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1971

UNITED STATES TARIFF COMMISSION

TELEVISION RECEIVERS AND CERTAIN PARTS THEREOF

Report to the President on  
Investigation No. TEA-I-21  
Under Section 301(b)(1) of the Trade Expansion Act of 1962



TC Publication 436  
Washington, D. C.  
November 1971

**UNITED STATES TARIFF COMMISSION**

**Catherine Bedell, *Chairman***

**Joseph O. Parker, *Vice Chairman***

**Glenn W. Sutton**

**Will E. Leonard, Jr.**

**George M. Moore**

**J. Banks Young**

**Kenneth R. Mason, *Secretary***

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**Address all communications to  
United States Tariff Commission  
Washington, D. C. 20436**

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Note.--The whole of the Commission's report to the President, including the statistical appendix, may not be made public since it contains certain information that would result in the disclosure of the operations of individual concerns. This published report is the same as the report to the President, except that the above-mentioned information has been omitted. Such omissions are indicated by asterisks.





REPORT TO THE PRESIDENT

U.S. Tariff Commission,  
November 19, 1971.

To the President:

In accordance with section 301(f)(1) of the Trade Expansion Act of 1962 (76 Stat. 885), the U.S. Tariff Commission herein reports the results of an investigation made under section 301(b)(1) of that act, relating to television receivers and certain parts thereof.

The investigation was undertaken to determine whether television receivers and parts thereof, provided for in item 685.20 of the Tariff Schedules of the United States (TSUS), are, as a result in major part of concessions granted thereon under trade agreements, being imported into the United States in such increased quantities as to cause, or threaten to cause, serious injury to the domestic industry producing like or directly competitive products.

The investigation was instituted by the Commission on June 8, 1971, upon petition filed under section 301(a)(1) of the Trade Expansion Act of 1962 by three major unions (the International Association of Machinists and Aerospace Workers, AFL-CIO; the International Brotherhood of Electrical Workers, AFL-CIO; and the International Union of Electrical, Radio & Machine Workers AFL-CIO-CLC) representing workers in the U.S. television receiver industry. The petitioners alleged that imports of television receivers have seriously injured the U.S. industry that produces like or directly competitive articles and that a restoration of the 1930 rate of duty (35 percent ad valorem) is necessary to remedy such injury.

Public notice of the institution of the investigation and of a public hearing to be held in connection therewith was given in the Federal Register of June 12, 1971 (36 F.R. 11491). On August 20, 1971, the Commission postponed the date of the hearing from August 24 to October 6, 1971. Notice of the postponement was published in the Federal Register of August 24, 1971 (36 F.R. 16614). The hearing was held October 6-13, 1971. All interested parties were afforded opportunity to be present, to produce evidence, and to be heard. A transcript of the hearing and copies of briefs submitted by interested parties in connection with the investigation are attached.

On March 4, 1971, the Tariff Commission advised the Secretary of the Treasury of its unanimous determination that an industry in the United States was being injured by reason of the importation of television receiving sets, monochrome and color, from Japan at less than fair value within the meaning of the Antidumping Act, 1921, as amended. As of November 1, 1971, the Treasury Department had not assessed dumping duties on the less-than-fair-value imports; however, customs officials were continuing to compile and analyze data concerning these imports in order that they might properly assess such duties.

Since June 1970 the Commission has conducted three different investigations involving imports of television receivers and 19 investigations involving imports of television receiver parts. The parts involved in these investigations include articles entered under TSUS item 685.20, which covers parts of television receivers that are not specially provided for elsewhere in the TSUS (tuners,

deflection components, and so forth), as well as those that are provided for by name under other TSUS item numbers (capacitors, receiving tubes, and so forth). These recent investigations by the Commission include four that were conducted under the Antidumping Act and four firm and 14 worker investigations conducted under sections 301(c)(1) and (2) of the Trade Expansion Act of 1962. A list of the investigations, including the articles involved and the Commissioners' findings, is shown in table 1.

