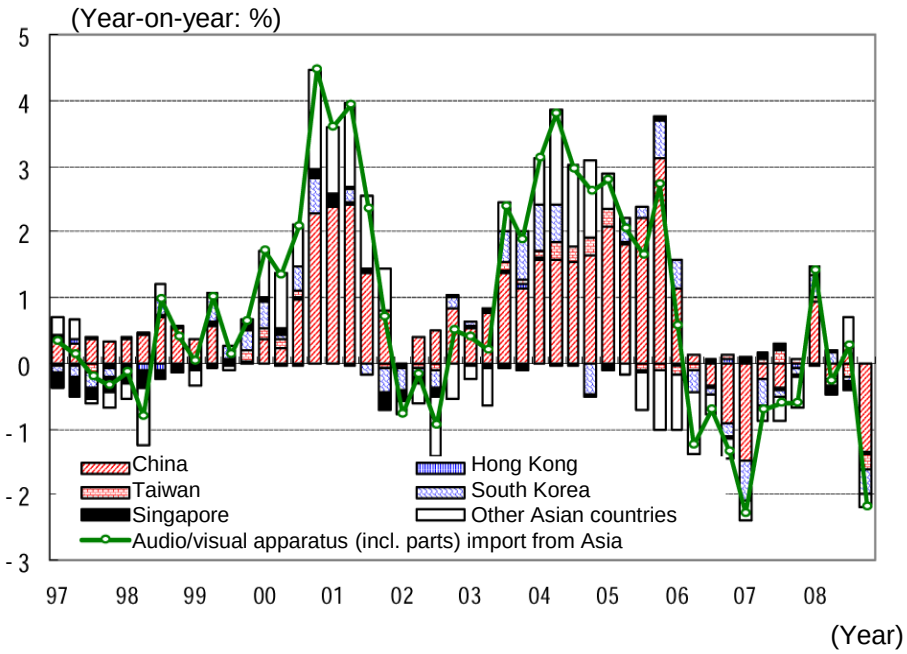
- Contribution of audio/visual apparatus (incl. parts) to year-on-year change in ICT-related goods import (see p. 33) was negative for three quarters in a row, and dropped sharply to –3.2% for the October–December 2008 period.
- In terms of the contribution of import by country/region, the negative contribution of import from Asia sharply increased. The negative contribution of import from the United States also grew.
- Regarding the contribution of import from Asian countries, import from China made the greatest negative contribution, followed by import from South Korea.

[Contribution of Audio/Visual Apparatus (incl. Parts) Import: by Country/Region]



Note: The bars represent the contribution made to the year-on-year change in ICT-related goods import. (The plotted line represents the total.)
Source: MOF, *Trade Statistics of Japan*

[Contribution of Audio/Visual Apparatus (incl. Parts) Import from Asia (Breakdown)]



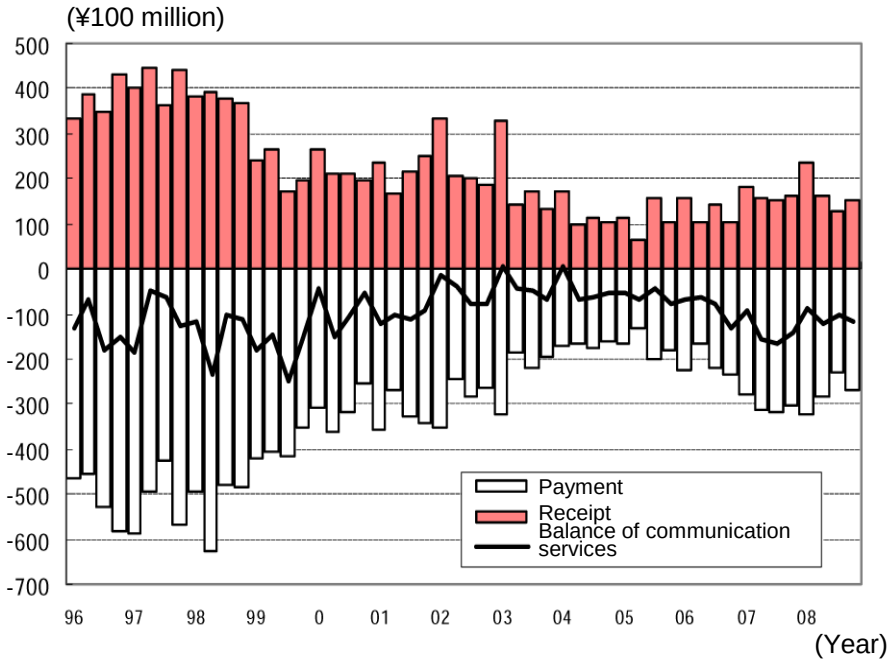
Note: The bars represent the contribution made to the year-on-year change in ICT-related goods import. (The plotted line represents the total.)
Source: MOF, *Trade Statistics of Japan*

