

# The Growing Information and Communications Industry

By Hamano Takayoshi

The Japanese economy, unable to shake off the extended "Heisei recession" of the early 90's, hit bottom in fall of 1993 and tentatively began a recovery, only to be brought down again in the spring of 1995. There have been three consecutive years of almost zero growth, and exasperation now grows with an economy which just does not seem to easily get back on its feet.

Though the Japanese government decided upon the sixth economic package on September 20, including a second largely revised budget during the recession, rapid recovery in fiscal 1995 will be difficult. Except, of course, for the information and communications industry, which includes products such as mobile telephones and personal computers, areas where growth is eye-opening. The 21st century will see a new multimedia society in which a large volume of information is exchanged at high speeds between various locations. Growth in this area is likely to have a positive effect not only on the current economic situation in Japan but well into the future.

## The mobile telephone and personal computer market

A home-use cordless telephone which can be carried outside and used as if it were a mobile telephone began servicing customers in Japan in July of this year. This is the Personal Handy Phone System (PHS). Cost of the phone service is one quarter that of mobile telephones which have now become quite popular in Japan, and sales of the new system are doing well. Interestingly enough, this seems to have caused a rise in sales of traditional mobile telephone systems (including car telephones) as well.

During fiscal 1994, mobile telephone sales doubled in comparison with the previous year, and in 1995 a similar rate of growth is continuing, with an average monthly sales volume between January and July reaching the 320,000 unit level. These figures represent



Cellular phones have been among the telecommunications industry's hottest selling items.

growth of three times that of the 120,000 units per month on average of the previous business year. There are worries that if growth continues at this pace a shortage in available mobile telephone numbers will occur, and in response, the Ministry of Posts and Telecommunications has decided to add the prefixes 080 and 090 to the 030 and 040 prefixes currently in use (a seven digit number is appended to these prefixes). The maximum number of mobile telephones which could be used had been 8.5 million units in the past, but has now been expanded to a total of 16 million units.

Meanwhile, personal computer sales are favorable as well. The Japan Electrical Appliance Chain Store Association (consisting of 71 chain stores which account for 40% of all Japan's electronics sales) reported that sales of televisions during the first half of 1995 topped all other products at 92.5 billion, while personal computers hit the number two spot at a total of 87.5 billion. Year-to-year growth rate for these products was 7.4% for televi-

sions and 36.1% for personal computers. If growth continues at this rate, annual sales of personal computers for 1995 may likely surpass those of televisions. One of the reasons for the brisk sales in personal computers is the trend toward lower prices, while increased use in schools and businesses, along with home use has brought a major increase in consumers of both laptops and full-size systems in Japan.

## Supporting the economy

According to research conducted by the Ministry of Posts and Telecommunications, sales of primary electronic communications businesses, companies which themselves install communications lines and provide a service such as NTT, Shin-Denden (DDI, IDO and so on), reached a total of ¥8,508,500 million during the 1994 business year, 9.8% above that of the previous year. Meanwhile, equipment investment plans made by primary electronic communications businesses during the current business year totals ¥3,158,300 million, up 16.7% from the



previous year. According to an Economic Planning Agency survey conducted in April of this year, equipment investment plans for industry overall has declined by 3.5% in comparison with the previous year, a figure which makes the activities of the communications industry especially prominent. Investment by Shin-Denden in PHS and long distance telephone service is especially large, growing 45.2% year-to-year. The scale of this investment exceeds that of Japan's two leading industries—automobiles are exceeded by 2.5 times and electrical machinery by ¥2,811,700 million. The industry now accounts for 8% of overall industrial equipment investment in Japan.

While growth in sales and equipment investment for primary electronic communications businesses is large, it accounts for only 1.8% of overall GDP in terms of sales, still behind that of automobiles at 4.1% and electrical machinery at 4.8%. Therefore, this activity is not enough to salvage the economy as a whole. At the same time, however, the information and communications industry includes the areas of information processing and service. Overall figures which include these areas are not available, but there is no doubt that together they can provide basic support for the economy. Without these industries, the economy would likely be much worse off.

Opinion is divided as to the extent to which equipment investment carried out by the information and communications industry can influence, or cause a ripple effect, of the sort experienced with other industries. The Ministry of Construction, not surprisingly, insists that public spending towards civil engineering projects has a much larger effect of this sort. In other words, investment in construction on a per-unit basis tends to have an influence on industries outside construction of 2.13 times within a period of three years after said investment has occurred. The Ministry of Posts and Telecommunications insists, however, that the ripple effect caused by equipment investment in the electronic communications and broadcasting industries is not as small

as one might think. The laying of optical fiber networks and other facilities for information communications gives birth to a whole new industry and socio-economic system. With the rise of an information-intensive society, the effects of these new developments become exponential. The debate here becomes increasingly important in the context of development of new economic measures, and it is important that proper analysis be carried out with the use of accurate data.

### **Toward a leading industry**

Will the information and communications industry become the new horse to draw the cart of Japan's economy, i.e., can it become the new leading industry? There is every reason to expect that this may occur.

Leading industries of Japan during its high-growth periods of the past have included the steel and chemical, and since the 1970's, electrical machinery, including semiconductors, has become what rice was to Japan in ancient times. And of course Japan's other major influential industry, automobiles. What all of these industries hold in common is their immense scale, and their tendency to have a ripple effect on other industries, helping these other industries to increase their own production volume. Finally, these types of industries tend to have a high growth rate, which is inclined to lead to an overall improvement in efficiency for the economy as a whole. In order for the information and communications industry to take on this same power of influence over others, new technologies which will allow installation of facilities such as optical fiber networks at low cost will be necessary, along with the development of new user technologies.

According to the economic white paper issued by the Japanese government in July of 1995, the only industries in Japan capable of operating at a healthy level with a yen rate of 102.18 to the dollar (the average rate in 1994) are the electrical machinery and automobile industries. As has already been mentioned, all of Japan's economic leaders of the past which have spurred

the economy on to grow have been export-oriented industries. The rapid rise of the yen has crippled many of Japan's industries, which now require major restructuring in industrial orientation and employment policies. On this point, the information and communications industry is an area not directly related to export-oriented trade and, therefore, is an area where growth shows little danger of leading to trade friction. Once the role of the information and communications industry in Japan's future becomes more clear in the context of an economy whose future is itself very much unclear, the corporate world could be infused with new energy, which would in turn lead to still further growth in information and communications.

The question is, "Can an industry not necessarily meant for export have the international competitiveness necessary for survival and growth?" For this purpose the easing of economic restrictions in the form of outmoded economic systems and business customs, obstacles to a multimedia society, is essential as a means of making way for growth in competitiveness of the information and communications industry. If these conditions are not met, it cannot grow to become the new leading industry without a considerable amount of time.

The high yen tendency has eased somewhat since the extremes of the spring of 1995, falling back somewhat in the summer from the ¥80-to-the-dollar level to around ¥100. However, we should make great efforts towards gaining investment opportunities, which could be made possible by eased economic restrictions resulting in a cutting back of domestic costs. There are fears in Japan that reforms might ease economic restrictions; however, without major structural reforms of this type, newer industries cannot be cultivated, and the result can only be the hollowing out of Japan's industries as corporations move to regions where lower production costs can be gained.

*Hamano Takayoshi is a news commentator at NHK (Japan Broadcasting Corporation).*