#### Finding of the Commission

On the basis of its investigation, the Commission finds (Commissioner Moore dissenting) that television receivers and parts thereof provided for in item 685.20 of the TSUS are not, as a result in major part of concessions granted under trade agreements, being imported into the United States in such increased quantities as to cause or threaten to cause, serious injury to the domestic industry producing like or directly competitive products.

Views of Chairman Bedell, Vice Chairman Parker,  
and Commissioner Young

This statement expresses our views for our negative determination under section 301(b) of the Trade Expansion Act of 1962 in this industry investigation made upon petition of three major labor unions representing a substantial number of the workers in the U.S. television receiver industry.

Our determination is in the negative for the reason that all of the statutory conditions prerequisite to an affirmative determination are not satisfied.

Television receivers are being imported into the United States in increased quantities. Import data show that television receivers from all sources have increased in every year from negligible quantities in 1961 to over 4.5 million receivers in 1970; imports during January-June 1971 indicate a continuing increase. Although television receivers are being imported in increased quantities, it is our opinion that the increase in imports is not "as a result in major part of concessions granted under trade agreements" as required by section 301(b)(1) of the Act. Failure to meet this statutory condition is the basis of our negative determination.

The import duty applicable to television receivers has been reduced on successive occasions in trade agreements, the latest of which was the Kennedy Round of negotiations concluded in 1967. A number of other factors, however, have affected international trade and competition in the

United States between foreign receivers and those produced in the United States.

A more than significant contribution to the increase in imports of television receivers occurred under the provisions of item 807.00 of the Tariff Schedules of the United States which authorize partial exemption from duty under certain conditions.<sup>1/</sup> Between 1968 and 1970, for instance, the increase in annual imports of television receivers under item 807.00 accounted for 42 percent of the increase in total annual imports of such articles. The bulk of the receivers entered under item 807.00 was imported by or for the account of domestic producers.

Japan is the only significant source of imported television receivers aside from those foreign countries whose receivers entered under item 807.00. A number of factors unique to Japan are contributing to the increase in imports into the United States of both Japanese brand name receivers and private label receivers.

Among the more obvious of these factors or "pressures" on the market was the dumping of television receivers in the United States by producers of receivers in Japan. The U.S. Department of the Treasury determined under section 201(a) of the Antidumping Act, 1921, that television receivers from Japan were being or were likely to be sold in the United States at less than fair value. Following an appropriate investigation the Tariff Commission in March 1971 determined that such imports were causing injury to producers of television receivers in this

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<sup>1/</sup> Under item 807.00 the dutiable values of such imports of television receivers are reduced by subtracting the cost or value of fabricated components of U.S. origin assembled therein abroad.

country. 1/ Accordingly, the Treasury Department has issued a finding of dumping, subjecting such receivers to dumping duty in appropriate instances. The unfair low price was part of an aggressive pricing policy that generated sales in the United States and a commensurate increase in imports.

Besides those mentioned above, the following factors stimulated increased U.S. imports of television receivers: A variety of export incentives on the part of the Government of Japan and the Japanese television industry to bolster production well in excess of home market requirements; 2/ a more rapid increase in labor productivity in the television industry in Japan as compared with the industry in the United States, and the substantially lower wage rates in that country; the unrealistically low value of the yen compared to the dollar resulting in exchange rates extremely favorable to the television receiver industry in Japan; and the joint sharing of research and development work and costs by the receiver producers in Japan.

While it would be difficult to evaluate the relative effect that each of these "other factors" has had on the level of U.S. imports of television receivers, it is our opinion that their aggregate effect far outweighs the effect of tariff concessions. Thus, we find that the increased imports of television receivers are not as a result "in major part" of U.S. tariff concessions, which requires a negative determination.

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1/ U.S. Tariff Commission Publication No. 397, March 1971.

2/ Exports generally comprise over one-third of total output of television receivers in Japan.