2-3. Export/Import Trends

(4) Trade Balance of ICT-related Services

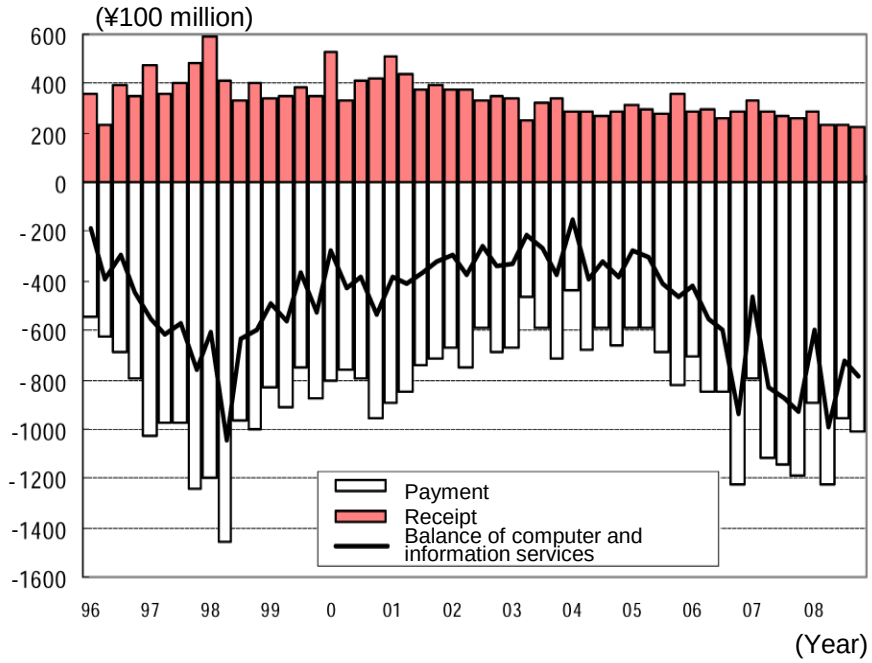
- The trade balance of ICT-related services (communications and information) continued to be in deficit.
- As for the trade balance of communication services, the payment excess continued. The trade deficit for this sector for the October–December 2008 period was 11.9 billion yen.
- The trade deficit in computer and information services for the October–December 2008 period was 79 billion yen.

[Trade Balance of Communication Services]



Source: MOF, *Balance of Payment Statistics;*
BOJ, *Balance of Payments Statistics*

[Trade Balance of Computer and Information Services]



Source: MOF, *Balance of Payment Statistics;*
BOJ, *Balance of Payments Statistics*

3. Trends in ICT-related Prices

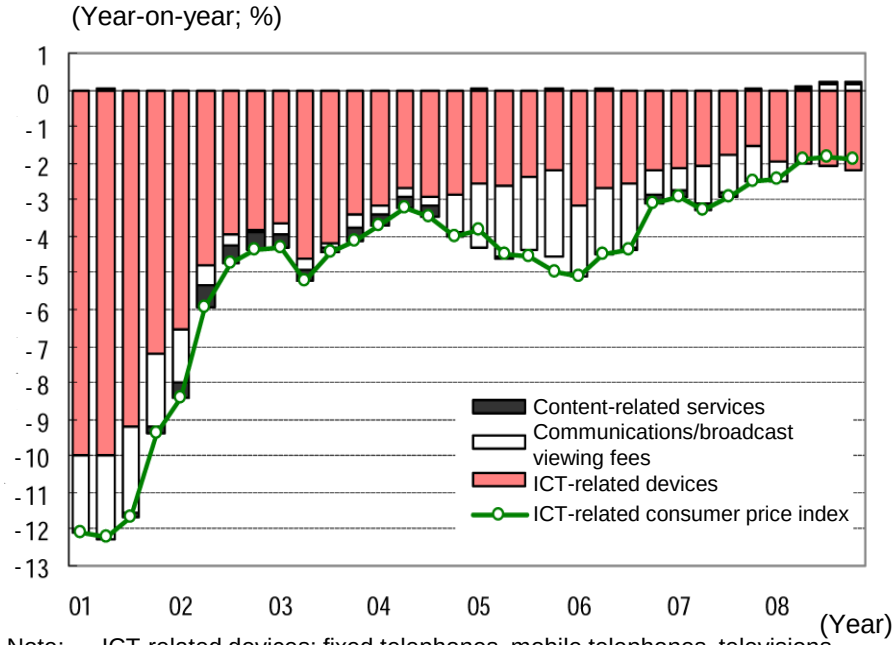
3-1. Consumer Prices (*1)

