## Uneven Results Expected in Fiscal 1994

In addition to macroeconomic stagnation involving sluggish personal consumption and diminished private investment in facilities and equipment in fiscal 1993, the rapid strengthening of the ven led to a domestic production downturn in the electronics and electrical appliance industry, and a second consecutive year of negative growth, -5.1% compared to the previous year, is forecast. The reduction was particularly apparent in computer-related manufacturing production, hit by the effects of downsizing, and in private sector electronics and electrical machinery production due to increased overseas production.

Fiscal 1994 promises more of the same, as well as seeing sectors which will expand overseas, offering no opportunity for a recovery and a third straight year of negative growth (-0.5%) is predicted. The notable shift to overseas production in private sector electronics will probably lead to a correspondingly sharp decline in production. However, it is forecast that, along with satisfactory growth shown by electronics components such as integrated circuits, positive growth can be expected for air conditioners and other private sector electrical equipment, for which demand declined dramatically last year.

## Slack demand followed by strong ven in fiscal 1993

Primarily due to sharply declining exports, it is forecast that private sector electronics (audio-visual equipment) production will decline 11.9% compared to the previous fiscal year. Along with diminished individual consumption, a lack of major hit products and slumping replacement purchase demand has led to a continuing slump in domestic demand, or what has been called the "AV recession." Mini-disks, extra-wide TVs, high-definition TVs, and other new products have appeared, but a bit more time will be needed before they can play a role in a recovery.

With ven-based exports declining by value due to the strong ven and an expansion of overseas production, it is forecast that exports will decline sharply, by a bit less than 20 percent. Particularly for VTRs, whose overseas manufacturing ratio is low at just over 30% and whose export ratio is high, overseas production will probably be rapidly expanded in the future. Further, as typified by the case of color televisions, the advance of horizontal specialization in conjunction with the expansion of overseas manufacturing leads to increased reverse imports, primarily low-grade equipment, from ASEAN.

Because a sharp decline in both internal demand (sales of air conditioners, which are usually strong sellers, took a nosedive due to last year's cold summer) and external demand (the shift to overseas manufacturing) is forecast for private sector electrical equipment (white goods and home appliances), production will probably turn in negative growth (-6.5%). However, refrigerators and washing machines have maintained a strong position as necessities of life and there are continuing moves to add more value which should serve to restrain the decline in domestic demand, allowing recovery to the level of the previous fiscal year.

It is forecast that commercial electronics production will fall below the previous fiscal year's levels in both domestic demand and exports, registering a negative growth of -6.5% compared to the year before. With regard to domestic demand, computer and telecommunications equipment have both slumped due to the impact of corporate cutbacks in investments in information processing. The downturn in mainframe computers has been particularly dramatic due to the combined effects of downsizing and investment cuts by financial institutions, who are the primary users.

Personal computer and workstation sales, on the other hand, can be expected to equal those of the previous year



The trend in home appliances and other sectors is increasingly to shift production overseas. (Akihabara electronics district)

on the basis of units shipped due to the price war. Because printers, external storage devices, and other peripherals, as well as phones, fax machines, and other telecommunications equipment have been hit by the effects of the stronger yen and pressure to cut prices due to sharply increased competition, it is forecast that exports will decline by value. However, a revival of the U.S. computer industry may lead to an increase in information processing equipment on the basis of units shipped.

It is also forecast that production of commercial electrical equipment will register a highly negative growth (more than -5%). Even though demand from electric power companies has remained firm, a decline in domestic demand has occurred because of investment cutbacks by ordinary companies. Negative export growth is also forecast due to the effects of the strong yen.

Although general electronics components have continued to decline, internal and external demand for integrated circuits has pushed production of electronic components up and it is forecast that production will exceed the previous year by 0.2 percent. With regard to integrated circuits, four megabyte DRAM price stability and increased CPU memory capacity deriving from the boosted performance of personal computers have been factors in sustaining the favorable overall market trend and positive growth is forecast.

Also, with increased demand expected for large color displays, high growth is forecast for liquid crystal displays. Exports of integrated circuits, primarily to the U.S., have also trended favorably and should serve to sustain positive

growth. With sharply increased U.S. production of personal computers, exports of memory circuits, primarily four megabyte DRAMs, have trended satisfactorily. In addition to the shift to overseas manufacturing of electronics components, overseas production of home appliances is moving forward, and because the portion of electronics components manufactured overseas is not sufficient to cover local demand, exports of electronics components have been on an increasing trend.

