

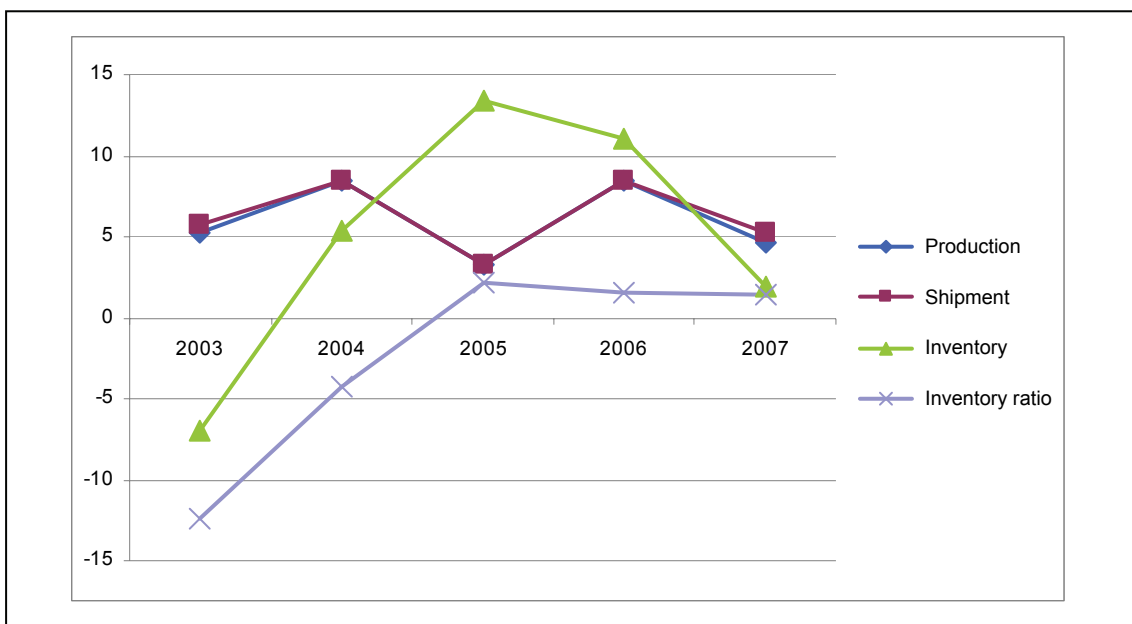
1. Trend of the Machine Industry in Japan

1.1 Trend of the production, shipment, etc. of the machine industry

(1) Trend of the machine industry in the past five years

The production of the machine industry (excluding steel vessels and railway vehicles) in 2007 showed a modest growth of 4.6% over the previous year. Behind this was the fact that, while the output of electric machines fell, that of electronic parts and devices, precision machines and transportation machines increased. The shipment increased by 5.3% year on year, which was, as in the production, due to rises in the shipment of electronic parts and devices, precision machines and transportation machines. The inventory registered a 1.9% growth over the previous year for the same reason for the production and shipment. The inventory ratio went up by 1.4% year on year, recording the third consecutive growth.

Fig. 1.1.1 Trend of the industrial indexes of the entire machine industry (year-on-year basis)



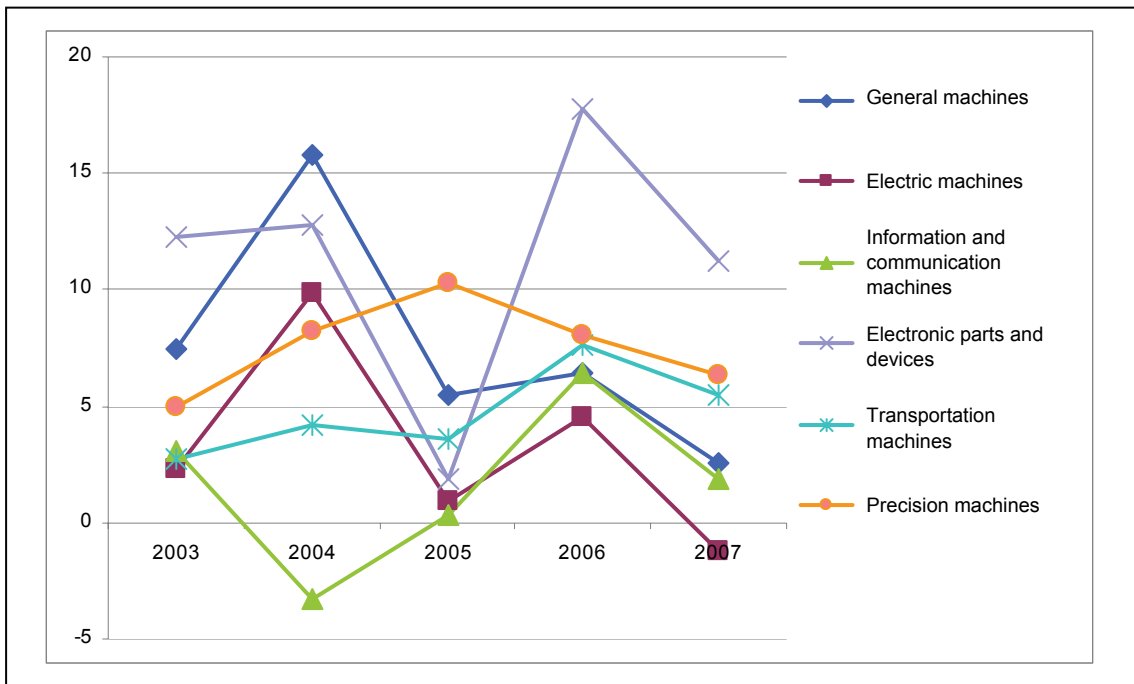
Source: Based on the Ministry of Economy, Trade and Industry, "Annual Report of Machinery Statistics."

Figure 1.1.1 shows the trend of year-on-year ratios of the production index, shipment index, inventory index and inventory ratio of the machine industry (excluding steel vessels and railway vehicles) from 2003 to 2007. As evident from this figure, the production and shipment indexes in the past five years moved roughly in the same pattern: while the indexes were on a high level in 2004, +8.5 points and +8.4 points, respectively, both lowered to +3.3 points in 2005 and then rose again to +8.5 points and +8.4 points in 2006. In 2007, the figures decreased to +4.6 points and +5.3 points. The inventory index was on a low level at -7.0 points as compared with the previous year in 2003 but showed a substantial rise in 2005 and 2006 to +13.4 points and +11.1 points, respectively. Then

in 2007 they decreased again to +1.9 points. The inventory ratio was as low as -12.4 points in 2003 and remained on a low level of -4.2 points in 2004, too, but in 2005 and after took an upward turn, although the increase rate was very small.

The trend of the machine industry index by business category is as shown in Figure 1.1.2. As this figure indicates, all of the business categories excluding electric machines showed positive year-on-year ratios in 2007, but the indexes themselves were smaller than the level a year before for all the business categories. In particular, electronic parts and devices had the broadest range of changes in the index. Information and communication machines took an upward turn in 2005 but were on the decline in 2007. The range of changes in the index of general machines became relatively wide; the index recorded a high of 15.8 points in 2004 but considerably lowered after that. On the other hand, precision machines showed minor changes between 5 and 10 points in the five years.

Fig. 1.1.2 Trend of the production index of the machine industry by business category (year-on-year basis)

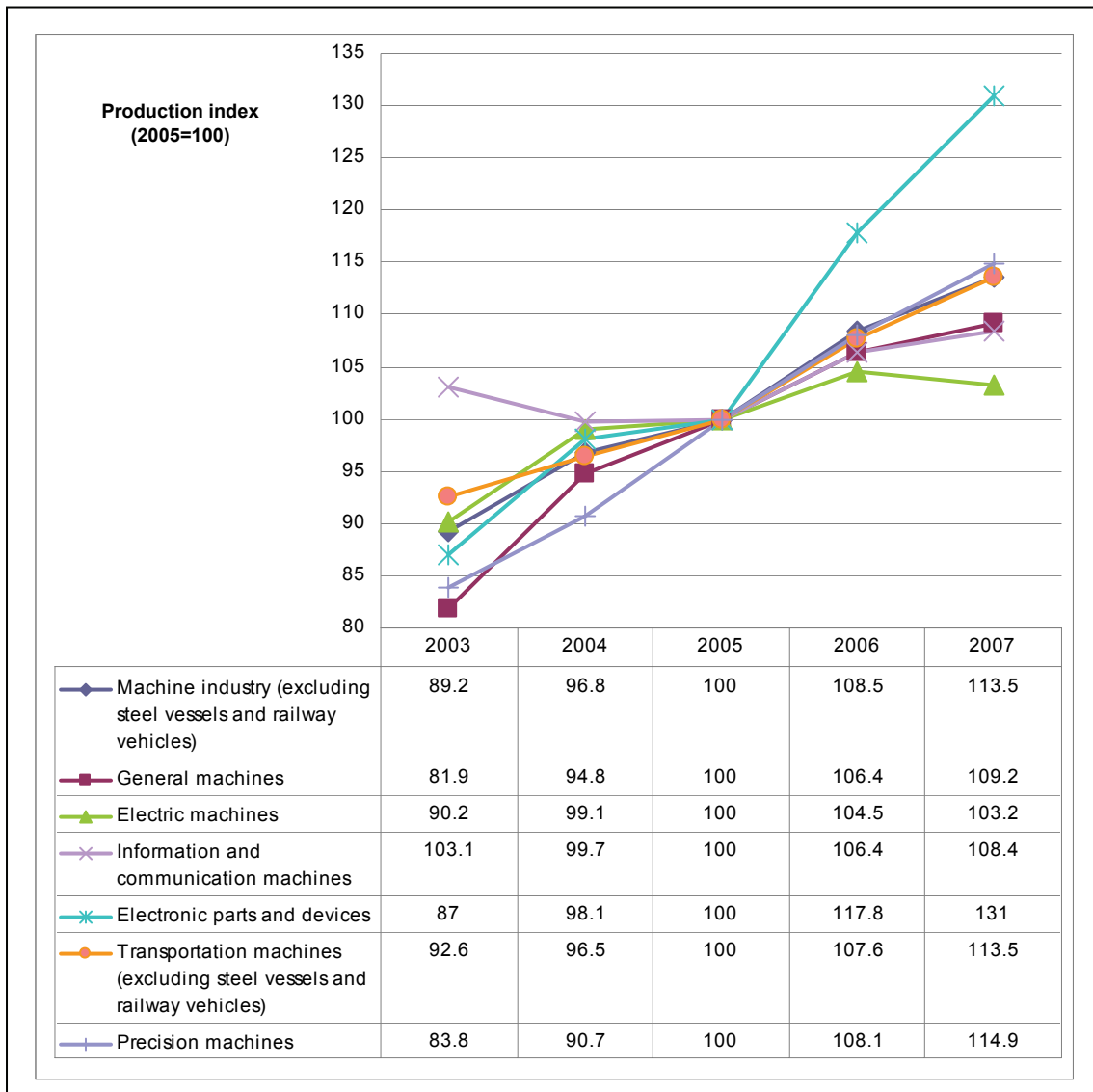


Source: Same as that for Fig. 1.1.1.

Figures 1.1.3 and 1.1.4 show the trend of the production and shipment indexes of the machine industry (excluding steel vessels and railway vehicles) as a whole and by business category supposing that the figure for 2005 were 100. First, the production index of the entire machine industry was 113.5 points in 2007 or an increase of 13.5 points over the base year 2005, suggesting that the industry continued a favorable performance. For the production index by business category in 2007, the index of electronic parts and devices was very high at 131 points, an increase of 31.0 points as compared with the base year 2005. This figure was followed by precision machines with

114.9 points and transportation machines (excluding steel vessels and railway vehicles) with 113.5 points, which were better than the index for 2006. In addition, general machines and information and communication machines were on the increase. By contrast, the index of electric machines in 2007 was 103.2 points, a lower level than 104.5 points in 2006.

Fig. 1.1.3 Trend of the production index of the machine industry (2005=100)

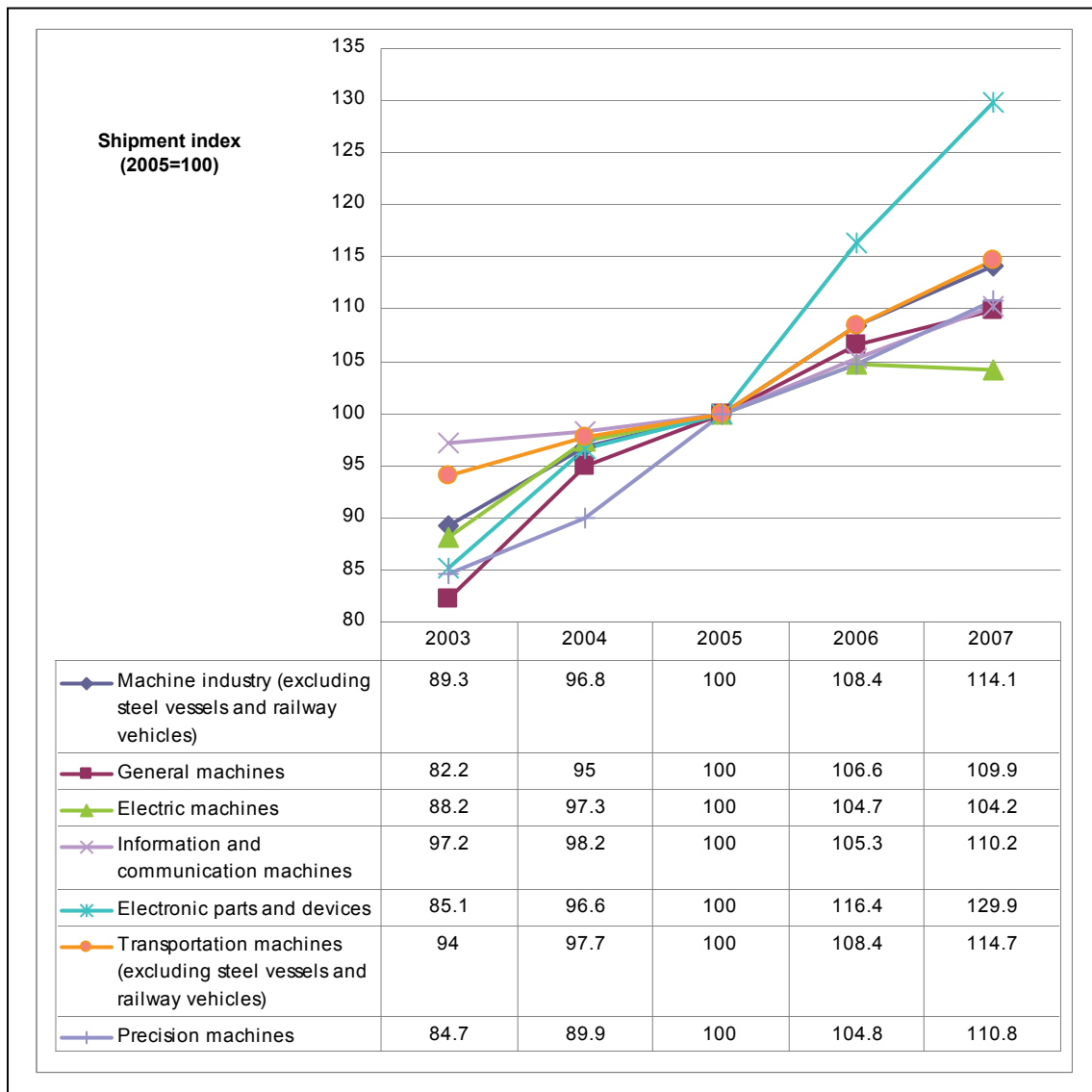


Source: Same as that for Fig. 1.1.1.