・・・Overall Trends in ICT-related Consumer Prices

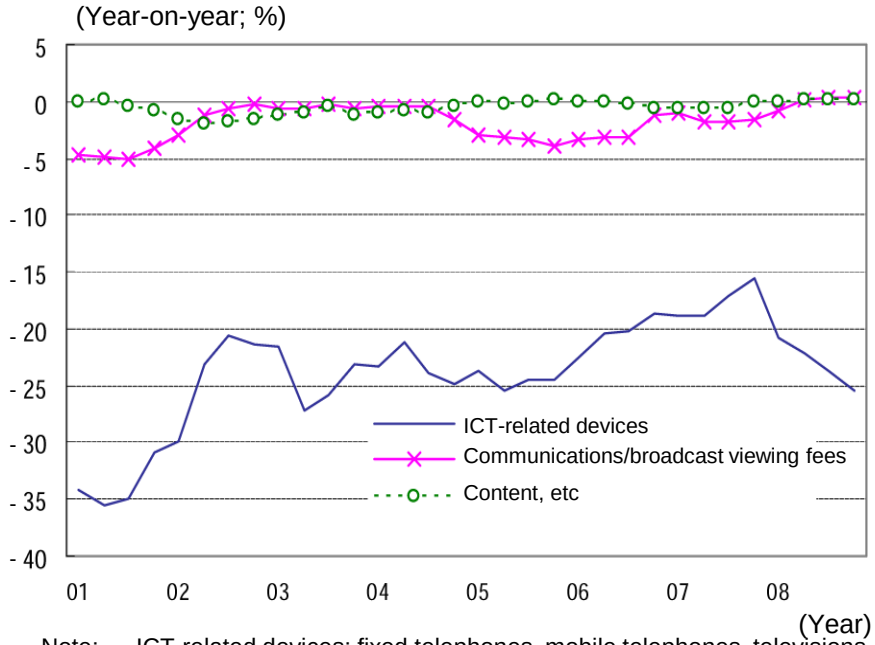
- ICT-related consumer prices continued to fall. The degree of decrease remained at the same level for the third consecutive quarter.
  - The year-on-year change in ICT-related consumer prices for the October–December 2008 period was –1.9%, falling at the same pace as the previous quarter.
  - In terms of year-on-year change in consumer prices by item, ICT-related devices continued to fall by double digits, reaching –25.4%, following increasingly sharp decreases over the past four consecutive quarters.
  - Communications and broadcast viewing fees continued to increase for the third consecutive quarter, to +0.3%.
  - Content, etc. scored +0.1%. The degree of change remained the same as the previous quarter over the past three consecutive quarters.

Note: In conjunction with the revision of the benchmark year to 2005 for the consumer price index, the commodities included in the index were changed. In January 2008, the categories of CRT-based televisions and audio recording media were abolished, while video games were divided into home video game machines (desktop) and home video game machines (mobile).

[ICT-related Consumer Price Index]



Note: ICT-related devices: fixed telephones, mobile telephones, televisions (CRT-based, flat-screen), computers, etc.
Communications/broadcast viewing fees: call charges, broadcast viewing fees, Internet access fees
Content, etc.: video game, books and other printed materials, audio/visual media, etc.
Source: MIC, *Consumer Price Index*



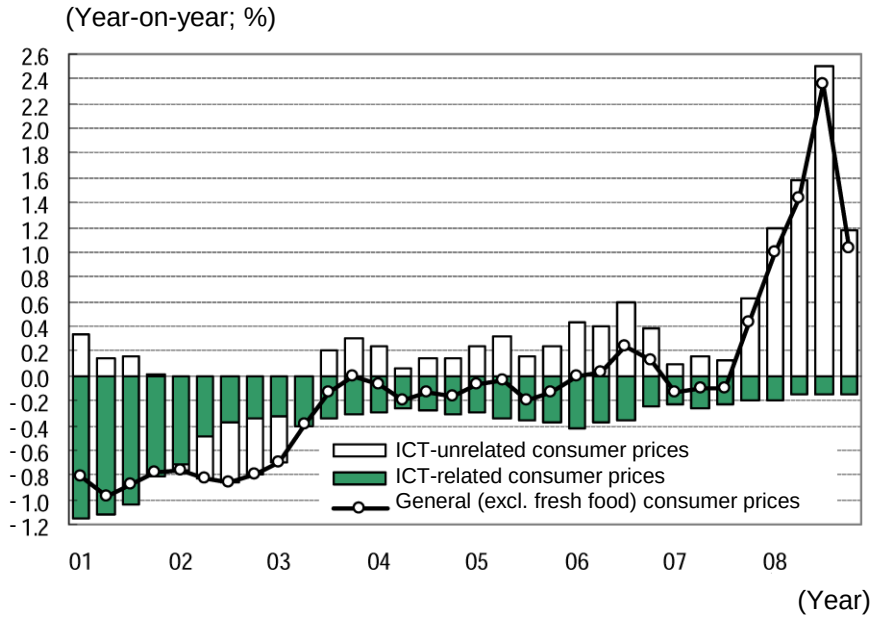
Note: ICT-related devices: fixed telephones, mobile telephones, televisions (CRT-based, flat-screen), computers, etc.
Communications/broadcast viewing fees: call charges, broadcast viewing fees, Internet access fees
Content, etc.: video game, books and other printed materials, audio/visual media, etc.
Source: MIC, *Consumer Price Index*

3-1. Consumer Prices

・・・Impact on Overall Consumer Prices

- A look at the contribution of ICT-related goods to the year-on-year change in the “general (excluding fresh food)” consumer price index, which indicates the impact of ICT-related consumer prices on overall consumer prices, reveals that ICT-related goods have continually made a negative contribution.
- For the October–December 2008 period, the contribution of the ICT-related consumer price index to the year-on-year change in the consumer price index for general (excluding fresh food) (+1.0), was –0.1%.