## Continued slowdown in fiscal 1994

The scope of the private sector electronics production decline is shrinking, but a drop of a bit less than 5% compared to the previous year is expected. Although a recovery is foreseen in the latter half of 1994 due to expanded domestic demand for extra-wide TVs and other products, there will probably be a slight decline as the AV recession drags on throughout the year. Because overseas production is expected to continue increasing, a sharp drop in exports will probably be inevitable. In particular, the shift to overseas production, focusing on popular VTR models, will probably continue. For the time being there will likely be more instances of increases in overseas production of home appliance products in the form of boosted capacity at existing ASEAN plants. Because capital resources and manufacturing know-how have already been built up in ASEAN, investments there are highly efficient and production increases can be quickly achieved. However, companies which decided upon new factory construction in China and Indonesia will probably be the leading candidates.

In the area of private sector electrical equipment production, increased production of air conditioning equipment will probably contribute to a positive growth of 2.3 percent. With normal weather as a prerequisite, a large rebound in air conditioners should sustain and contribute to increased production. But with the impact of continuing increases of air conditioners manufactured in China and other overseas loca-

tions, broadly negative growth in exports is forecast.

While exports should revert to positive growth, commercial sector electronics production will probably be 0.8% less than the year before due to stagnant domestic demand. Regarding domestic demand related to computers, expanded demand is forecast for personal computers for educational institutions in conjunction with the development of social capital, but the downturn should continue to be large due to the impact of the mainframe computer slowdown

Positive growth in telecommunications equipment should be seen in the latter half through sustained demand after the liberalization of cellular phone sales in April 1994 which promoted lower prices. Mobile telecommunications is a sector that shows expanded mid-term growth prospects with the advent of personal handy phones. Slight increases in communications and computer equipment exports are forecast with a lull in the ven's rise, overseas telecommunications infrastructure demand, and stable demand in the U.S. personal computer industry. However, there has been increased overseas manufacturing in these sectors as well so the increase in exports will probably be limited. On the other hand, there should be a continued trend of peripheral imports from Taiwan, ASEAN and other sources.

With regard to industrial electrical equipment production, domestic demand should continue to lag due to peaked out demand on the part of electric power companies and a delayed recovery in private equipment investments, therefore a minus growth of 1.1% is forecast. Although competition with U.S. and other overseas manufacturers has been heating up, a slight increase in exports is forecast due to a lull in the yen's rise and firm overseas electric power infrastructure demand.

Production of electronics components should see a 1% increase over the previous year due to a boost from integrated circuits. Led by a recovery in domestic production components, demand should pick up and domestic demand for electronics equipment should recover more quickly than in other sectors. It is forecast that with the expansion of demand for four megabyte DRAMs for personal computers and workstations and an expected actual recovery by 16 megabyte DRAMs, integrated circuits will trend favorably.

Further, liquid crystal displays should continue to show solid growth. However, with expanded four megabyte DRAM manufacturing capabilities, supply and demand should ease and this will be an element in fears concerning declining prices. Positive growth is forecast for exports due to the lull in the yen's rise and stable demand for semiconductors in the U.S., but will probably halt at low levels due to sluggish personal computer demand in the U.S. and expanded local manufacturing of general electronic components.

(Hoshino Tsuyoshi, economist)

(Unit: ¥1 billion, %)

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		FY1993	FY1994	
Private sector electronics	Produced	2,990 (-11.9)	2,848 (-4.7)	
	Exported	1,715 (-19.3)	1,608 (-6.2)	
Private sector electrical equipment	Produced	2,570 (-6.5)	2,630 (2.3)	
	Exported	365 (-21.8)	359 (-1.6)	
Commercial sector electronics	Produced	8,845 (-6.5)	8,770 (-0.8)	
	Exported	3,085 (-6.6)	3,140 (1.8)	
Commercial sector electrical equipment	Produced	3,645 (-5.3)	3,605 (-1.1)	
	Exported	1,195 (-3.0)	1,225 (2.5)	
Electronic components	Produced	7,709 (0.2)	7,783 (1.0)	
	Exported	5,480 (0.6)	5,565 (1.6)	
Total	Produced	25,759 (-5.1)	25,636 (-0.5)	
	Exported	11,840 (-5.8)	11,897 (0.5)	