Then the shipment index of the entire machine industry (Fig. 1.1.4) was 114.1 points in 2007, an increase of 14.1 points over the base year 2005. This figure is higher than that for previous year (2006) by 5.7 points. By business category, as in the case of the production index, electronic parts and devices showed a very high level of 1,229.9 points. Transportation machines (excluding steel vessels and railway vehicles) also continued to be on the rise with 114.7 points. The index of

information and communication machines (110.2 points), general machines (109.9 points) and precision machines (110.8 points) was on a relatively high level. By contrast, as in the production index, the shipment index of electric machines was 104.2 points, a fall of 0.5 points from the previous year (2006).

Fig. 1.1.4 Trend of the shipment index of the machine industry (2005=100)



Source: Same as that for Fig. 1.1.1.

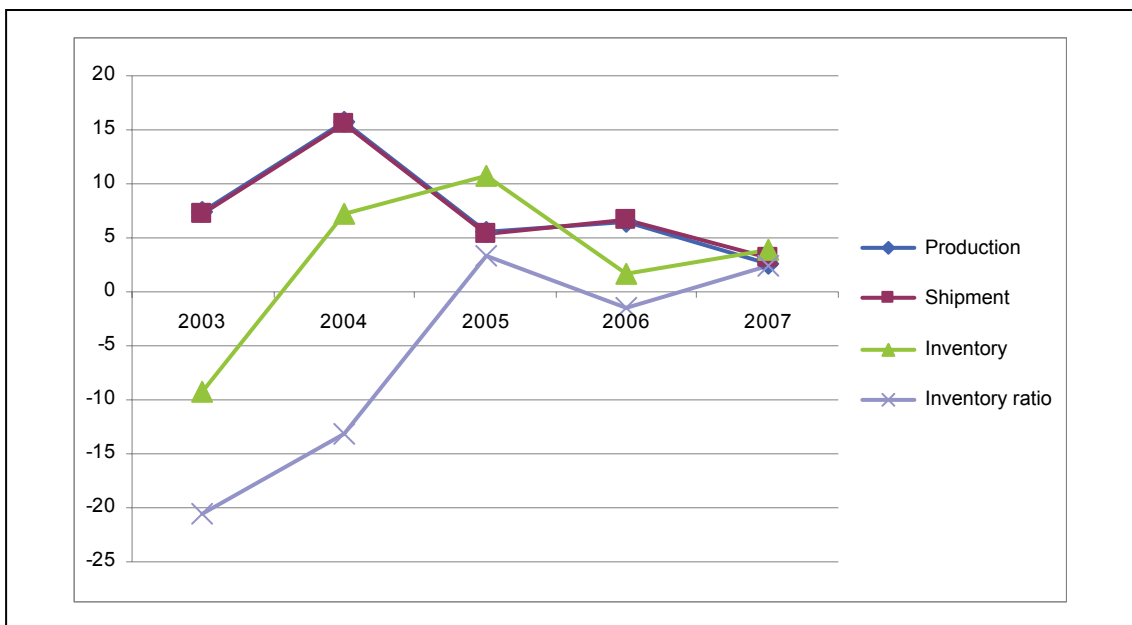
(2) Trend of the general machine industry

As Figure 1.1.5 shows, the production index of the general machine industry (boilers and motors, civil engineering and construction machines, chemical machines, life-related industrial machines, semiconductors and flat-panel devices, wind-powered and hydraulic machines and oil pressure equipment, conveying and carrying machines, industrial robots, farm machines, metal

machine tools, metal working machines, textile machines, freezers and applied products, dies, machinery tools, other general machines and general machine parts) in 2007 was +2.6 points year on year, recording a growth for five years running as a whole. It can be pointed out that the main factors behind this were the fact that as stated later, textile machines showed a remarkable upward trend in 2006 and after, that civil engineering and construction machines were also on a relatively high level and that a marked growth trend was observed in wind-powered and hydraulic machines and oil pressure equipment in 2007, although the increase was smaller than in 2006. By contrast, farm machines suffered a considerable decline of -14.6 points year on year in 2007. The performance was negative, too, in dies, other general machines, machinery tools and semiconductors and flat-panel devices.

The shipment index continued to be favorable, recording +3.1 points as compared with the previous year, although the growth rate was lower than in 2006. The inventory index showed a slow upward trend, while the inventory ratio turned into +2.5 points from -1.5 points in 2006.

Fig. 1.1.5 Trend of the industrial indexes of the general machine industry (year-on-year basis)

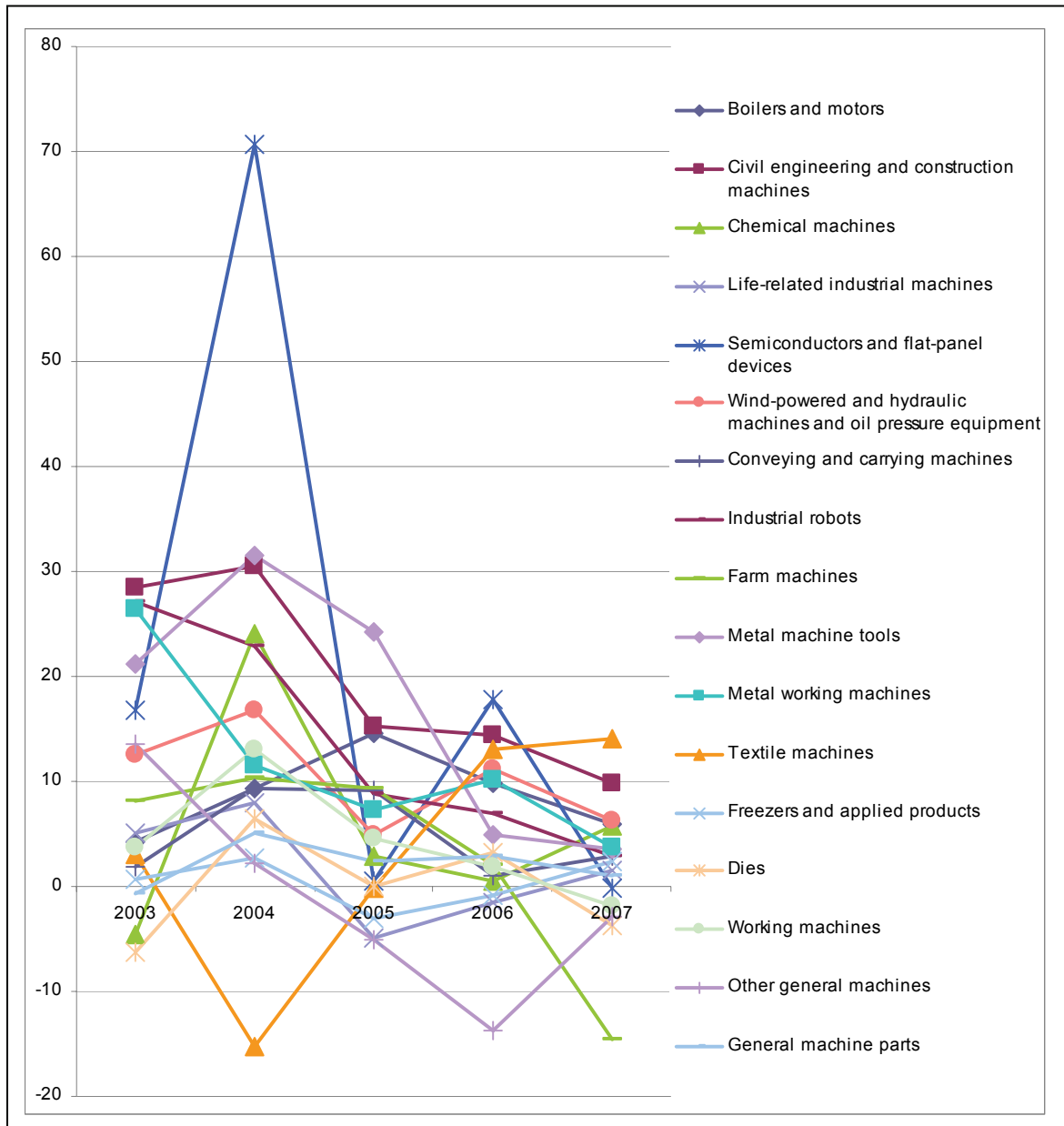


Source: Same as that for Fig. 1.1.1.

The trend of the production index by business category of the general machine industry is as shown in Figure 1.1.6. As seen in this figure, while farm machines had a considerable fall of -14.6 points, textile machines achieved +14.1 points, an increase greater than in 2006. Civil engineering and construction machines recorded +9.9 points, although this was smaller than in the previous year. It is supposed that behind these favorable performances were the growing demand in newly industrialized countries, including BRIC (Brazil, Russia, India and China), for programs to develop infrastructure, and for mining machines mainly in Australia.

Chemical machines, metal machine tools and metal working machines had positive indexes and showed a steady trend. By contrast, dies were on the decline with -3.7 points, suggesting that capital investment will slow down in the future. Semiconductors and flat-panel devices took a downward turn to a bit negative index in 2007 partly because of the very high level of +17.8 points in 2006, indicating that the production of these products would edge off in the years ahead.

Fig. 1.1.6 Trend of the production indexes of the general machine industry by business category (year-on-year basis)



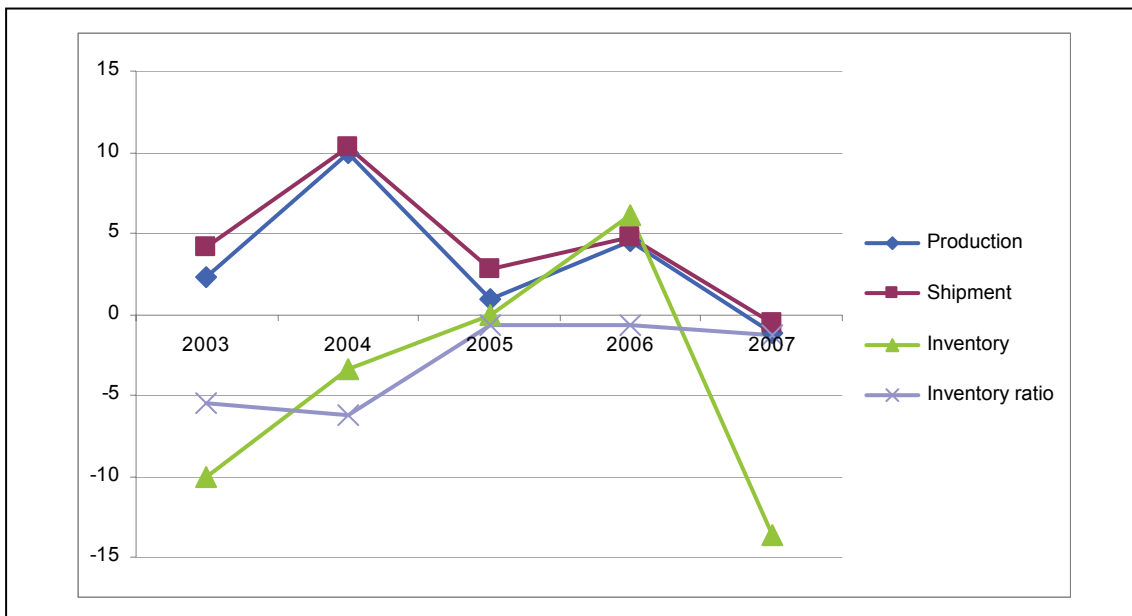
Source: Same as that for Fig. 1.1.1.

(3) Trend of the electric machine industry

As Figure 1.1.7 shows, the production index of the electric machine industry in 2007 (rotary electric machines, stationary electric machines, switching devices and equipment, consumer electric machines, wiring/lighting appliances, electronic application devices, batteries and other electric machines) was -1.2 points year on year, showing a decreasing trend. It can be said that behind this situation was a relatively great decline in the production index of other electric machines, consumer electric machines and electric measuring instruments, as described later.

The shipment index showed a small fall of -0.5 points, which was the lowest in the past five years. The inventory index suffered a great decrease of -13.6 points, and the inventory ratio showed an increasing negative trend, too.