[Contribution of ICT-related Consumer Prices to Year-on-Year Change in General (excl. Fresh Food) Consumer Price Index]



Note: ICT-related devices: fixed telephones, mobile telephones, televisions (CRT-based, flat-screen), Computers, etc.
Communications/broadcast viewing fees: call charges, broadcast viewing fees, Internet access fees
Content, etc.: video game, books and other printed materials, audio/visual media, etc.

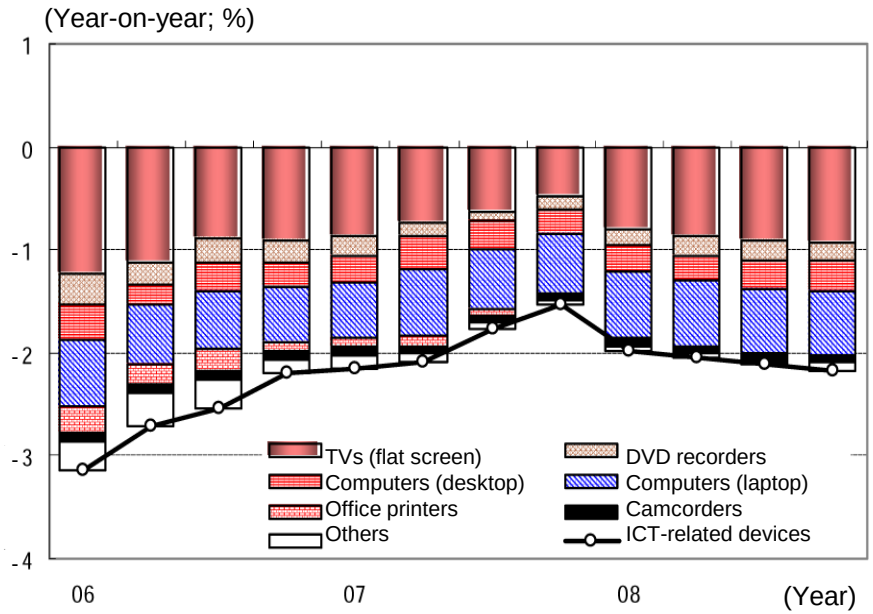
Source: MIC, *Consumer Price Index*

3-1. Consumer Prices

･･･Consumer Prices for ICT-related Devices

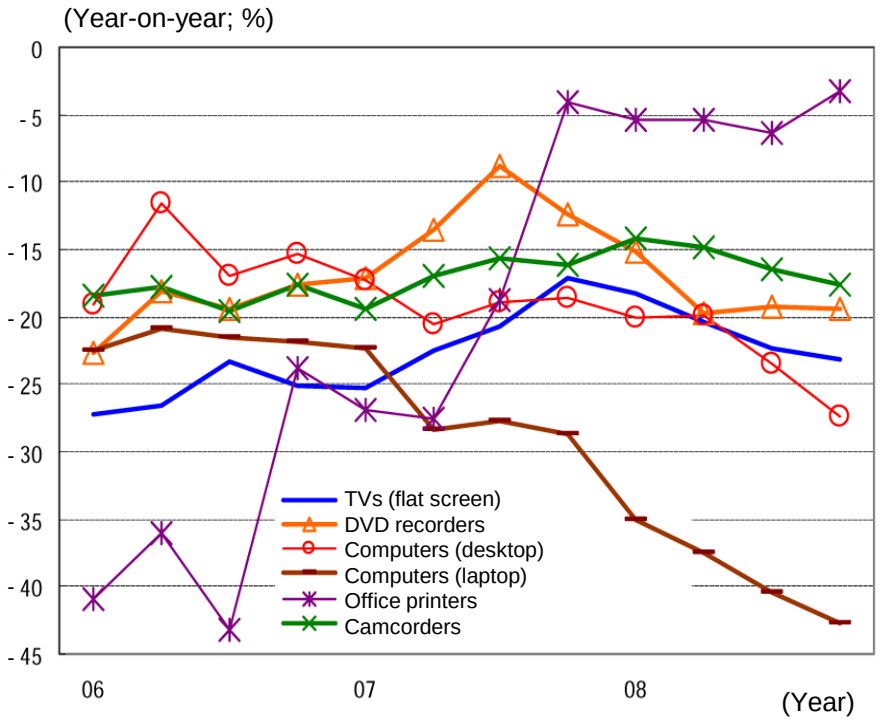
- Within the category of ICT-related devices, flat-screen televisions, digital cameras and laptop computers have been subject to price-cutting competition and performance improvement. A statistical method which assumes that, as performance doubles the price is halved explains the fall in overall consumer prices.
- The consumer price index for ICT-related devices fell for all types of devices.
- For this period, consumer price index for key commodities, except office printers, dropped more sharply.
- Computers (laptop) continued to fall, at a sharper rate, to –42.7%.