## Views of Commissioner Sutton

Since mid-1970 the Tariff Commission has conducted a number of investigations under the provisions of the Trade Expansion Act of 1962 involving the products that are of concern in the case at hand, i.e., television receivers and parts of television receivers classifiable under TSUS item 685.20. In those investigations, 1/ I found that television receivers, as well as the parts of television receivers that were involved, were not being imported in increased quantities as a result in major part of concessions granted under trade agreements. With regard to imports of television receivers, I concluded that the sale of Japanese television receivers at less than fair value within the meaning of the Antidumping Act, 1921, and the duty-saving provision of item 807.00 of the Tariff Schedules of the United States (TSUS) 2/ have contributed more to the rising trend of

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1/ Television Receivers: Production and Maintenance Workers at RCA Corp. Plant, Memphis, Tenn. . . . , Investigation No. TEA-W-70, TC Publication 376, March 1971, pp. 7-8; Television Receivers, Radios, and Phonographs: Former Workers at the Emerson Television and Radio Company, Jersey City, N.J. . . . , Investigation No. TEA-W-77, TC Publication 380, April 1971, p. 7; Electronic Components and Apparatus and Allied Products: Production and Maintenance Workers of the F. W. Sickles Division, General Instrument Corporation, Chicopee and Ludlow, Massachusetts . . . , Investigation No. TEA-W-21, TC Publication 329, July 1970, pp. 3-5; Coils and Antennas: Bel-Tronics Corporation, Addison, Illinois . . . , Investigation No. TEA-F-19, TC Publication 385, April 1971, pp. 3-5; Deflection Yokes and Horizontal Output Transformers: Former Workers at Advance Ross Electronics Corp. Plant, Washington, Iowa . . . , Investigation No. TEA-W-80, TC Publication 386, April 1971, pp. 3-4.

2/ Under this item, U.S. duty is assessed on the value of the imported article less the value of the U.S. components contained therein.

imports than the trade-agreement concessions. With regard to parts of television receivers, I found that, whereas imports had increased, the increase could not have been caused in major part by trade-agreement concessions which, like those applicable to television receivers, had mostly been granted some two decades or more earlier. Indeed, in the two decades preceding the investigations, the total duty reduction applicable to television receivers and parts thereof provided for in TSUS item 685.20 had been 6.5 percentage points.

For these same reasons, I have concluded in the instant investigation that the increased imports of television receivers and parts thereof provided for in TSUS item 685.20 are not in major part the result of trade-agreement concessions. Hence, the conditions imposed by section 301(b)(1) of the Trade Expansion Act for an affirmative determination have not been met, and I have found in the negative.



## Views of Commissioner Leonard

In the present case, the conditions imposed by section 301(b) of the Trade Expansion Act of 1962 have not been satisfied and, therefore, the determination must be in the negative. Although television receivers are being imported into the United States in increased quantities, the increased quantities have not occurred as a result in major part of concessions granted under trade agreements. Since the increased quantities of imports are not attributable in major part to concessions granted under trade agreements, it is not necessary to consider the existence, or likelihood, of serious injury to the domestic industry.

Under the statute a causal relationship must be established whereby the increased imports, which are alleged to be causing or threatening serious injury, are the result "in major part" of trade agreement concessions. The interpretation of "in major part" is controlling when measuring the factual situation of the particular case against the concession-import causation requirement of the statute. In 1962, with the enactment of the Trade Expansion Act, Congress made the concession-import causation requirement more stringent. Prior to the 1962 Act, it was necessary to find a causal connection "in whole or in part"<sup>1/</sup> between trade-agreement concessions and increased imports rather than "in major part" as required by the 1962 Act.

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<sup>1/</sup> Trade Agreements Extension Act of 1951, Ch. 141, Sec. 7(a) 65 Stat. 74.

The bill which became the 1962 Act was initially passed by the House of Representatives stating:

. . . the Tariff Commission shall promptly make an investigation to determine whether, as a result of concessions granted under trade agreements, an article is being imported into the United States in such increased quantities as to cause, or threaten to cause, serious injury to the domestic industry producing an article which is like or directly competitive with the imported article.1/

The Senate Finance Committee felt that the language as passed by the House of Representatives might be interpreted to mean that trade-agreement concessions must be the "sole" cause of the increased imports and amended the language to provide that the increased imports should be caused in major part by trade-agreement concessions. The Senate Finance Committee commented on the language change as follows:

The amended language provides that the Tariff Commission investigation shall be made to determine whether 'as a result in major part of concessions granted under trade agreements' the article is being imported in such quantities as to cause or threaten serious injury to the domestic industry.2/

