

Flagging Vigor

The electronics and electrical equipment industry's ¥30,278.7 billion in production in fiscal 1996 represents an expansion of 3.9% over the previous year and although the growth rate has been sluggish it should have remained firm. In the semiconductor sector, which served as an engine for domestic production expansion in fiscal 1995, the collapse of primary DRAM market depressed overall production value, but this was offset by satisfactory production of telecommunications and personal computer equipment, resulting in sustained positive growth overall. With exchange rates tending toward a weaker yen than in fiscal 1995, the slump in exports of home appliances and semiconductors eased and exports remained stable overall. With increased demand for personal computer and mobile telecommunications equipment, domestic consumption continued to demonstrate favorable growth, but imports, including reverse imports by Japanese-affiliated manufacturers, continued to expand as vigorously as ever, registering 30% growth over the previous year.

In fiscal 1997, domestic production is expected to reach ¥30,818.5 billion, exceeding the year before by 1.8%, sluggish growth compared to the 3.9% of FY1996. This is because DRAM markets, which depressed domestic production in fiscal 1996, will stabilize and semiconductor export volumes will revert to the plus column. This should lead to positive overall export growth of around 3% compared to the year before. And the expansion in demand for mobile telecommunications equipment that strongly propelled domestic demand in fiscal 1996 will slow, resulting in a substantial slowdown in overall domestic demand growth compared to 1996. This will be coupled with a continued underlying expansion in imports.

FY97 Electronics and Electrical Equipment Industry Supply and Demand Trends

Unit: ¥1 billion

	Production	Exports	Domestic Demand	Imports
Private sector electronics	1,766.0	1,120.0	1,225.0	579.0
	-14.5	-8.4	-7.2	21.4
Private sector electrical equipment	3,243.0	284.0	3,200.0	241.0
	-6.2	-1.5	-4.7	19.1
Commercial sector electronics	12,788.5	2,790.7	13,155.6	3,157.8
	4.2	-4.1	11.2	28.2
Data processing equipment	6,102.0	1,662.0	6,580.0	2,140.0
	3.5	-1.8	11.6	26.4
Telecommunications equipment	4,791.0	390.0	4,960.0	559.0
	4.0	-11.0	8.3	36.4
Commercial sector electrical equipment	3,581.0	1,366.0	2,820.0	605.0
	-0.3	2.7	2.1	20.5
Electronic components	9,228.0	8,320.0	4,697.0	3,789.0
	5.0	8.6	8.8	18.6
Integrated components	3,953.0	2,820.0	2,902.0	1,769.0
	7.1	13.4	7.5	18.4
Total	30,818.5	14,000.7	25,169.6	8,351.8
	1.8	3.4	6.4	20.9

Note: 2nd line figures represent rate of year-on-year growth (%)

Source: Industrial Bank of Japan

Continued slump in home appliance manufacturing

In fiscal 1996, the double-digit decline in private-sector electronics production compared to the previous year continued. This was due to a continued drop in retail prices, declining exports and increasing imports on the one hand and stagnating domestic demand for audiovisual equipment in the latter half of the year after favorable quantitative growth in the first half, among other factors. Further, although the weaker yen had an impact on exports, reducing the negative margin, the declining trend remained unchecked and exports fell 4.2% compared to the year before.

Domestic shipments of air conditioners, the mainstay of the private sector appliances, remained strong in the first half of fiscal 1996, as in 1995, and on an actual demand basis the approximately 7.8 million units shipped during the FY96 freeze (October 1995 to September 1996) represented the highest level ever reached. However, growth in domestic shipments lagged in the latter half of the year.

Private-sector electronics production in fiscal 1997 should show a double-digit decline, as in the year before. Because a lull in replacement demand that pushed up the shipments for most audiovisual equipment in fiscal 1995 and 1996 is anticipated, domestic demand will decline by an even greater margin by value. Exports will continue to fall, but because there are indications that there will be a lull in the shift of Japanese manufacturing shifts to Asian manufacturing bases, the margin of the decline in exports should gradually shrink over the medium term.

Although FY1997 growth in demand for air conditioning equipment is not expected to be as strong as in FY1996, the demand base has expanded as consumers have installed air conditioners in more rooms in homes, which should result in moderate demand, primarily for compact units.