[Consumer Price Index for ICT-related Devices]



Note: ICT-related devices: fixed telephones, mobile telephones, televisions (CRT-based, flat-screen), computers, etc.
Since January 2008, “TVs (CRT-based)” has been integrated into “TVs (flat-screen).” The contribution of this category in 2008 was calculated by using an index that combines the figures for TVs (flat-screen) and TVs (CRT-based) for 2007.

Source: MIC, *Consumer Price Index*



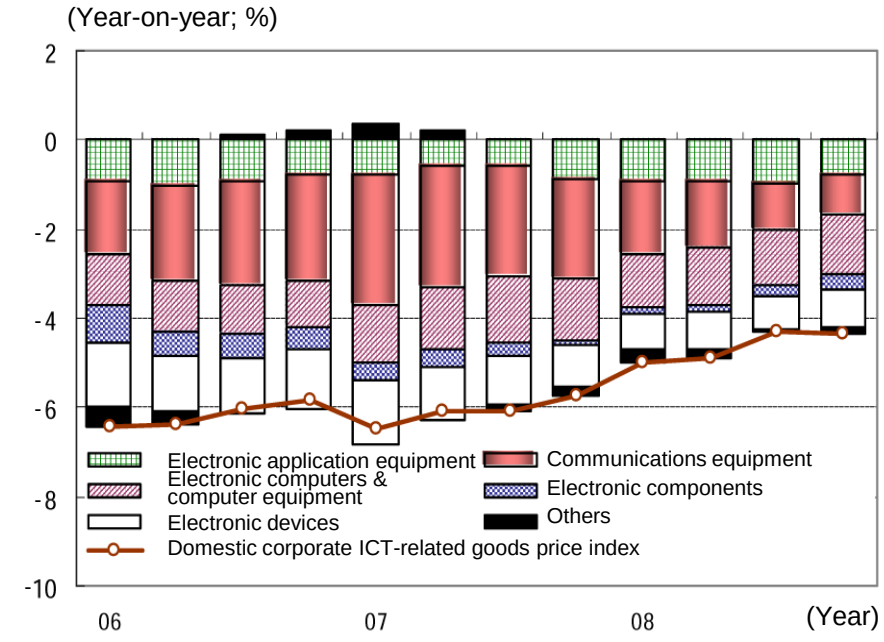
Source: MIC, *Consumer Price Index*

3-2. Corporate Goods Prices

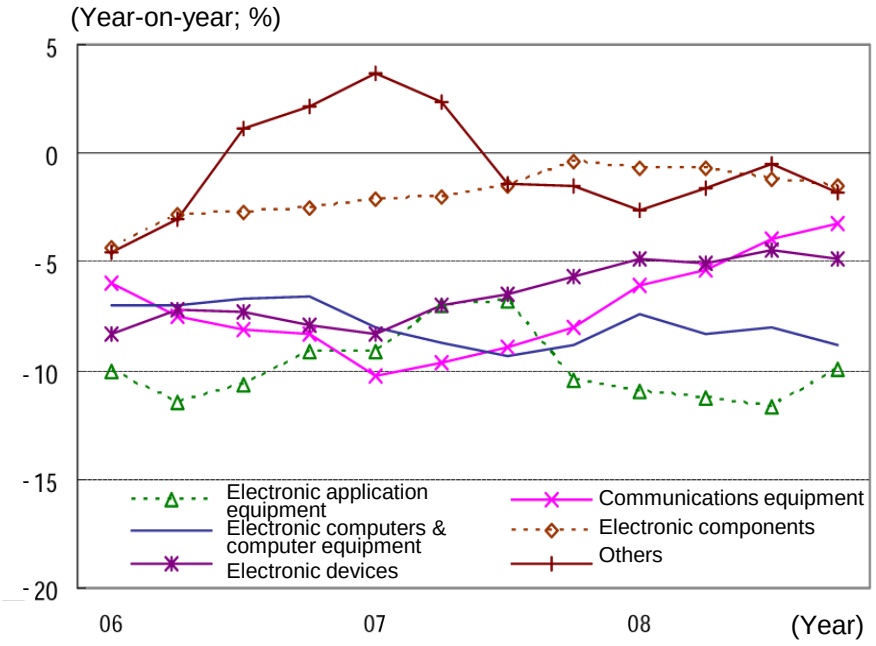
- Corporate ICT-related goods prices, which had been declining, fell more sharply after two quarters of leveling out.
  ⇒ The fall in corporate goods prices was triggered by a reduction in production costs, achieved through technological innovations.
- For the October–December 2008 period, year-on-year change in corporate ICT-related goods prices was –4.4%, a slight increase from –4.3% for the previous quarter.
  - In terms of year-on-year change by commodity, four commodities (electronic computers & computer equipment, electronic components, electronic devices, and others) dropped further while two commodities (communications equipment and electronic application equipment) fell at a slower rate.