Fig. 1.1.7 Trend of the industrial indexes of the electric machine industry (year-on-year basis)



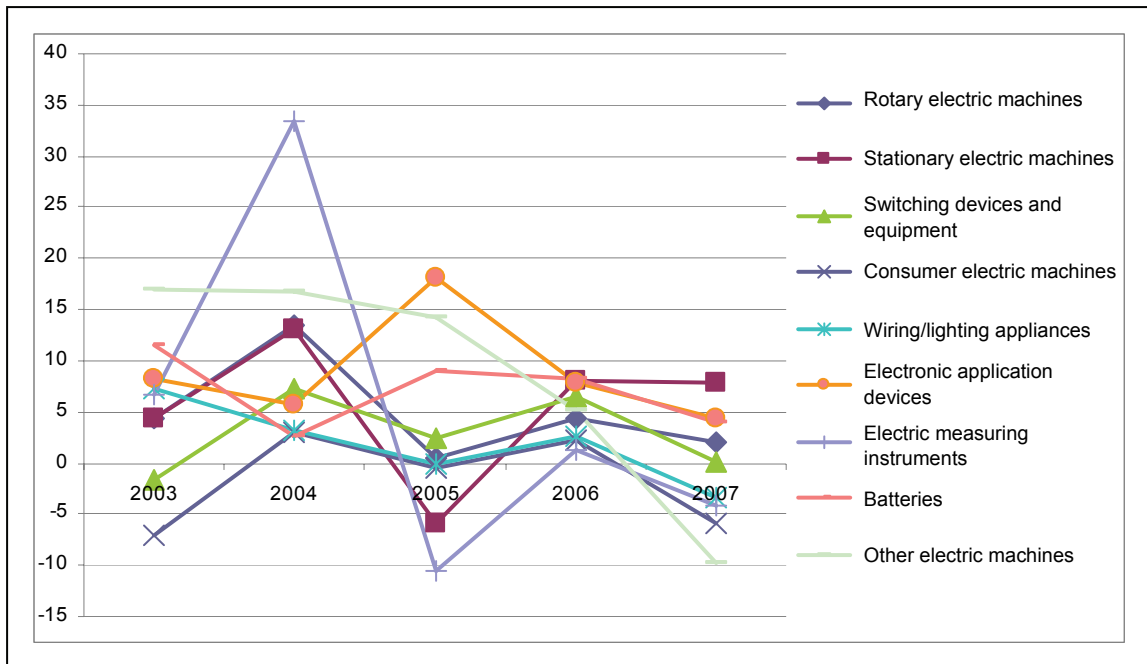
Source: Same as that for Fig. 1.1.1.

The trend of the production index of the electric machine industry by business category is as shown in Figure 1.1.8. In the past five years, electric measuring machines showed a broad range of changes and had wild fluctuations, taking a negative turn again in 2007. The business categories recording a remarkably positive trend in 2007 were only stationary electric machines (+7.8 points), electronic application devices (+4.3 points) and batteries (+3.9 points), and the indexes of the electric machine industry registered a downward trend in general.

In the field of batteries, demand for lithium ion batteries, etc. is expected to increase in recyclable energy areas, such as photovoltaic generation systems and fuel cell systems, and the future trend of this field, including new product development, is noteworthy. Similarly, the

production index of wiring/lighting appliances in 2007 was negative as compared with the previous year, but especially in the area of lighting appliances, great efforts have been made to develop LED lighting appliances, organic EL lighting and the like. Thus in the medium term, demand for lighting appliances is expected to grow as a result of the appearance of new products.

Fig. 1.1.8 Trend of the production index of the electric machine industry by business category (year-on-year basis)



Source: Same as that for Fig. 1.1.1.

(4) Trend of the information and communication machine industry

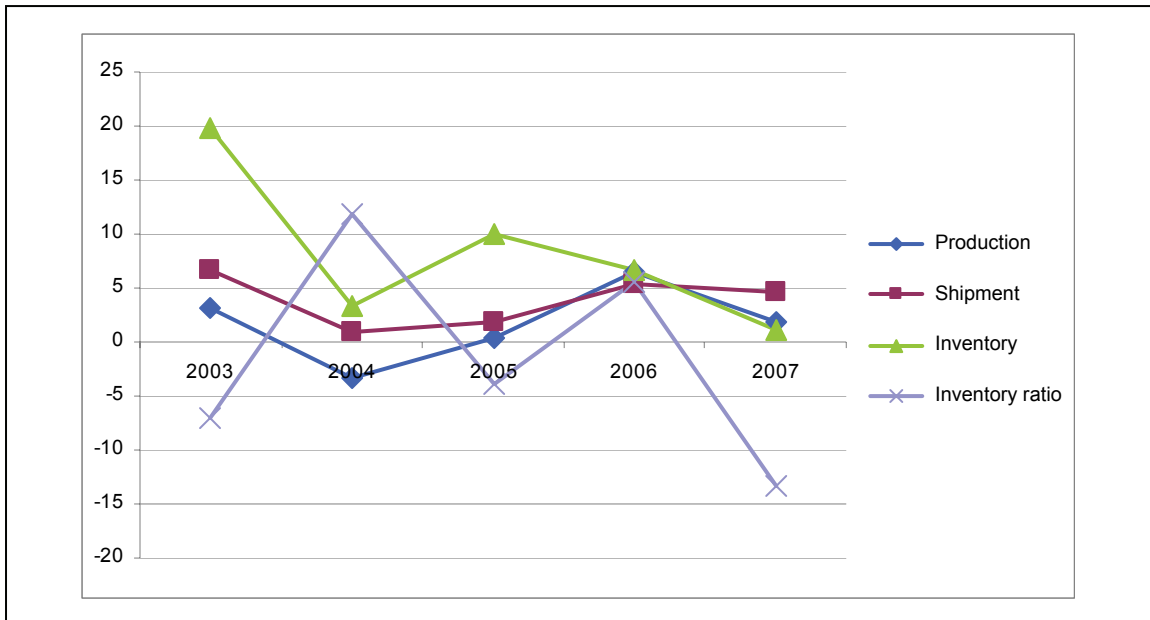
Figure 1.1.9 shows the industrial indexes of the information and communication machine industry (communication machines, consumer electronic machines, electric computers and other information and communication machines). As evident from this figure, the production index in 2007 was modest with +1.9 points. The shipment index was favorable with +4.7 points year on year. The inventory index was low with +1.2 points, while the inventory ratio was -13.4 points, a decline first in two years.

As the reasons for the trend of the information and communication machine industry in 2007 mentioned above, it can be pointed out that while there were decreases in activities mainly in cellular phones and electronic automatic exchanges, liquid crystal TVs, digital cameras and car navigation systems enjoyed growth. As a result, the production index of the entire industry registered +1.9 points year on year, an increase for three consecutive years.

The trend of the production index of the information and communication machine industry by business category is as shown in Figure 1.1.10. As this figure indicates, communication machines and electronic computers were slack with -4.9 points and -2.4 points year on year, respectively, while consumer

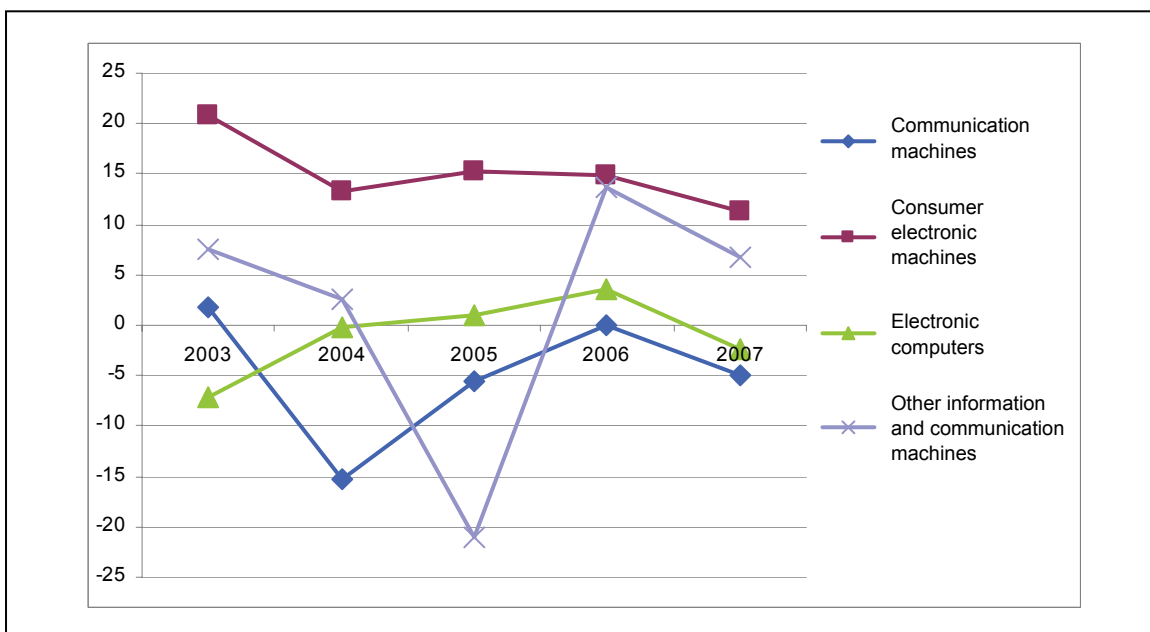
electronic machines continued to be favorable as in 2006, recording +11.4 points. Other information and communication machines also achieved a good performance for the second straight year.

Fig. 1.1.9 Trend of the industrial indexes of the information and communication machine industry (year-on-year basis)



Source: Same as that for Fig. 1.1.1.

Fig. 1.1.10 Trend of the production index of the information and communication machine industry by business category (year-on-year basis)

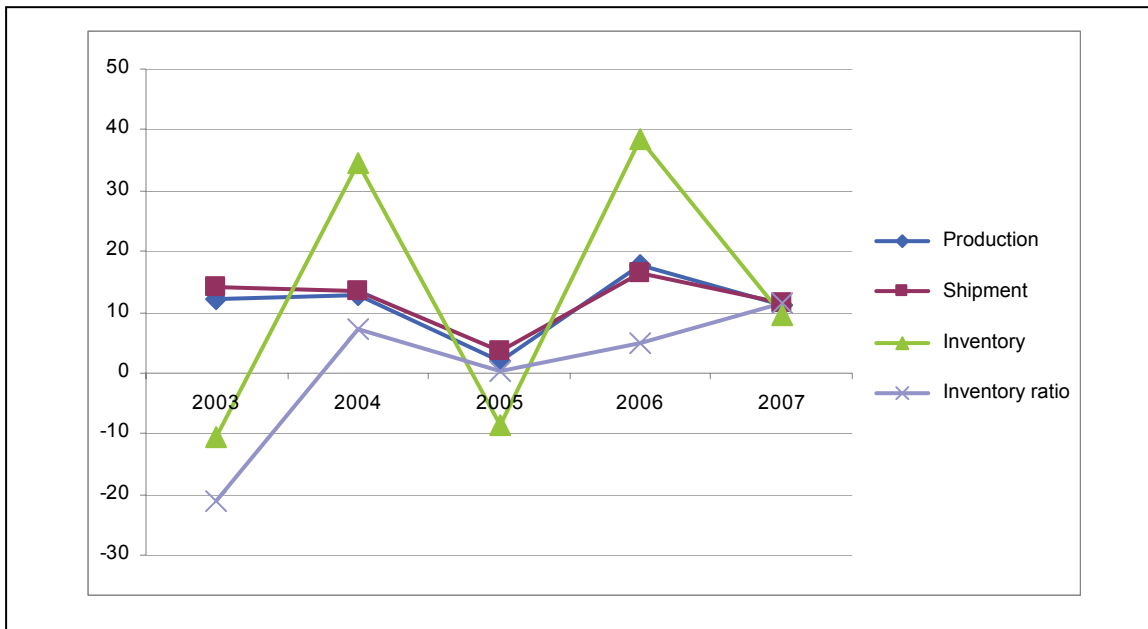


Source: Same as that for Fig. 1.1.1.

(5) Trend of the electronic parts and device industry

Figure 1.1.11 shows the industrial indexes of the electronic parts and device industry (electronic parts, semiconductor devices, integrated circuits and semiconductor parts). As seen in this figure, the production index in 2007 continued to be good with +11.2 points as compared with the previous year. The shipment index was +11.6 points, recorded a good result, too. The inventory index showed an upward trend with +9.4 points, although the growth was not so high as in the previous year, and the inventory ratio reached +11.5 points. A probable reason for these achievements is the fact that in the area of electronic parts and devices, the output of magnetic tapes and bipolar semiconductor integrated circuits decreased but that of active liquid crystal elements (large-sized) and logics and CCDs (charge-coupled devices) grew, leading to the index of +11.2 points as a whole.

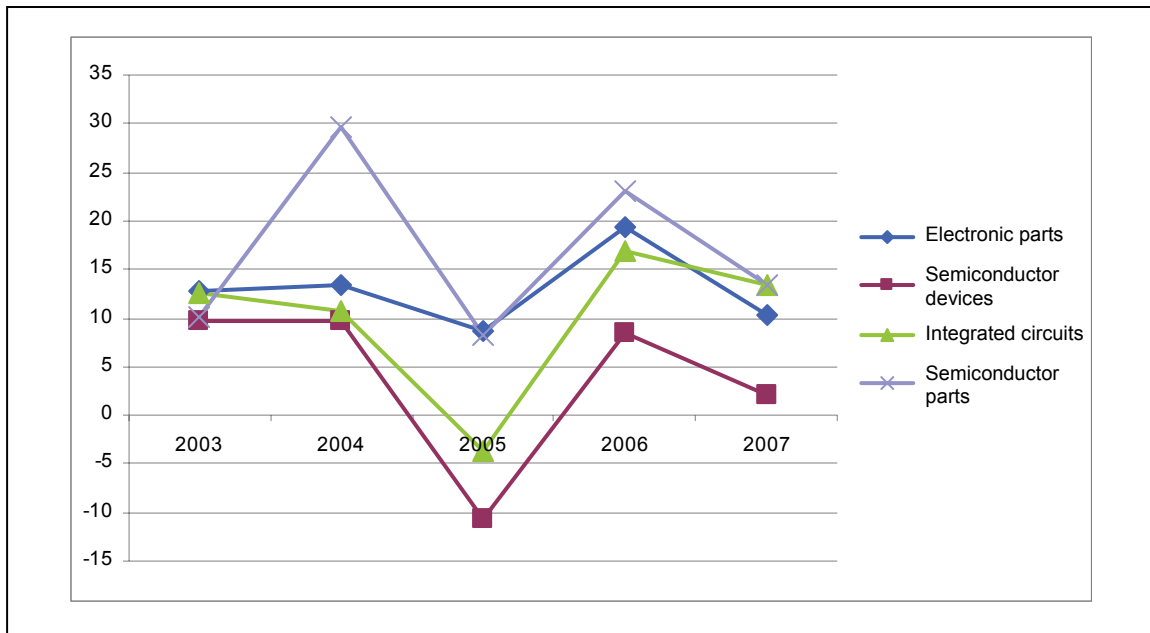
Fig. 1.1.11 Trend of the industrial indexes of the electronic parts and device industry (year-on-year basis)



Source: Same as that for Fig. 1.1.1.

