Compiled by the Industrial Research Department of the Industrial Bank of Japan, Ltd. Notes: The fiscal year is from April to March. All exchange rates are based on ¥165/S.

## Electrical Machinery

## Export Profits Evaporate

he electric machinery industry was affected more seriously than any other industry by the yen's steep rise against the U.S. dollar in 1986. The reason is that the industry had achieved a high growth level thanks to the expansion of exports, with its export ratio exceeding 50%.

In the field of industrial electric machinery—heavy-duty electric machinery—domestic demand was relatively firm, while exports plunged. In domestic demand, equipment investment carried out earlier than planned by electric power companies in response to a request from the government pushing its reflationary package was a major factor in the past year. The power companies invested mainly in transformers, not in large-scale power generators.

Exports of industrial electric machinery fared very badly as a result of a fast decline in price competitiveness brought on by the yen's steep appreciation, although there were some plant exports to developing countries. To cope with the situation, industrial electric machine makers made every effort to cut costs, for instance by procuring parts overseas and discontinuing overtime work. However, the cut in costs through such efforts was largely canceled out by the blunting of the competitive edge.

In the consumer electronic and electric appliance sector, large-sized color TVs made an unexpectedly big hit on the domestic market. Video disks, compact disks and other audio-visual products

and microwave ovens also sold well. Middle-market video cassette recorders (VCRs) enjoyed good demand due to reduced prices. High-grade VCRs with high-fidelity functions also were very popular among consumers. Multifunction and high value-added new products, such as refrigerators with built-in microwave ovens and minicomponent stereos with an answering machine-telephone were among other strong sellers.

In sharp contrast with the brisk domestic demand, however, exports of consumer electronic and electric appliances slowed down markedly due mainly to three factors—the decline in dollar-price competitiveness caused by the strong yen, intensified trade friction and a slump in shipments to China.

Under China's modernization policy, exports of home appliances, such as color TVs, refrigerators and washing machines, to that country trebled in 1984 and doubled in 1985. However, in the face of a rapid decline in foreign exchange reserves, the Chinese government has virtually suspended the import of home electric appliances since early 1986.

As a result, Japan's total exports in value of color TVs, refrigerators and washing machines suffered a 40–50% setback. In the case of VCRs, the main export item, about 85% of annual output is accounted for by exports. The yen value of VCR exports was down by more than 10% in 1986 from the previous year, although the number of units exported was up 20%. As the yen appreciated, Japanese

manufacturers failed to raise their export prices in dollar terms sufficiently in the face of intensifying competition from Korean makers. Worse still, the stocks of unsold VCRs in the United States, the No. 1 export market, have increased to nearly 3 million units.

The deteriorating environment for export trade is forcing manufacturers to make an all-out effort to reduce costs by buying parts and components overseas and expanding overseas production. Yet an "unprecedented" profit setback seems inevitable in fiscal 1986.

The business outlook for 1987 is far from bright for industrial electric machinery. Domestic demand cannot be expected to increase appreciably. With the strong yen likely to stay, there will be hardly any factor to brighten export prospects.

Heavy-duty electric machinery makers will step up investment to boost productivity and to make themselves more high-tech oriented for the sake of their own survival. During that process, natural selection will get under way among them.

In the consumer electronic products and electric appliance sector domestic demand will probably be firm in 1987 as it was in 1986. New multifunction and higher-grade products will be developed to attract consumer attention. Liquid crystal TVs and camcorders (camera-VCRs) will probably become more popular. Further, a digital audio tape recorder (DAT) will also make its debut.

However, low-priced small TVs and radio-cassette tape recorder imports from South Korea and Southeast Asian countries will increase in the coming year. They will be supplied either under Japanese brands on an OEM (original equipment manufacture) basis or under the brands of Asian makers.

Exports from Japan will be centered on high value-added products. The production of low-priced products will gradually be shifted to Southeast Asia and that of "trade friction" products to the U.S. and Europe. In concert with such moves, a "hollowing" of the industry will likely come to the fore.

**Output and Exports of Electronic & Electric Machinery** 

(¥ hillion

	FY 1986 (estimate)			FY 1987 (forecast)		
THE RESERVE AND A SAME	1st half	2nd half	Total	1st half	2nd half	Total
Consumer electronic products				1177.7-12		
Output	2,143.3	2,055.8	4,199.1	2,126.8	2,181.6	4,308.6
	(-11.6)	(-9.3)	(-10.5)	(-0.8)	(6.1)	(2.6)
Exports	1,298.5	1,157.1	2,455.6	1,240.1	1,256.6	2,496.7
	(-30.8)	(-21.3)	(-26.6)	(-4.5)	(8.6)	(1.7)
Consumer electric machinery			100	THE REAL PROPERTY.		
Output	1,134.1	1,137.7	2,271.8	1,165.4	1,206.7	2,372.1
	(-3.9)	(-0.7)	(-2.4)	(2.8)	(6.1)	(4.4)
Exports	200.2	184.9	385.1	188.6	190.1	378.7
	(-35.8)	(-21.4)	(-29.6)	(-5.8)	(2.8)	(-1.7)
Industrial electric machinery						
Output	1,354.2	1,360.6	2,714.8	1,327.9	1,301.6	2,629.5
	(1.2)	(-2.2)	(-0.5)	(-1.9)	(-4.3)	(-3.1)
Exports	488.2	468.5	956.7	440.8	446.8	887.6
	(-12.0)	(-11.4)	(-11.7)	(-9.7)	(-7.2)	(-8.5)

Notes: Figures in parentheses represent growth rate over previous year.

(Koichi Hasegawa, economist)