Rapid growth in industrial electronics

With the slump in domestic semiconductor production, due to worsening DRAM markets, the electronics and electrical equipment industry was sus-

tained by industrial electronics components used in personal computer and mobile telecommunications equipment in fiscal 1996. In 1996, domestic industrial electronics production grew 18.4% compared to the year before, making it the only sector to turn in double-digit growth. Domestic demand for telecommunications equipment, particularly mobile telecommunications gear, was quite strong. Buoyed by rapid interim growth in the number of cellular phone and PHS (personal handyphone system) subscribers and demand for handsets coupled with an increase in replacement demand, the overall mobile telecommunications sector turned in a strong expansion of more than 50% compared to the previous year. Mobile telecommunications service providers' aggressive plans for investment in base stations, exchanges and other infrastructure was also noteworthy.

Meanwhile, demand for wire communications equipment, primarily networking equipment, also remained strong. Amid an overall lack of enthusiasm for capital investment in Japan, investment in information processing technology designed for office networking remained lively and there should continue to be a strong foundation for networking equipment demand over the midterm.

Domestic demand for personal computers should have remained strong in FY1996, as in FY1995. In fiscal 1995, approximately 5.7 million personal computers were shipped in Japan, an increase of 70% over the year before. Although the growth rate should have slowed in 1996, demand is expected to have expanded favorably to around 7.5 million units, or 32% more than the previous year.

Overseas manufacturing of personal computer peripherals and telecommunications equipment have both increased, and industrial electronics exports have continued to lag. On the other hand, the upward trend in personal computer and networking equipment imports has remained unchanged.

Fiscal 1997 industrial electronics production is expected to slow substantially to growth of around 4% compared to the year before. There is a great possi-

bility that a lull in demand for mobile telecommunications equipment will result in a broad decline in growth in manufacturing targeted at this sector. While the mobile telecommunications sector will slump, steady growth is anticipated in wire communications equipment in FY1997. There will be especially solid corporate demand for intranet and ISDN (Integrated Services Digital Network) equipment, which should sustain production of switch carrier equipment.

Although domestic personal computer shipments have been sluggish for two years in succession, they should remain strong in fiscal 1997, with an anticipated market expansion of 20% over the last fiscal year, or around 9 million units.

Rapidly falling semiconductor prices slam brakes on electronics and electrical equipment industry

Semiconductor manufacturing trends now have an extremely large impact on domestic electronics and electrical equipment industry production. In fiscal 1995, the contribution to the overall increase in the industry's domestic production was 40%.

Conversely, the semiconductor sector thwarted the overall electronics and electrical equipment industry in fiscal 1996. That is, fiscal 1996 domestic production of integrated circuits fell 10% by value compared to the fiscal year before and this abrupt decline ended up offsetting the positive factors in commercial sector electronics.

A worsening demand balance in the market for DRAMs, Japanese manufacturers' main semiconductor product line, from early 1996 resulted in drastically declining prices. The main factor for disruption in the market for DRAMs was a growing demand gap brought on by a misreading of demand.

In terms of volume, or total bits, demand in the DRAMs market in fiscal 1996 is expected to have expanded by around 60% compared to the last fiscal year, sustained by firm growth in per-

sonal computer demand, but because unit prices (per bit) fell up to 30% compared to the year before, demand will have shrunk by around half in terms of value. DRAMs' share of domestic semiconductor production in Japan was around 30% in fiscal 1995, and because markets for semiconductors other than DRAMs will have been relatively strong, the collapse in DRAM markets will have had less impact on overall semiconductor production, but nearly double-digit negative growth would have nonetheless been unavoidable.

There was considerable turmoil in DRAM markets in fiscal 1996, but the supply and demand gap should ease from the first half through the second half of fiscal 1997. A steady expansion in demand would be the primary reason that could be suggested for this. Although the Christmas retail war at the end of 1996 ended up as a misfire for the U.S. personal computer market, worldwide PC markets are generally expanding smoothly. Falling DRAM prices have yielded additional benefits in that the average amount of memory stored in each personal computer has grown, and it is thought that DRAM demand volume in terms of total bits will steadily expand in future. Second, suppliers have altered their stance. Because DRAM manufacturers very much want to avoid a further market collapse in terms of earnings, it is expected that they will adjust supplies to appropriate levels.

As a result, DRAM prices are not expected to drop as drastically as in fiscal 1996 and a return to the trend curve of the past, that is, annual price cuts of around 20%, or what could be described as moderate, is anticipated. Moreover, demand volume in terms of total bits is expected to continue expanding substantially, sustained by firm personal computer demand growth. And, because stable demand expansion is anticipated for products other than DRAMs, domestic semiconductor production will rebound from the negative growth of fiscal 1996. Year-on-year growth of around 10% is forecast. ■

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