The trend of the electronic parts and device industry by business category is as shown in Figure 1.1.12. As evident from this figure, while the production index of semiconductor devices was only +2.0 points year on year, that of integrated circuits, semiconductor parts and electronic parts recorded a good performance with over +10 points. Integrated circuits recorded +13.4 points thanks to the fact that the production of logics, CCDs and memories showed an increase, although that of bipolar semiconductor circuits fell. In particular, the good result of logics was strongly supported by greater demand mainly from digital household electric appliances, game machines and liquid crystal TVs.

Fig. 1.1.12 Trend of the production index of the electronic parts and device industry by business category (year-on-year basis)



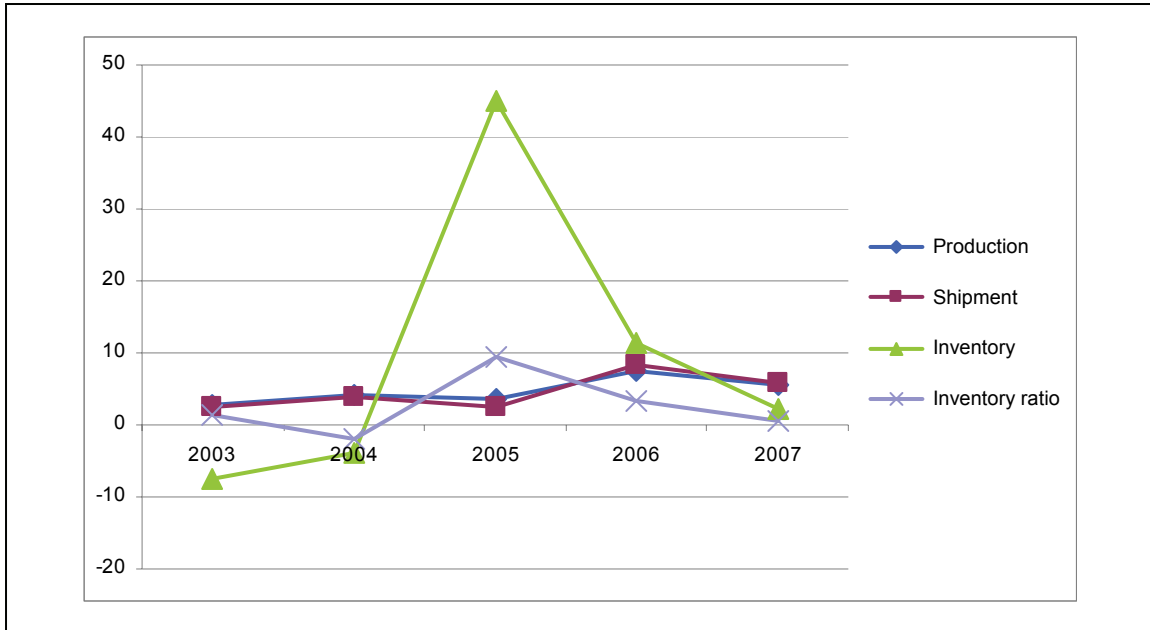
Source: Same as that for Fig. 1.1.1.

(6) Trend of the transportation machine industry

Figure 1.1.13 shows the industrial indexes of the transportation machine industry (passenger cars, buses, trucks, automotive parts, two-wheeled vehicles and industrial vehicles). As this figure indicates, the production index and shipment index of the transportation machine industry in 2007 were both on a favorable level at over +5 points year on year. By contrast, the inventory index was +2.1 points and the inventory ratio, +0.5 points, registering a marked downward trend. It can be supposed that this was due to growth in passenger cars, automotive parts and buses despite a fall in trucks and two-wheeled vehicles, leading to a rise for six consecutive years for the entire industry.

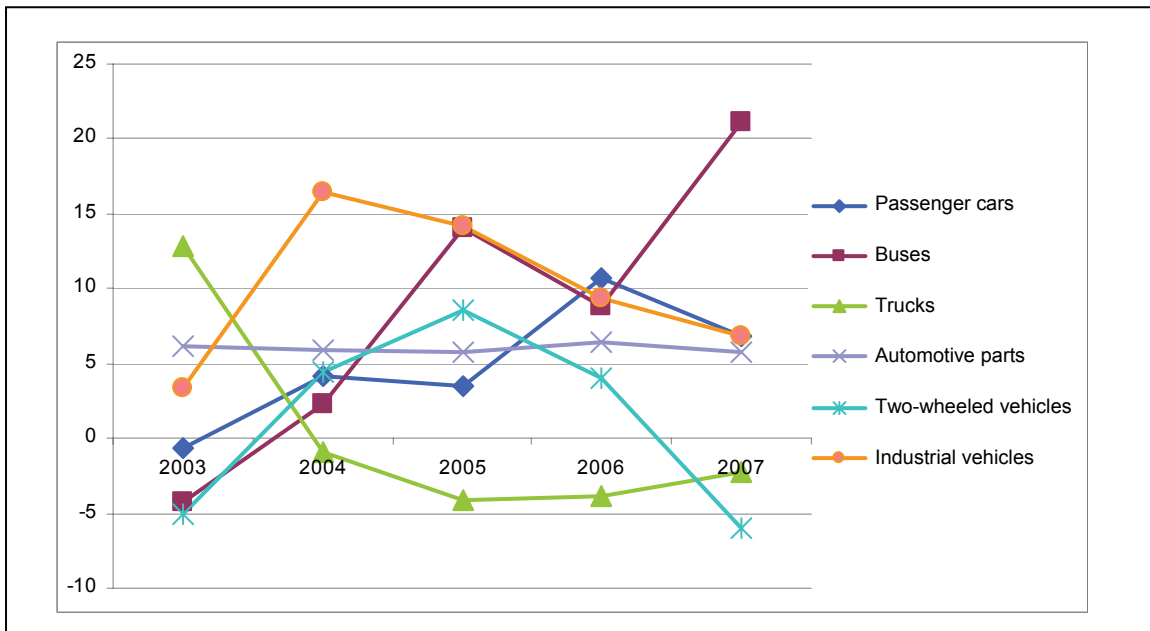
The trend of the production index of the transportation machine industry by business category is as shown in Figure 1.1.14. As seen in this figure, buses recorded an increase of +21.1 points year on year, suggesting a very good result. Passenger cars and industrial vehicles both had 6.8 points, while automotive parts recorded a steady growth with +5.7 points. Factors behind this include an increase in the output of passenger cars for the domestic market due to the effect of new models and growing export mainly to Europe, Middle East and North America. By contrast, two-wheeled vehicles suffered a marked downward trend at -6.0 points and trucks also declined for four years running at -2.2 points. This was probably influenced greatly by the fact that the output of trucks for the domestic market fell, although the export increased principally to the ASEAN and Middle East.

Fig. 1.1.13 Trend of the industrial indexes of the transportation machine industry (year-on-year basis)



Source: Same as that for Fig. 1.1.1.

Fig. 1.1.14 Trend of the production index of the transportation machine industry (year-on-year basis)

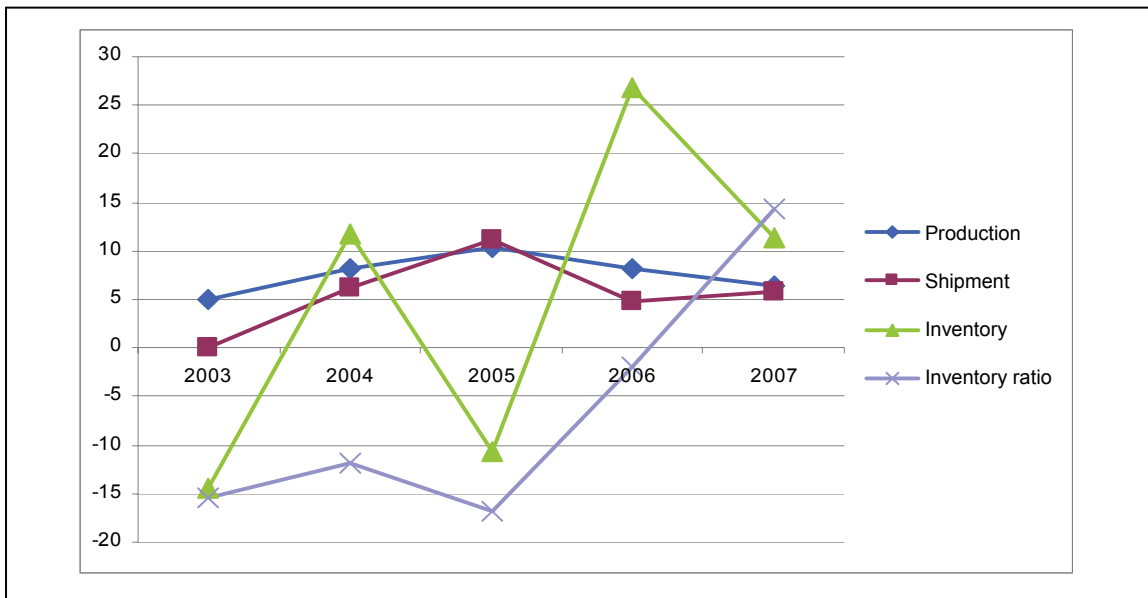


Source: Same as that for Fig. 1.1.1.

(7) Trend of the precision machine industry

Figure 1.1.15 shows the industrial indexes of the precision machine industry (measuring instruments, optical machines and parts and timepieces). As evident from this figure, the production index of the precision machine industry in 2007 was +6.3 points, an increase for five straight years. The reason for this is the fact that while precision measuring instruments and industrial length meters decreased, analytical instruments, interchangeable lenses for cameras and gas meters registered growth. The shipment index rose for four consecutive years with +5.7 points year on year. This was because the shipment of measuring instruments and optical parts increased despite a decline in timepieces both in the domestic and overseas markets. The inventory index was 11.3 points as compared with the previous year, a growth first in two years. The inventory ratio went up to 14.3 points year on year.

Fig. 1.1.15 Trend of the industrial indexes of the precision machine industry (year-on-year basis)

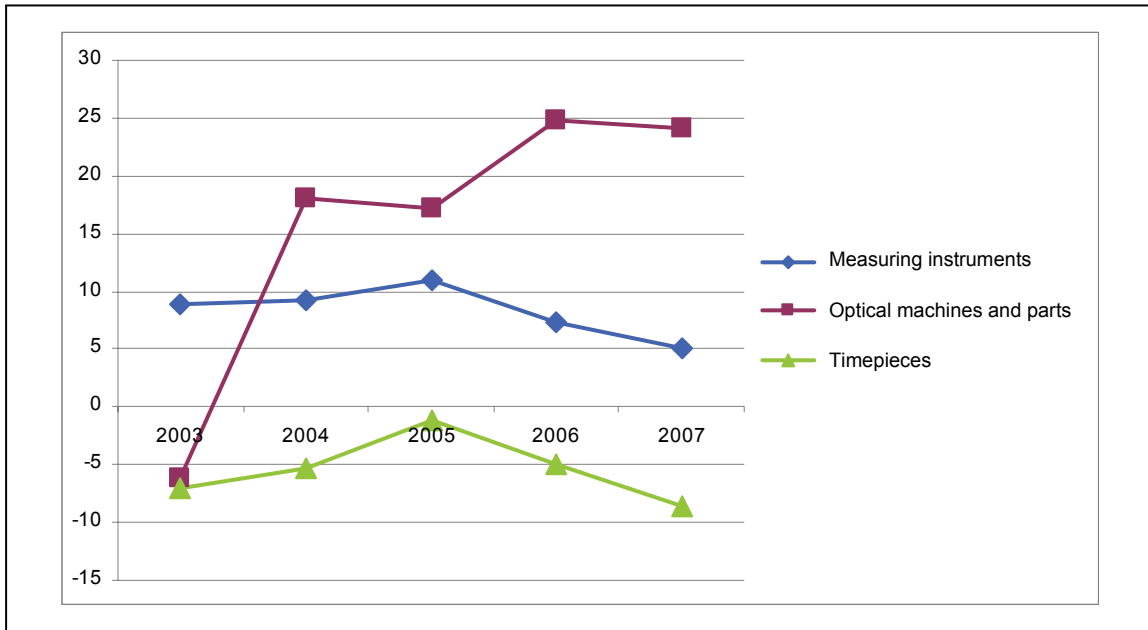


Source: Same as that for Fig. 1.1.1.

The production index of the precision machine industry by business category as compared with the previous year is as shown in Figure 1.1.16. As indicated in this figure, measuring instruments and optical parts increased but timepieces suffered a fall in the production index.

It can be pointed out that the situation behind this result was the fact that the output of precision measuring machines decreased but analytical instruments (e.g., optical analytical instruments, chromatographs, separation devices and distillation devices), gas meters and testing machines recorded a higher output. The production of optical parts achieved a growth for four years running with +24.1 points year on year as a result of an increased production of interchangeable lenses for cameras. The main reason for this was a production increase in lenses for single-lens reflex digital cameras, which enjoyed a good performance.

Fig. 1.1.16 Trend of the production index of the precision machine industry by business category (year-on-year basis)



Source: Same as that for Fig. 1.1.1.

