

Recently, the large Japanese companies have concentrated on the more expensive multi-band transistor radios while much of the production of 6-transistor AM radios has shifted to smaller Japanese companies as well as producers in Hong Kong and Taiwan.

It is important to note that Japanese producers such as Sony, Matsushita, Toshiba and Hitachi were the first to exploit the vast potential of transistors in home entertainment products. These imports stimulated the growth of the entire consumer electronic market.

The Japanese producers were also the leading innovators in developing tape recorders for home entertainment use. Before the advent of imports, the only tape recorders available in the United States were large expensive units beyond the reach of the average consumer. Sony Corporation was the first to introduce battery operated portable tape recorders suitable for the mass market. Tape recorder sales were expanded through Japanese development of improved tape heads and motors. This product innovation created a new market dimension which would not have come into being at the time were it not for imports. Japanese producers are now developing a new mass market for tape recorders with the cassette tape cartridge system originated by Phillips of Holland. Another new dimension is being added by Japanese companies such as Crown which have coupled the cassette to telephone answering systems.

The imported micro TV set is another example. At a time when major U.S. manufacturers were advertising their 19-inch sets weighing 30 or 40 pounds or more as "portable," merely by adding a luggage handle, the imports came into this market with a truly portable 8-inch and 5-inch television receiver. Matsushita has recently introduced a 1½-inch black and white set powered by flashlight batteries. These imports have opened an entirely new market. In addition to the large living room console, the average family can now afford a second or third television set for other rooms or for outdoor use.

Japanese companies were also the leaders in small screen color TV sets. Toshiba was the first to offer a 14-inch color set. On the other hand, domestic producers have generally concentrated on the larger screen sizes.

The latest development in this field is the new 7-inch color TV set recently introduced by Sony. The set is the first commercial application of the chromatron picture tube invented in 1951 by Dr. E. O. Lawrence, a physicist at the University of California. Next year, Sony will introduce a new small screen color TV set with the trinitron color tube—a new departure in picture tube design which provides substantial improvements in brightness and clarity.

Japanese companies have also played a leading role in the development of home video tape recorders. Through new technological improvements the cost is being steadily reduced and complete video tape recorder systems are now coming on the market at a price within the reach of the average consumer. They will undoubtedly open new marketing opportunities in the consumer electronic industry.

These Japanese innovations have not displaced domestic production since, in general, comparable products are not produced in this country. Thus it is incorrect to assume that every imported transistor radio, portable tape recorder, or small screen TV set, means one less item produced in the United States with a corresponding loss of employment. Were it not for imports, these products would not have been available to the American consumer since U.S. companies have generally concentrated in the larger and higher profit items.

In fact, the innovations of Japanese electronic producers have benefited the American economy. They have opened up new markets and generated demand for new products. The American consumer has benefited through the variety and range of choice available today. And these innovations have provided employment for thousands of Americans engaged in importing, distributing, merchandising and servicing of consumer electronic products from abroad. The vitality of this industry would be jeopardized by the quota legislation pending before your Committee.

It is evident that the domestic electronic industry does not require special protection from imports. The United States is the world leader in electronics. The industry has experienced a fantastic rate of growth since World War II. Total factory sales rose from \$1.7 billion in 1947 to \$22.1 billion in 1967. Between 1958 and 1967, total employment jumped from 650,000 to nearly 1.2 million workers. The United States has a substantially favorable balance of trade in electronic products. Total exports in 1967 amounted to nearly \$1.8 billion with imports of about \$830 million. Total exports increased by 22.7% between 1966 and 1967,