Note: With the revision of the benchmark year to 2005 for the corporate goods price index, the commodities adopted were changed (see p. 49).

[Trends in Corporate ICT-related Goods Price Index]



Note: "Others" refers to the sum of electrical fine ceramics, metal communications cables, optical fiber communications cables, semiconductor manufacturing equipment, flat-panel & display manufacturing equipment, semiconductor & IC measuring instruments, recoding media and silicon wafers.
Source: BOJ, *Domestic Corporate Goods Price Index*

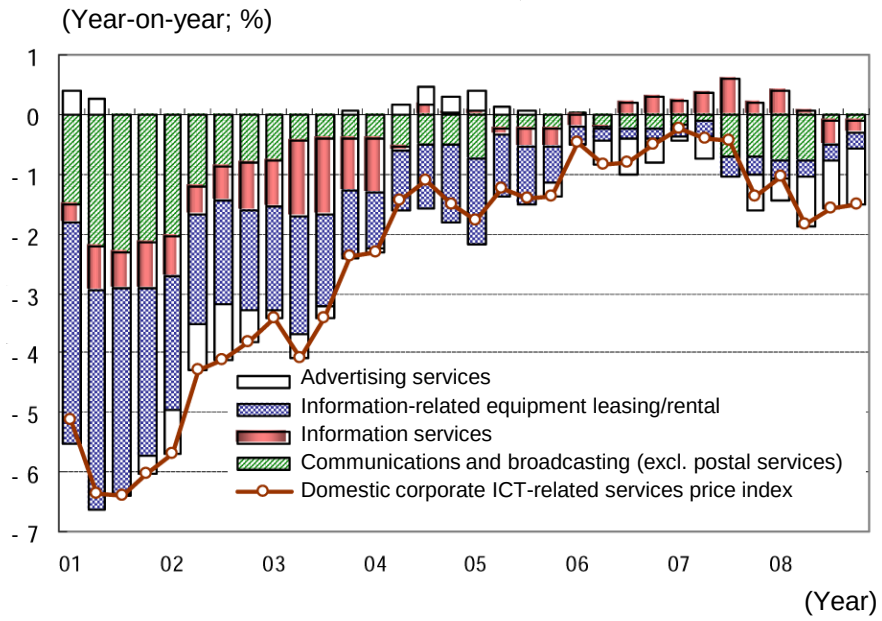


Note: "Others" refers to the sum of electrical fine ceramics, metal communications cables, optical fiber communications cables, semiconductor manufacturing equipment, flat-panel & display manufacturing equipment, semiconductor & IC measuring instruments, recoding media and silicon wafers.
Source: BOJ, *Domestic Corporate Goods Price Index*

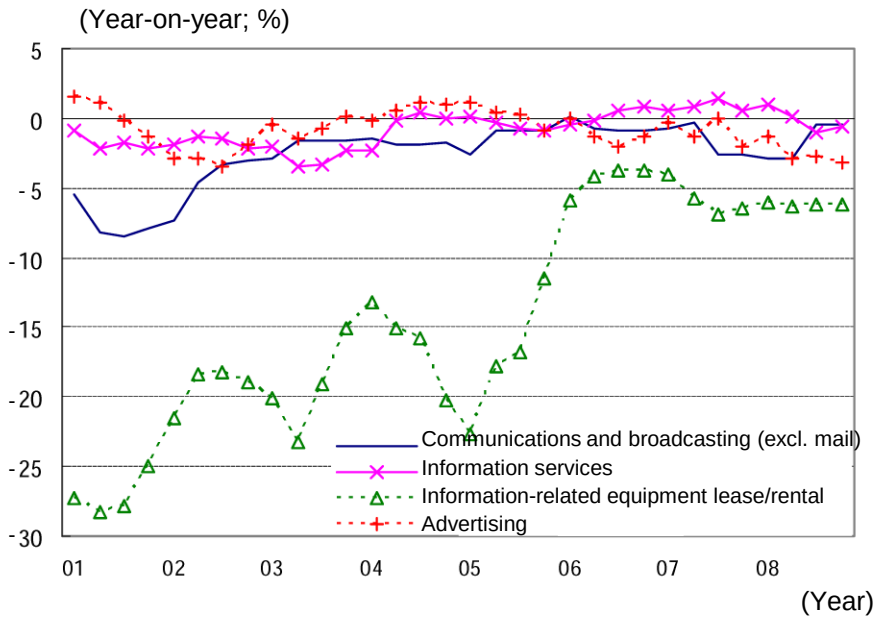
3-3. Corporate Services Prices

- Year-on-year change in corporate ICT-related services prices was –1.5%, slightly less than –1.6% for the previous quarter. The index fell for all service items.
  - In terms of year-on-year change by item, advertising scored –3.2%, a negative figure for the fifth consecutive quarter.
    ⇒ Advertising services declined as demand for advertising decreased due to a downturn in business and, consequently, advertising unit price was reduced.
  - Year-on-year change in information services was –0.5%, a negative figure for the second quarter in a row.
  - Year-on-year change in communications and broadcasting (excl. postal services) was –0.4%. The figure was negative for the 11th consecutive quarter, although it remained at the same level as the previous quarter.
  - Year-on-year change in information-related equipment leasing/rental was –6.1%, the same level as the previous quarter (–6.2%).
    ⇒ The decrease in leasing/rental was triggered by the fall in leasing prices due to the domestic economic slowdown.