1.2 Trend of the industrial indexes of the machine industry in 2007

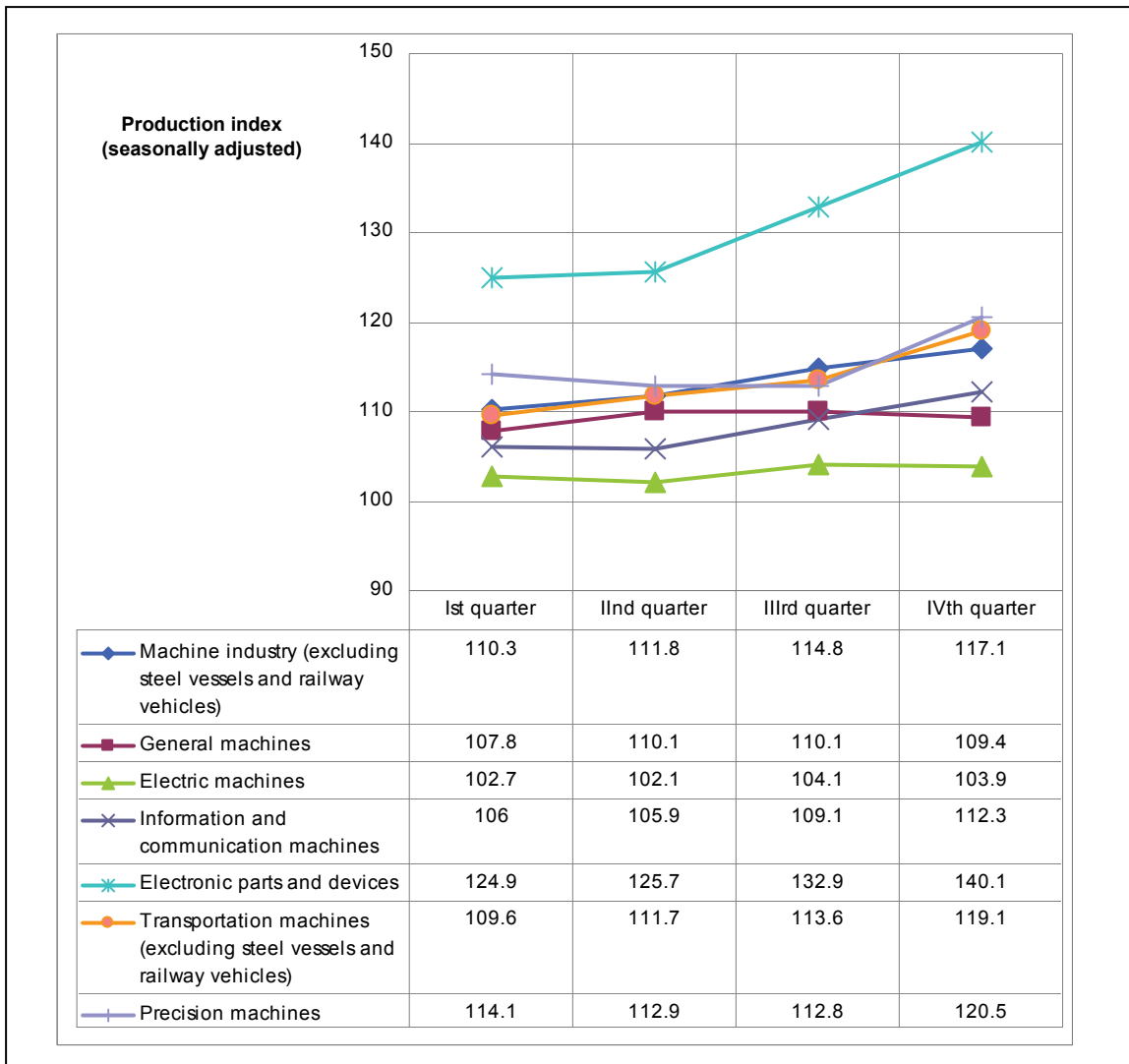
(1) Trend of the production index in 2007 by quarter

Figure 1.2.1 shows the trend of the production index (seasonally adjusted; 2005=100) in 2007 by quarter of the entire machine industry and its main branch industries. As shown in this figure, the entire machine industry (excluding steel vessels and railway vehicles) kept up a high level of over 110 points in all the quarters of 2007, indicating the trend of remarkably favorable performance. In particular, the figure for the IVth quarter was 117.1 points, suggesting a steady growth.

By main branch industry, the general machine industry recorded about 110 points, indicating that the result was moderate. The electric machine industry had 102 to 104 points but registered a better performance than in the base year 2005 in general. The information and communication machine industry achieved higher points in the IIIrd and IVth quarters in the second half of 2007, showing signs of recovery. The electronic parts and device industry kept up a high level in all of the quarters; in particular, the production index recorded 140.1 points in the IVth quarter, and this industry continued to be favorable in general although the performance differed among its business categories.

The transportation machine industry (excluding steel vessels and railway vehicles), a typical industry playing the role of leading other industries, had 109.6 points in the Ist quarter but began to show a marked upward trend thereafter, rising to 119.1 points in the IVth quarter and recording a steady growth. The precision machine industry stood at about 112 points and rose to 120.5 points by the IVth quarter, showing a clearer trend of recovery.

Fig. 1.2.1 Production index of the machine industry in 2007 by quarter (seasonally adjusted; 2005=100)



Source: Same as that for Fig. 1.1.1.

(2) Trend of the shipment index in 2007 by quarter

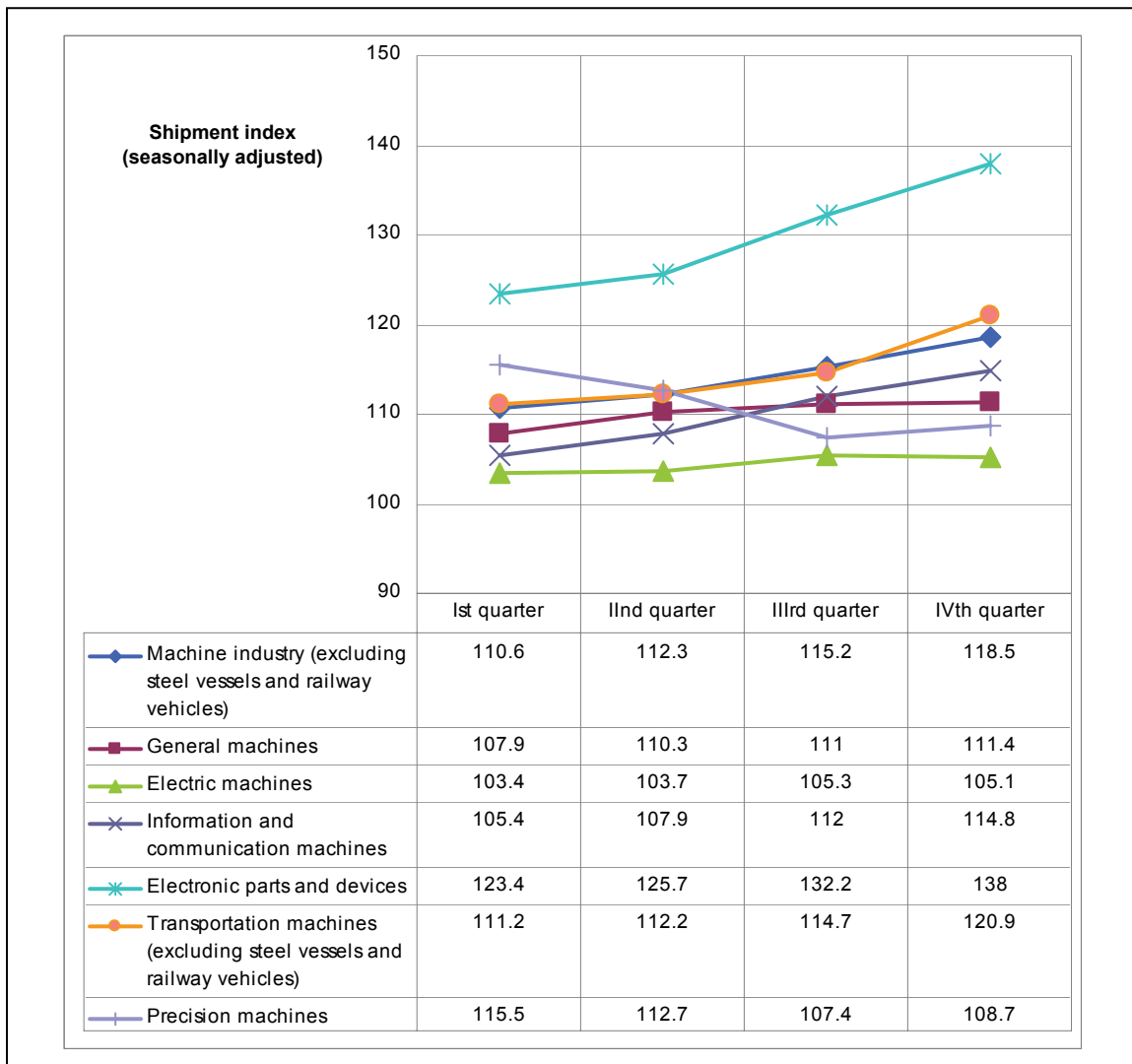
Figure 1.2.2 shows the trend of the shipment index (seasonally adjusted; 2005=100) in 2007 by quarter of the machine industry and its main branch industries. As seen in this figure, the shipment index of the entire machine industry (excluding steel vessels and railway vehicles) in 2007 was on a level of over 110 points in all of the quarters, indicating that as in the production index, the shipment index kept up a favorable result. In particular, in the second half of 2007, the index achieved a steady increase with 115.2 points in the IIIrd quarter and 118.5 points in the IVth quarter.

By main branch industry, the general machine industry did relatively well with its shipment index within range of 107-111 points. Behind this was probably a firm growth in the transportation machine industry as stated later. The electric machine industry had a modest result, staying at 105

points in the IIIrd quarter and after. The information and communication machine industry attained over 112 points in the IIIrd quarter and after and registered a steady growth. The electronic parts and device industry continued to be at 120 points or more and recorded as high as 138.0 points in the IVth quarter, suggesting the strength of the industry.

The transportation machine industry kept up a level of 111-120 points and remained firm, indicating signs of growth in the second half of 2007. The precision machine industry was at a relatively high level with over 110 points during the Ist and IInd quarters but in the second half of 2007, showed a downward trend, resulting in a little weak note.

Fig. 1.2.2 Shipment index of the machine industry in 2007 by quarter (seasonally adjusted; 2005=100)



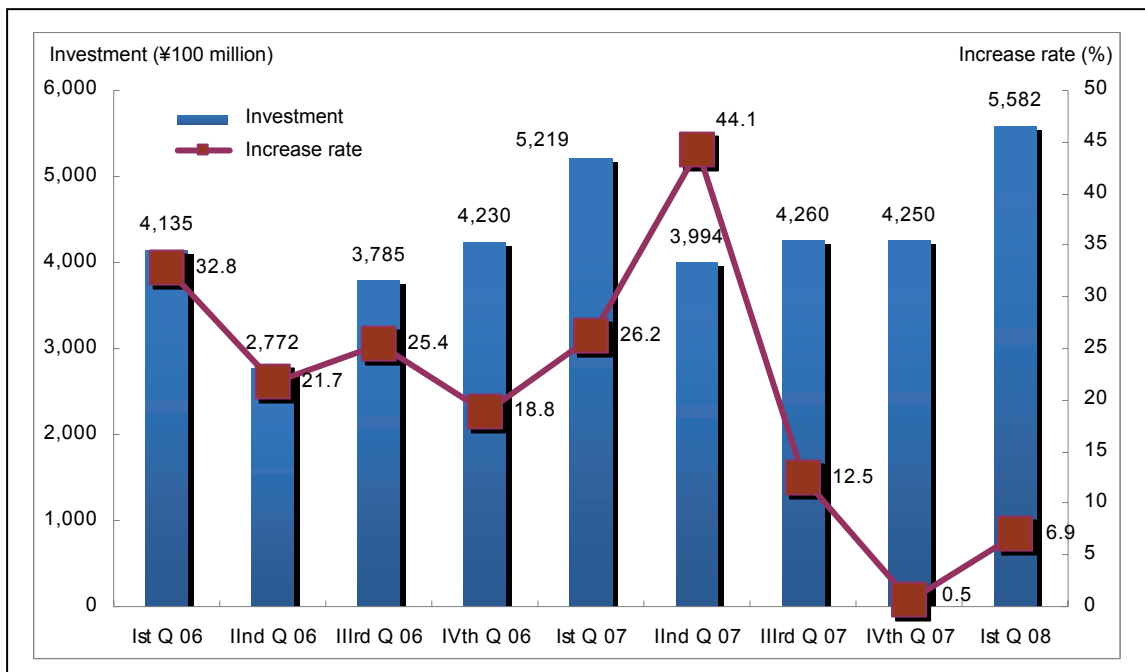
Source: Same as that for Fig. 1.1.1.

1.3 Situation of the capital investment of the machine industry

(1) Situation of the capital investment of the general machine industry

Figure 1.3.1 shows the trend of capital investment of the general machine industry from the 1st quarter of 2006 to the 1st quarter of 2008. As this figure indicates, the capital investment of the general machine industry recovered to ¥423.0 billion in the IVth quarter of 2006, reached ¥521.9 billion in the 1st quarter of 2007, remained at over ¥400.0 billion thereafter and grew again to ¥558.2 billion in the 1st quarter of 2008. As described above, the capital investment of the general machine industry clearly has a cycle (periodicity), but as far as the situation from the 1st quarter of 2007 to the 1st quarter of 2008 is concerned, the scale of the industry's capital investment was on the increase.

Fig. 1.3.1 Situation of the capital investment of the general machine industry



Note: Increase rate figures are those as compared with the same quarter of the previous year.

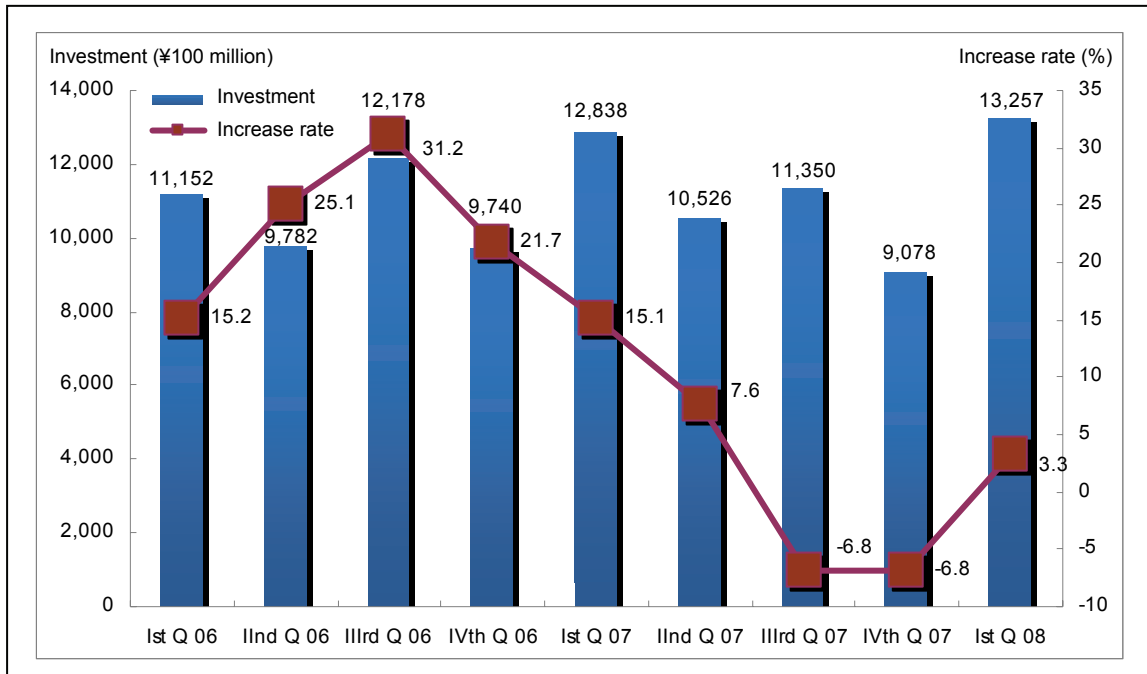
Source: Based on the Ministry of Finance, "Statistical Survey of Incorporated Enterprises."

(2) Situation of the capital investment of the electric machine industry

Figure 1.3.2 shows the trend of capital investment of the electric machine industry from the 1st quarter of 2006 to the 1st quarter of 2008. As seen in this figure, the capital investment of the electric machine industry exceeded ¥1 trillion in the 1st quarter of 2006 and reached ¥1,217.8 billion in the IIIrd quarter of the same year. Then in the 1st quarter of 2007, the figure rose to ¥1,283.8 billion, indicating very great investment activities. The capital investment remained about ¥1 trillion in the IInd quarter of 2007 and after but attained to ¥1,325.7 billion in the 1st quarter of 2008, which suggests an increasing trend of capital investment in this industry. Behind this is the fact that the trend of "relocation to Japan" of overseas plants still continued in this industry. In particular, it is

supposed that there were active capital investment in the manufacturing facilities of liquid crystal displays (full-page displays or FPDs) and in the construction of new plants of flash memories.

Fig. 1.3.2 Situation of the capital investment of the electric machine industry



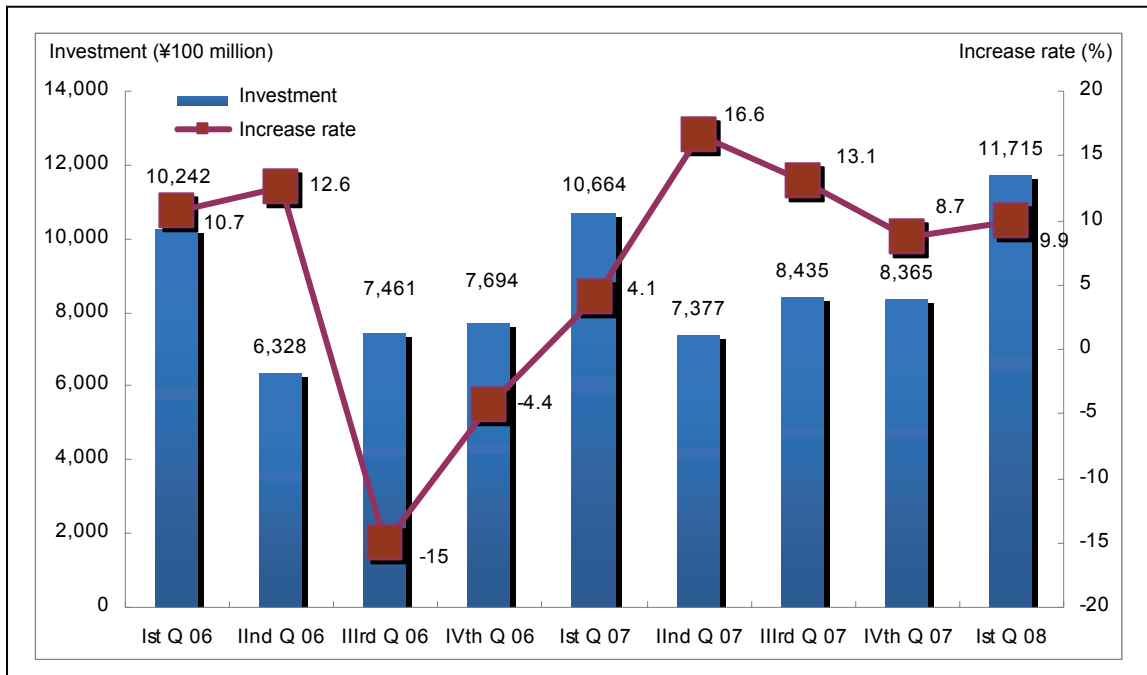
Note: Increase rate figures are those as compared with the same quarter of the previous year.

Source: Same as that for Fig. 1.3.1.

(3) Situation of the capital investment of the transportation machine industry

As seen in Figure 1.3.3, the capital investment of the transportation machine industry showed a marked investment cycle (periodicity): it returned to a ¥1 trillion level in the 1st quarter of 2006, the 1st quarter of 2007 and the 1st quarter of 2008.

Fig. 1.3.3 Situation of the capital investment of the transportation machine industry



Note: Increase rate figures are those as compared with the same quarter of the previous year.

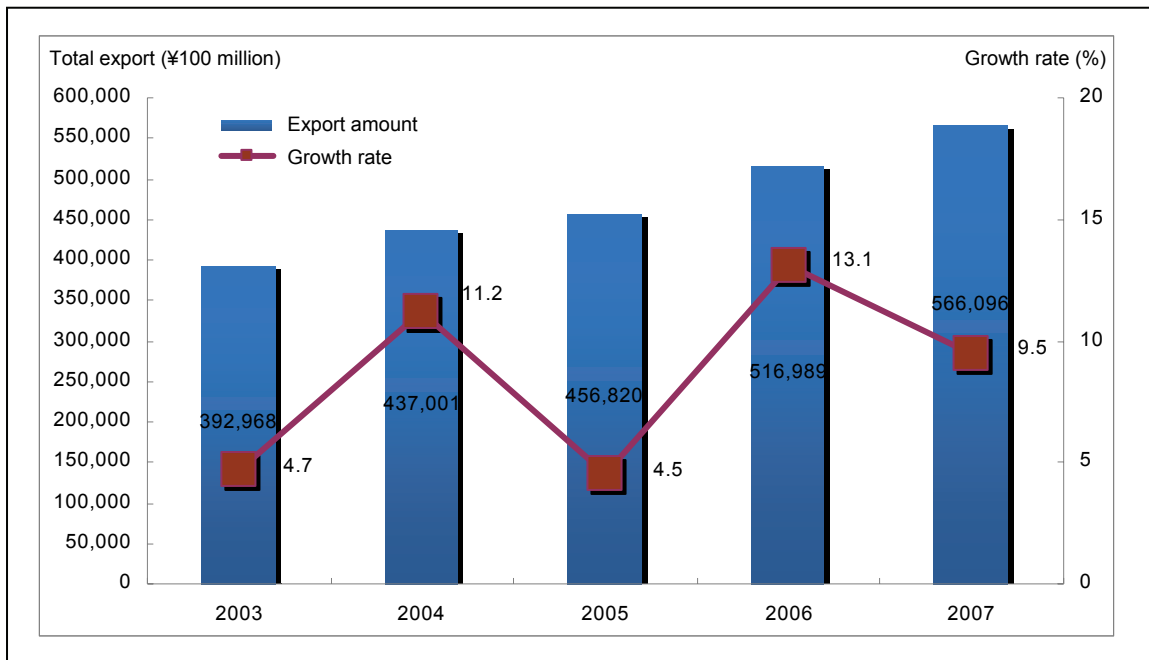
Source: Same as that for Fig. 1.3.1.

1.4 Situation of the export of the machine industry

(1) Situation of the export of the entire machine industry

Figure 1.4.1 shows the trend of the amount and growth rate (year-on-year) of the export of machines and equipment (general machines, electric machines, transportation machines and precision machines) from 2003 to 2007. As this figure indicates, the export of machines and equipment showed a steady upward trend after 2003, and the growth rate continued to be at about 10%. The export amount reached ¥56,600.0 billion in 2007.

Fig. 1.4.1 Situation of the export of machines and equipment



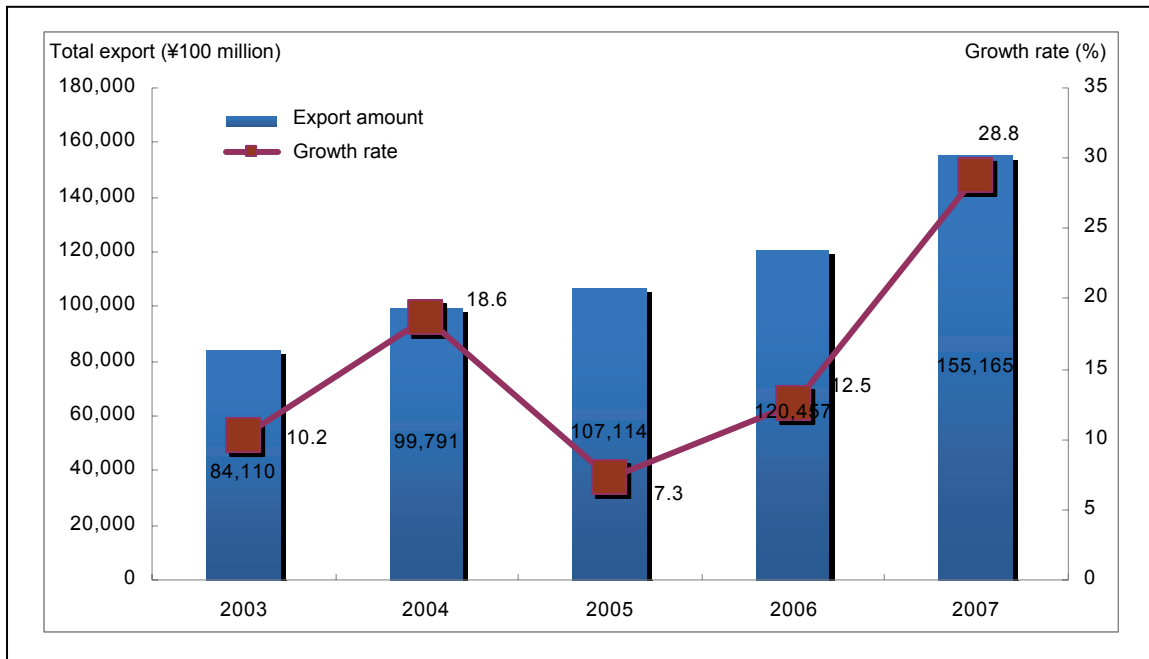
Note: Growth rate figures are those as compared with the previous year.

Source: Based on the Japan External Trade Organization (JETRO), "Trade Statistics Data Base."

(2) Situation of the export of general machines

Figure 1.4.2 shows the situation of the amount and growth rate (year-on-year) of the export of general machines from 2003 to 2007. As seen in this figure, the export of general machines was on a slow upward trend from 2003 to 2006, but greatly increased in 2007 with a growth rate of 28.8% and an export amount of over ¥15,500.0 billion. The factors behind this include an increased demand for construction machines associated with active capital investment, development of social infrastructure and development of resources in newly industrialized countries, including BRIC, and an expanding demand for the products of the process industry, such as industrial machines and machine tools resulting from the positive entry of Japanese automobile manufacturers in China, India and some other countries. But if the subprime loan problem relating to the housing loans in the U.S., which was revealed in December 2007, will be aggravated in the future, the motivation to spend in the U.S. is expected to decline, resulting in a cool-off of the North American market, which is stimulated by the sales of automobiles, etc. Moreover, should the financial problems in the U.S. spread to BRIC and other newly industrialized areas, it is feared that the export of general machines would slow down as a whole. Therefore, the future tendency of the U.S. financial market should be carefully observed.

Fig. 1.4.2 Situation of the export of general machines

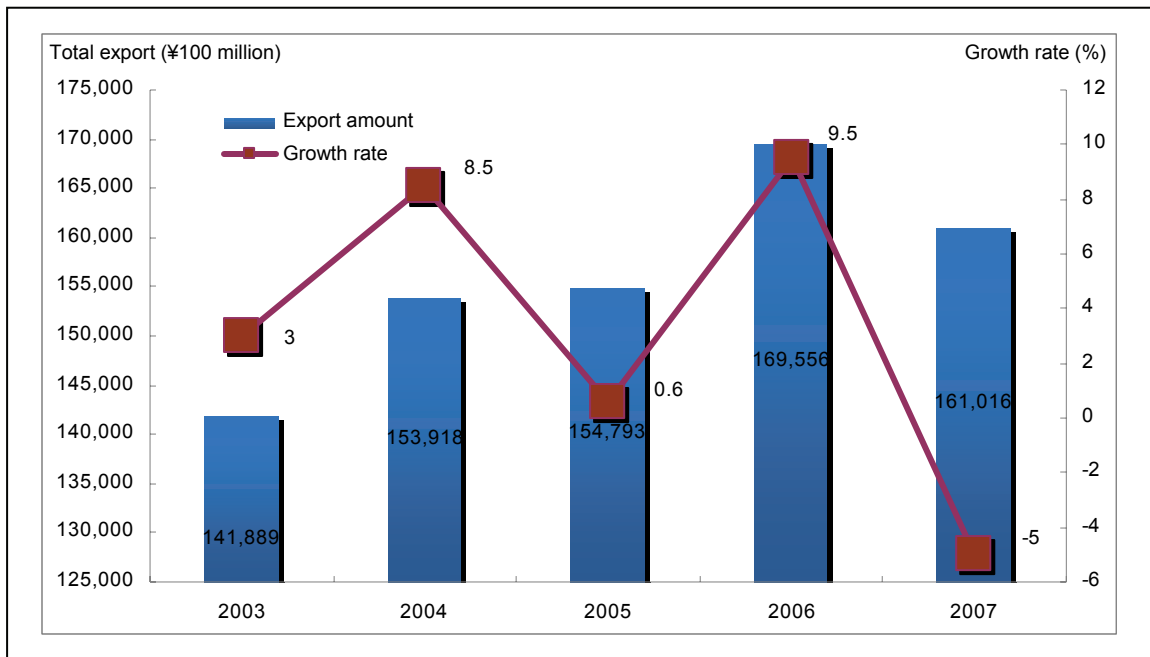


Note: Growth rate figures are those as compared with the previous year.