[Corporate ICT-related Services Price Index]



Source: BOJ, *Corporate Services Price Index*



Source: BOJ, *Corporate Services Price Index*

[Appended Table]

Appended Table: Definition of Indices
Definition of ICT manufacturing in relation to business categories in Indices of Industrial Production

- For the analysis under “1-2. Activities (1) Trends in ICT Manufacturing,” figures in METI’s *Indices of Industrial Production* were used. Articles covered and weights used are as follows:

Article	Weight of production index	Weight of shipment index	Weight of inventory index
Alkaline batteries	8.9	13.5	5.3
Lithium-ion batteries	21.3	32.0	11.9
Backlights for liquid crystal panels	11.9	9.8	2.9
Resistors	10.8	10.3	0.0
Fixed capacitors	43.5	41.4	0.0
Transformers	4.8	4.5	0.0
Crystal oscillators/composite parts	19.1	18.8	0.0
Switches for communications/electronic devices	8.6	6.8	0.0
Connectors	37.8	51.7	0.0
Electronic circuit boards	75.7	70.2	0.0
Switching supply	9.6	10.5	0.0
PDP modules	25.9	19.3	0.0
Active liquid crystal elements (large-sized)	48.5	34.9	23.9
Active liquid crystal elements (small/medium-sized)	73.5	87.3	50.5
Passive liquid crystal elements	6.2	6.8	5.5
Silicon diodes	4.1	4.5	5.2
Rectifying devices	6.1	6.2	5.5
Transistors	23.0	25.2	34.9
Light-emitting diodes	11.5	13.3	4.6
Laser diodes	8.5	7.8	2.9
Couplers/interrupters	4.5	4.5	3.4
Linear ICs	41.0	41.7	59.9
Bipolar ICs	3.4	3.4	1.5
MOS ICs (microcomputer)	62.1	58.4	33.4
MOS ICs (logic)	109.8	94.0	107.8
MOS ICs (memory)	51.4	45.7	30.0
MOS ICs (CCD)	24.9	20.4	9.9
Hybrid ICs	23.1	16.7	12.4
Silicon wafers	43.8	40.2	0.0
Information-related producer goods	823.3	799.8	411.4
Car audio systems	10.6	13.2	34.2
Part of consumer electronic machinery	10.6	13.2	34.2
Producer goods total	833.9	813.0	455.6

Article	Weight of production index	Weight of shipment index	Weight of inventory index
Communication wires/cables	3.7	4.5	17.0
Communication cable optical fiber products	6.2	10.1	5.4
Digital full-color copiers	21.1	50.7	50.1
Button telephone sets	3.5	3.2	5.5
Electronic automatic exchanges	12.0	10.2	0.0
Digital transmission equipment	10.8	9.2	0.0
Fixed communications equipment	7.1	6.0	0.0
Base station communications equipment	5.5	4.6	0.0
General-purpose computers	5.1	4.4	0.0
Mid-range computers	15.2	13.1	0.0
Desktop computers	1.7	15.6	12.4
Laptop computers	28.5	28.0	11.2
External storage devices	24.2	14.5	0.0
Input/Output devices	24.7	18.5	0.0
Terminal equipment	13.0	9.7	0.0
System cash registers	3.3	2.0	10.0
Projectors	10.4	5.7	0.0
Industrial TV sets	3.5	4.7	0.0
Information-related capital goods	199.5	214.7	111.6
Semiconductor manufacturing equipment	100.9	97.4	0.0
Flat panel & display manufacturing equipment	45.7	44.1	0.0
Semiconductor & IC measuring instruments	23.1	26.8	0.0
Capital goods for production facilities	169.7	168.3	0.0
Capital goods total	369.2	383.0	111.6

Article	Weight of production index	Weight of shipment index	Weight of inventory index
Mobile phones	111.1	102.2	0.0
Car navigators	32.2	31.5	67.8
Desktop computers	1.4	12.7	10.1
Laptop computers	23.4	23.0	9.1
Information-related consumer goods	168.1	169.4	87.0
Plasma TVs	8.5	13.7	18.2
Liquid crystal TVs	27.1	37.4	79.4
DVD recorders/VCRs	4.0	13.5	30.5
Camcorders	18.8	26.1	32.7
Digital cameras	27.8	38.5	29.4
Parts of consumer electronic machinery	86.2	129.2	190.2
Consumer goods total	254.3	298.6	277.2