Source: Same as that for Fig. 1.4.1.

(3) Situation of the export of electric machines

Figure 1.4.3 shows the situation of the amount and growth rate (year-on-year) of the export of electric machines from 2003 to 2007. As this figure indicates, the export of electric machines was ¥15 trillion or so until 2005 and increased to almost ¥17 trillion in 2006. But in 2007, the export fell to a ¥16 trillion level and the growth rate was -5%. This situation suggests that while the export of the electronic parts and device industry increased, external demand for household electric appliances and other electric machine products began to suffer a slower growth. Moreover, this industry has been faced with ever intensifying international competition in the field of digital products and semiconductors, and it is considered that the competitiveness of Japanese businesses has become a more important problem. In the future, this industry will be required to adopt the strategy of developing new products in new industrial areas, especially the area of products for a low-carbon society, such as solar cells and fuel cells, building up a domestic manufacturing system of these products and reducing fluctuations in the supply of and demand for cellular phones and liquid crystal products. The introduction of electronics into automobiles is also a promising field for export (mostly automotive parts) for the electric machine industry.

Fig. 1.4.3 Situation of the export of electric machines

Note: Growth rate figures are those as compared with the previous year.

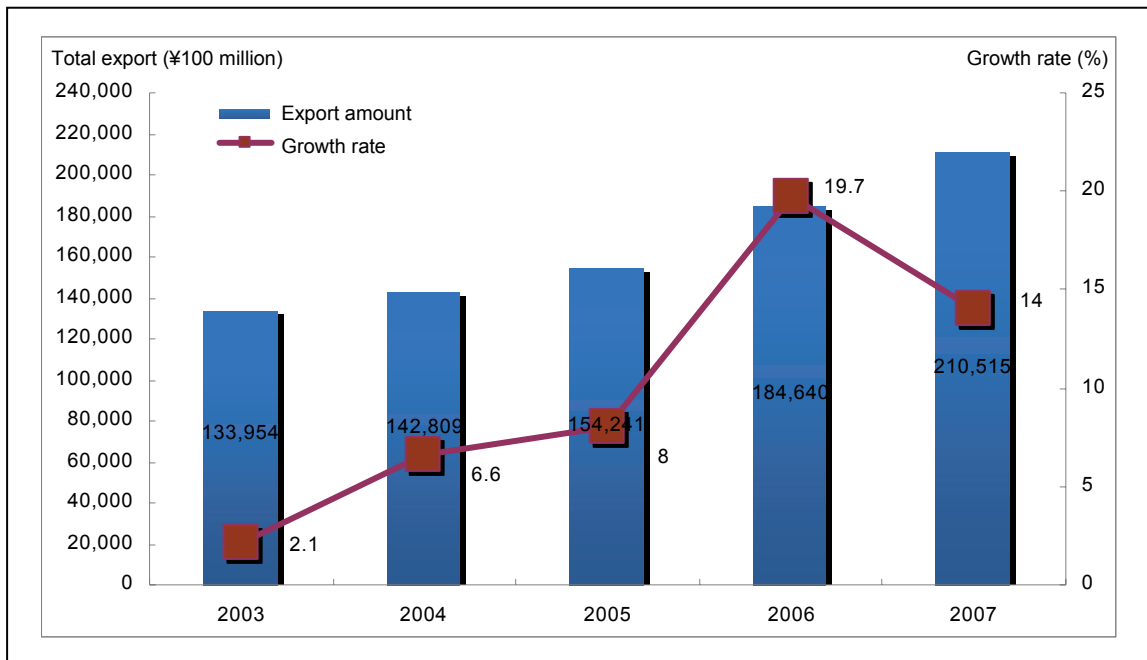
Source: Same as that for Fig. 1.4.1.

(4) Situation of the export of transportation machines

Figure 1.4.4 shows the situation of the amount and growth rate (year-on-year) of the export of transportation machines from 2003 to 2007. As seen in this figure, the export of transportation machines recorded a steady growth until 2007; in 2006, the export amount reached over ¥18,400.0 billion and the growth rate rose to almost 20%. The growth rate in 2007 was 14.0%, a little lower than that in 2006, but was still on a high level, and the export amount expanded to a ¥21 trillion mark. The factors contributing to the strong export competitiveness of this industry are the progress of motorization in BRIC and other newly industrialized areas and the effective strategy of Japanese automakers for introducing new models attractive mainly in fuel efficiency, price and design.

In expectation of future increase in global demand for compact cars to meet growing needs for eco-friendly products, Japanese automakers will focus on the development of models with higher fuel efficiency. In addition, the use of lighter materials, adoption of common parts, development of eco-friendly cars represented by hybrid cars and stimulation of demand for large-sized cars, mainly clean diesel engine vehicles, will become more important subjects. Anyway it is certain that Japanese automakers will reinforce the introduction of regional cars suited for the three giant markets, the U.S. market, the EU market and the newly industrialized market. However, it cannot be ignored that the occurrence of the subprime loan problem in the U.S. in December 2007 has begun to cool down the American market rapidly. Thus it will become an important task for automobile manufacturers in Japan, whose main market is in the U.S., to forecast the future market trend as precisely as possible.

Fig. 1.4.4 Situation of the export of transportation machines



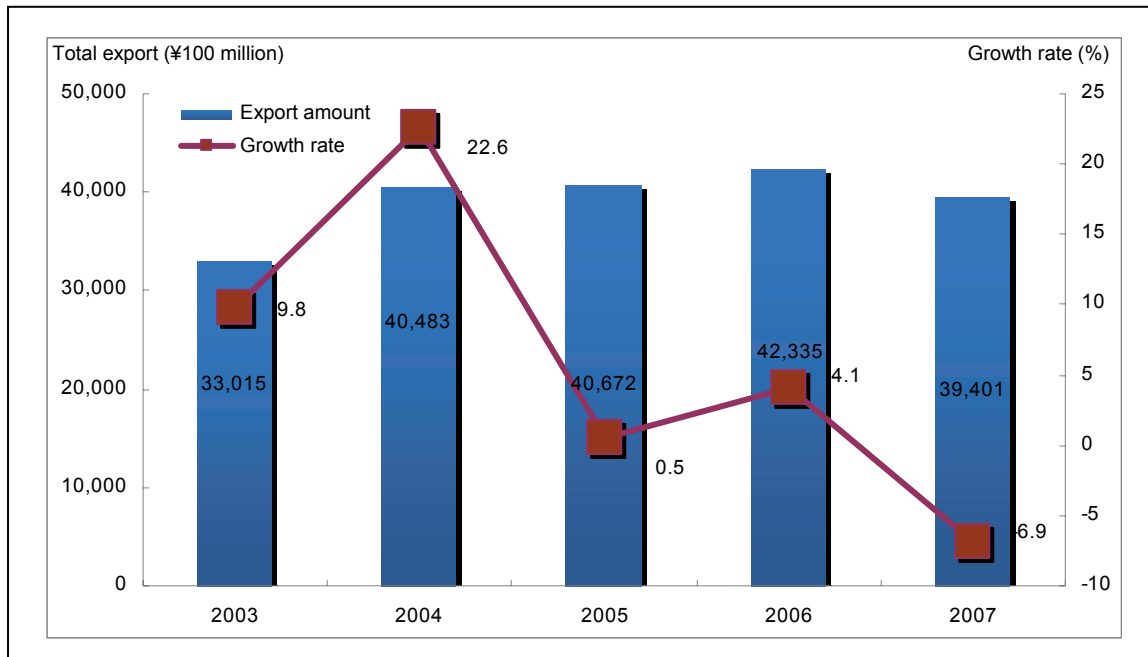
Note: Growth rate figures are those as compared with the previous year.

Source: Same as that for Fig. 1.4.1.

(5) Situation of the export of precision machines

Figure 1.4.5 shows the situation of the amount and growth rate (year-on-year) of the export of precision machines from 2003 to 2007. As this figure indicates, the export of precision machines recorded a high growth rate of 22.6% in 2004 but thereafter continued a small increase until 2006. Then in 2007, the growth rate showed a downward trend with -6.9% and the export amount was less than ¥4 trillion. A probable reason for this is the fact that while the export of analytical instruments grew for semiconductor plants in the U.S., the sales of precision measuring instruments, especially cylinder gauges and digital scales, for Southeast Asia suffered a decline. One of the future tasks of this industry will be how it can expand the market for interchangeable lenses for cameras, especially single-lens reflex digital cameras, which have done well in Japan, in overseas markets. In any event, the creation of overseas demand for products integrated into equipment and machines for measurement and inspection has been linked to the activities of the electronic parts and device industry, and so the field of these products will be greatly affected by the situation of mainly semiconductors and semiconductor manufacturing machines in the future, too. Considering that global awareness of environmental issues is growing and that needs for food safety and security are increasing, there are also high expectations for greater demand for inspection devices and their parts in environment- and food-related fields in overseas markets.

Fig. 1.4.5 Situation of the export of precision machines



Note: Growth rate figures are those as compared with the previous year.

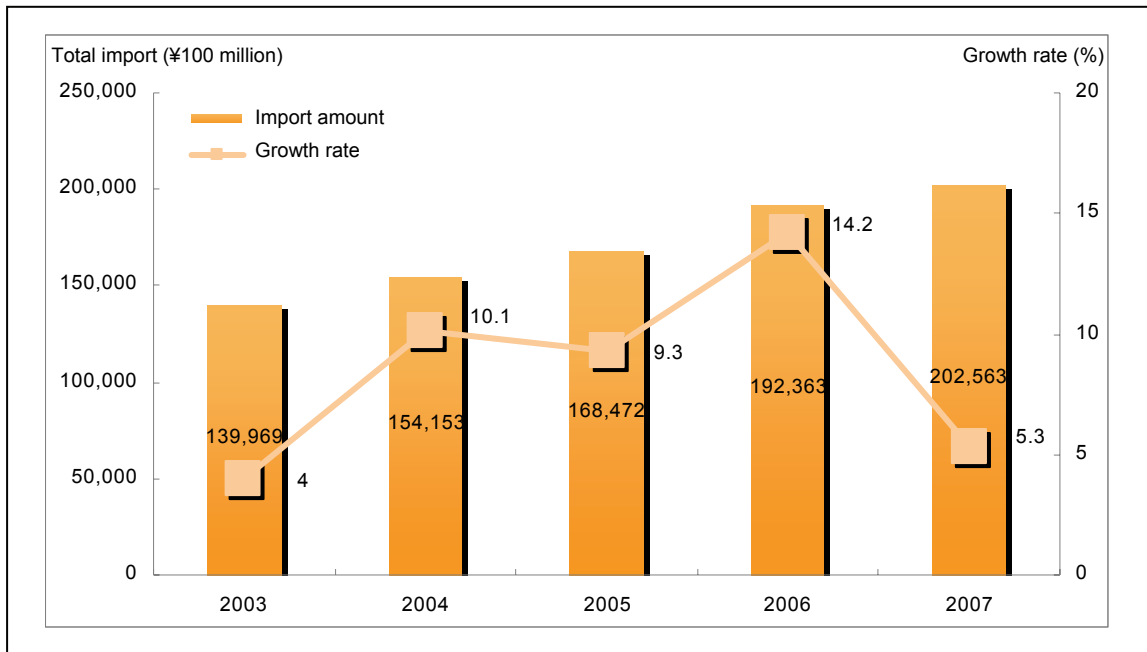
Source: Same as that for Fig. 1.4.1.

1.5 Situation of the import of the machine industry

(1) Situation of the import of the entire machine industry

Figure 1.5.1 shows the amount and growth rate (year-on-year) of the import of machines and equipment (general machines, electric machines, transportation machines and precision machines) from 2003 to 2007. As seen in this figure, the import of machines and equipment indicated a steady upward trend in 2003 and after but the growth rate in 2007 was only 5.3%, suggesting that the import showed some signs of decline. However, the import amount was less than ¥14 trillion in 2003 and exceeded ¥20 trillion in 2007, which will indicate that global supply chains for machines and equipment have been formed steadily. In the import amount of machines and equipment by exporting country, China ranked first with about ¥6,200.0 billion (30.7%), followed by the U.S. with about ¥3,900.0 billion (19.3%) and South Korea with about ¥1,600.0 billion (7.8%); the amount of import from China accounted for about 30% of all. In the growth rate, too, China had a very high level of +10.49%. The growth rate was +1.03% for the U.S. and -0.10% for South Korea.

Fig. 1.5.1 Situation of the import of machines and equipment

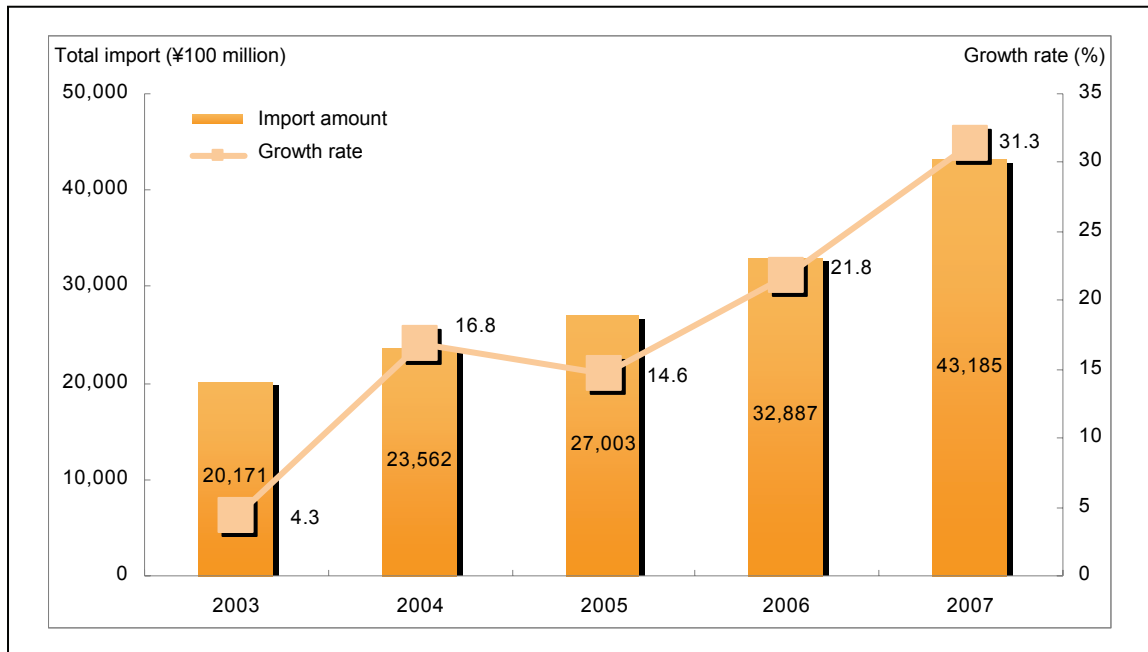


Note: Growth rate figures are those as compared with the previous year.

Source: Same as that for Fig. 1.4.1.

(2) Situation of the import of general machines

Figure 1.5.2 shows the situation of the amount and growth rate (year-on-year) of the import of general machines from 2003 to 2007. As this figure indicates, the import of general machines was on a ¥2 trillion level in 2003 and continued a moderate increase until 2005. Then the import showed a marked upward trend and exceeded ¥3 trillion in 2006 and further rose to ¥4,300.0 billion in 2007. The growth rate in 2007 was as high as 31.3%. The main reason for this is the fact that is triggered by active capital investment in Japan, the ratio of procurement from abroad increased in the field of general machines. In the import amount of general machines by exporting country, China took first place with about ¥1,200.0 billion, followed by the U.S. with ¥1,111.3 billion. China accounted for 27.9% of the total import of general machines to Japan and the U.S., 25.8%. As just mentioned, the import amount from the two countries was almost equal, but the growth rate differed greatly between them. While the growth rate of China in 2007 stood at as high as +63.02%, that of the U.S. was only +9.48%. Germany ranked third although the scale was far smaller than the two countries: in 2007, the import from Germany amounted to almost ¥380.0 billion (8.8%). But the growth rate of the import from Germany was nearly 23.6% in 2007, suggesting that the import of general machines from this country will continue to increase in the future.

Fig. 1.5.2 Situation of the import of general machines

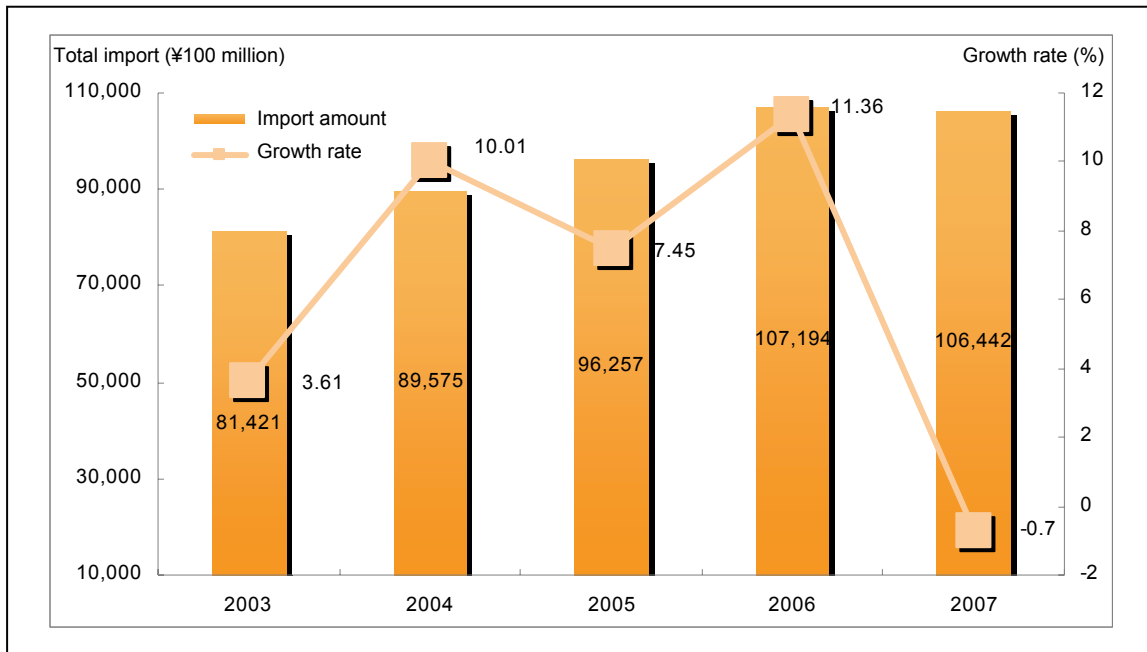
Note: Growth rate figures are those as compared with the previous year.

Source: Same as that for Fig. 1.4.1.

(3) Situation of the import of electric machines

Figure 1.5.3 shows the situation of the amount and growth rate (year-on-year) of the import of electric machines from 2003 to 2007. As seen in this figure, the import of electric machines was on a ¥8,100.0 billion level in 2003 and was on the increase thereafter: the import rapidly rose to almost ¥9 trillion in 2004 and a little over ¥9,600.0 billion in 2005 and reached just over ¥10,700.0 billion in 2006. But in 2007, the import amount was a little over ¥10,600.0 billion, below the level in 2006, and the growth rate was -0.7%. From this situation, it could be considered that the import of electric machines entered a period of stabilization in 2007. The import of electric machines rapidly increased at least for these five years, but it is supposed that demand for completed Japanese-made products was stimulated with an economic recovery in the domestic market and that the differentiation between relatively low-priced overseas products and high-quality domestic ones reached its limit for the time being. It can also be considered that due to an economic recovery, the market (demand) began to shift to domestic electric machines, which have a higher performance and more functions and can save energy consumption more efficiently. In the import amount of electric machines by exporting country, China won first place with a bit over ¥4,260.0 billion (40.0%), followed by the U.S. with just over ¥1,190.0 billion (11.2%) and Taiwan with more than ¥1,080.0 billion (10.2%). But the growth rate was lower for all of the three countries: +1.96% for China, -6.77% for the U.S. and -5.73% for Taiwan.

Fig. 1.5.3 Situation of the import of electric machines



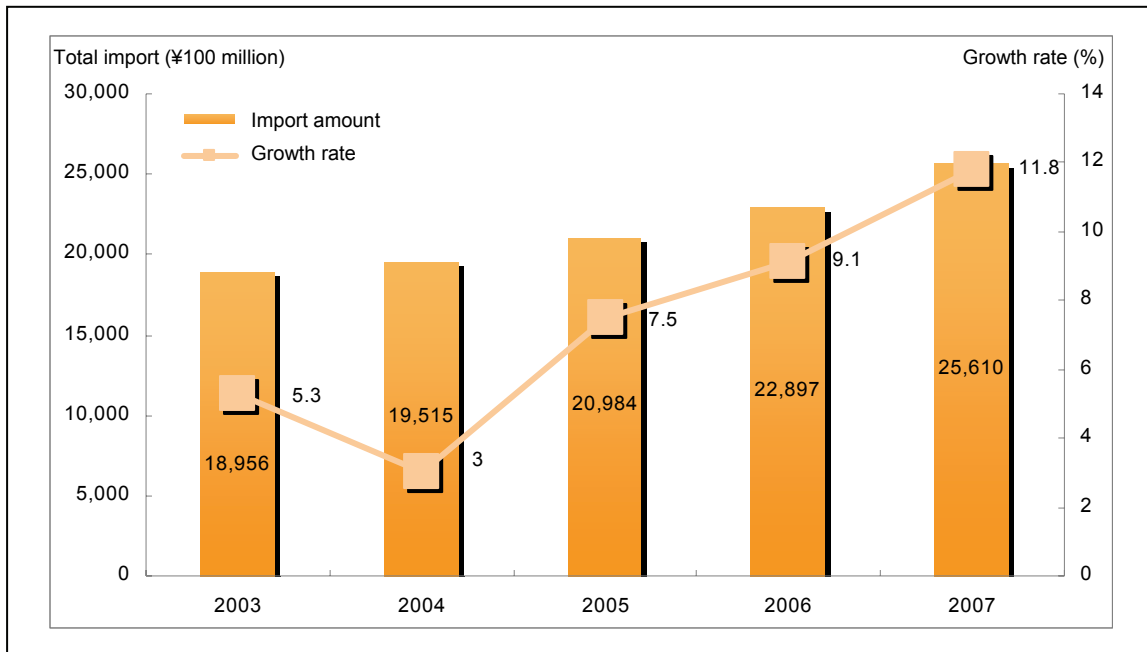
Note: Growth rate figures are those as compared with the previous year.

Source: Same as that for Fig. 1.4.1.

(4) Situation of the import of transportation machines

Figure 1.5.4 shows the amount and growth rate (year-on-year) of the import of transportation machines from 2003 to 2007. As this figure indicates, the import of transportation machines was almost ¥1,900.0 billion in 2003, increased slowly after that and began to grow rapidly in 2006, recording a little under ¥2,300.0 billion in 2006 and ¥2,560.0 billion in 2007. The growth rate was 11.8%, the sharpest increase in the five years. This upward trend was supported by the active reimport of passenger cars (finished products). In the import amount of transportation machines by exporting country, the U.S. ranked first with the import amount of just over ¥773.0 billion and accounted for 30.2% of the total import. The U.S. had a relatively high growth rate of +13.48%, too. These figures suggest that the import of finished cars manufactured in the U.S. greatly affected the entire import of transportation machines in Japan. Germany gained second place with an import amount of about ¥551.0 billion and a share of 21.5% but its growth rate was -2.78%, indicating a remarkable downward trend. The third-ranking China registered an import amount of about ¥276.0 billion and a share of 10.8% and achieved a high growth rate of 18.86%. Thus the import from China in the transportation industry is highly likely to increase in the years ahead, too. But imports from China will be limited to transportation machine-related ones rather than finished products of passenger cars and other vehicles.

Fig. 1.5.4 Situation of the import of transportation machines



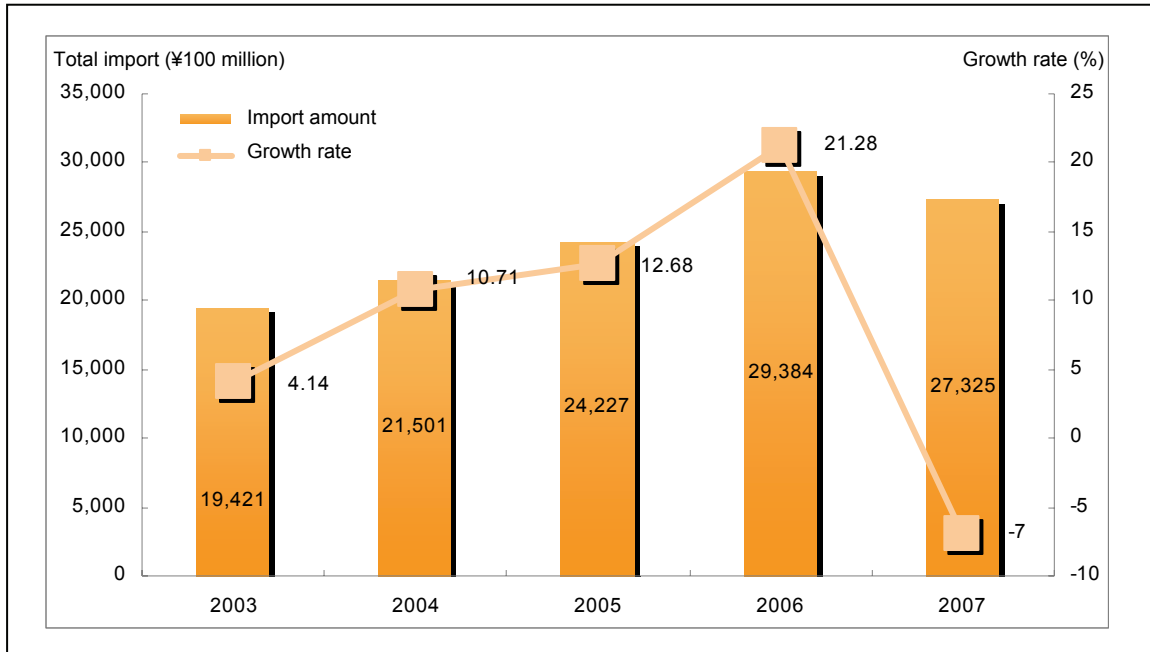
Note: Growth rate figures are those as compared with the previous year.

Source: Same as that for Fig. 1.4.1.

(5) Situation of the import of precision machines

Figure 1.5.5 shows the amount and growth rate (year-on-year) of the import of precision machines from 2003 to 2007. As seen in this figure, the import of precision machines stood at a little over ¥1,900.0 billion in 2003 but continued a rapid growth after that, registering about ¥2,150.0 billion in 2004, just over ¥2,400.0 billion in 2005 and more than ¥2,900.0 billion in 2006. The growth rate in 2006 was as high as +21.28%. But in 2007, the import amount was just over ¥2,700.0 billion, showing an downward trend first in these five years with the growth rate of -7.0%. Behind this was the fact that capital investment in precision machines for semiconductor manufacturing equipment and the like reached a ceiling. But the production bases of next-generation memories, liquid crystal panels and the like will be constructed in Japan in the coming years, and so the import of related precision machines may grow again. In the import amount of precision machines by exporting country in 2007, the U.S. took first place with about ¥832.0 billion (30.5%), followed by China with about ¥475.4 billion (17.4%) and Switzerland with about ¥227.1 billion (8.3%). These figures indicate that China became more important in the field of precision machines, too. But the growth rate was negative for all of these countries: -6.9% for the U.S., -0.22% for China and -1.98 for Switzerland. China recorded a high growth rate of 12% in 2006 but took a downward turn in 2007 although the decline was small.

Fig. 1.5.5 Situation of import of precision machines



Note: Growth rate figures are those as compared with the previous year.

Source: Same as that for Fig. 1.4.1.