Producer goods total	833.9	813.0	445.6
Capital goods total	369.2	383.0	111.6
Consumer goods total	254.3	298.6	277.2

ICT-related indices of industrial production	1457.4	1494.6	834.4

Appended Table: Definition of Indices
Definition of ICT services in relation to business categories in Indices of Tertiary Industry Activity

- For the analysis under “1-2. Activities (2) Trends in ICT Services,” figures in METI’s *Report on Indices of Tertiary Industry Activity* were used.
  Business categories covered and weight used are as follows:

	Weight
ICT-related services activity index	1248.7
Information and communications	906.3
Communications	383.2
Fixed telecommunications	223.2
Mobile telecommunications	160.0
Broadcasting	54.4
Public broadcasting	13.7
Private-sector broadcasting	40.7
Information services	336.4
Computer programming and other software services	233.8
Custom software services	195.8
Package software services	38.0
Data processing and information services	102.6
System management on commission, etc.	23.6
Other data processing and information services	79.1
Video picture, sound information, character information production & distribution	132.3
Video picture information production and distribution	32.4
Video production and distribution	1.3
Motion picture production and distribution	1.1
Television program production and distribution	30.0
Sound information production	5.8
Recording and disk production	3.2
Radio program production	2.6
Newspaper publishers	55.5
Publishers, except newspapers	38.6
Publishers of weekly magazines	4.8
Publishers of monthly magazines	17.2
Publishers of books	16.6
Advertising	171.3
Four types media advertising	90.5
Newspaper advertising	27.6
Magazine advertising	14.6
Television advertising	44.5
Radio advertising	3.8
Miscellaneous advertising	80.8
Traffic advertising	6.7
Outdoor advertising	3.6
Inserts and direct mail	16.8
Other advertising	53.7
Information-related equipment lease/rental	171.1
Lease	158.5
Rental	12.6

Appended Table: Definition of Electronic Parts/Devices

- Articles covered in the reference on electronic parts/devices under “1-2. Activities (1) Trends in ICT Manufacturing” are covered under ICT manufacturing, with some exceptions.
  Articles covered are as follows:

Articles included in electronic parts/devices			
	Weight of production index	Weight of shipment index	Weight of inventory index
Resistors	10.8	10.3	-
Fixed capacitors	43.5	41.4	-
Transformers	4.8	4.5	-
Crystal oscillators/composite parts	19.1	18.8	-
Miniature motors	2.3	2.1	-
Switches for communications/electronic devices	8.6	6.8	-
Connectors	37.8	51.7	-
Electronic circuit boards	75.7	70.2	-
Magnetic tapes	10.8	11.7	-
Optical disks	5.0	5.4	-
Switching supplies	9.6	10.5	-
PDP modules	25.9	19.3	-
Active liquid crystal elements (large-sized)	48.5	34.9	23.9
Active liquid crystal elements (small/medium-sized)	73.5	87.3	50.5
Passive liquid crystal elements	6.2	6.8	5.5
Silicon diodes	4.1	4.5	5.2
Rectifying devices	6.1	6.2	5.5
Transistors	23.0	25.2	34.9
Light-emitting diodes	11.5	13.3	4.6
Laser diodes	8.5	7.8	2.9
Couplers/interrupters	4.5	4.5	3.4
Linear ICs	41.0	41.7	59.9
Bipolar ICs	3.4	3.4	1.5
MOS ICs (microcomputer)	62.1	58.4	33.4
MOS ICs (logic)	109.8	94.0	107.8
MOS ICs (memory)	51.4	45.7	30.0
MOS ICs (CCD)	24.9	20.4	9.9
Hybrid ICs	23.1	16.7	12.4
Silicon wafers	43.8	40.2	-

Appended Table: Revision to Corporate Goods Price Index

- In conjunction with the revision of the benchmark year to 2005 for the corporate goods price index, the commodities included in the index were changed. ICT-related commodities after the revision are as follows.
- Graph items were also changed in line with the change of subgroup.

Subgroup	Commodity	Weight	Remarks
Electronic application equipment		8.2	Before the revision, electronic computers & computer equipment were included.
Communications equipment		26.5	Before the revision, consumer electronic machinery was not included.
Electronic computers & computer equipment		14.9	Before the revision, included under electronic application equipment.
Electronic components		18.4	
Electronic devices		15.9	Some items were integrated or divided.
Others (extracted from other groups)		8.9	Total of the following items.
	Electrical fine ceramics	0.9	
	Communication metal cables	0.7	
	Communication optical fiber cables	0.4	
	Semiconductor manufacturing equipment	3.4	
	Flat panel & display manufacturing equipment	1.7	
	Semiconductor & IC measuring instruments	0.4	
	Recording media	0.8	
	Silicon wafers	0.6	

* Graph items were changed as electronic computers & computer equipment were separated from electronic application equipment and consumer electronic machinery was integrated into communications equipment.