The Committee report stated further:

The bill as it came to the Committee might have made it difficult for industries which felt that they had been injured to prove their case under the escape clause. The language of the bill could have been interpreted to mean that the increased imports as a result of concessions were the sole cause of the injury. While this may not have been the intent of the bill, the amendment makes it clear that the Tariff Commission need find only that the tariff concessions have been the major cause of increased imports and that such imports have been the major cause of the injury.3/

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1/ H.R. 11970, 87th Cong., 2nd Sess., June 12, 1962, Sec. 301(b)(1), p. 27.  
2/ Sen. Rep. No. 2059, 87th Cong., 2nd Sess., p. 5 (1962).  
3/ Sen. Rep. No. 2059, Ibid. p.5.

The Finance Committee's changes were accepted by the Senate and then by the House and became part of the 1962 Act. The amendment clarified the intent of the section by making it clear that concessions need not be "the sole cause" of increased imports but that they must be "the major cause" of the increased imports. The ordinary meaning of the word "major" according to Webster's New International Dictionary is "greater in number, quantity, or extent."<sup>1/</sup> Black's Law Dictionary defines "major" as "greater or larger."<sup>2/</sup> The interpretation of "major" requires that its statutory meaning be viewed further in light of the seriousness of escape-clause withdrawal of trade-agreement concessions. The seriousness with which Congress views escape-clause actions is reflected by the statement of the House Ways and Means Committee in its report on the Trade Agreements Extension Act of 1958

Escapes from international obligations authorized by the Congress in return for reciprocal obligations should not be lightly permitted. The proof of serious injury alleged to be threatened or to have resulted from imports should be convincing since there are important effects of escape-clause actions on our trading partners and the American public.<sup>3/</sup>

Considering the ordinary meaning of "major" in accord with the Congressional concern that escape-clause actions should not be lightly permitted and the Congressional expression that trade concessions must be the major cause of the increased imports, it is clear that the

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<sup>1/</sup> Webster's New International Dictionary, 2nd ed., (Springfield, Mass G & C Merriam Co., 1961).

<sup>2/</sup> Black's Law Dictionary, 4th ed., (St. Paul, Minn.: West Publishing 1968).

<sup>3/</sup> H. Rep. No. 1761, 85th Cong., 2nd Sess., p. 11.

statutory language "in major part" requires that trade concessions be a greater cause of increased imports than the other causes of increased imports.

Causes other than trade-agreement concessions have been greater than such concessions in bringing about increased imports of television receivers and certain parts. The U.S. rates of duty applicable to imports of television receivers and parts have been reduced substantially--from a rate of 35 percent ad valorem before any trade agreements were negotiated to 6 percent ad valorem currently. However, the major concessions, accounting for about two-thirds of the total duty reduction, occurred more than two decades ago--before the existence of a significant source of foreign imports.

The rate of duty applicable to television receivers and parts was 12.5 percent ad valorem (effective June 6, 1951) when the television industry in Japan, currently the major source of U.S. imports, first began production in 1953. By mid-1958, the rate had been reduced to 10.5 percent ad valorem and the Japanese industry was producing annually over 1 million sets; by 1961, it was producing over 4.6 million receivers. Despite the increased Japanese production and the relatively large reductions in the U.S. duty since 1930, exports to the United States were very small, fluctuating at less than 1 percent of Japanese output except in 1955 when 25 percent was exported to the United States. The evidence is clear that U.S. tariff concessions were not an inducement to export even though in 1961 the Japanese industry was producing about three-fourths as many sets as were the U.S. producers. It can only be

concluded that factors other than tariff concessions resulted in the growth of exports from Japan which followed.

More important than concessions in causing television imports into the United States to increase was the operating environment of the Japanese television industry.

The Japanese television industry increased production and exports rapidly by reason of (1) the introduction of U.S. technology, (2) the incentives provided by the Japanese government, (3) a competitive cost structure which included relatively low-wage labor, and (4) a unique system of industry coordination through associations of executives and through guidance from the Japanese government.

(1) Technology.--U.S. firms licensed Japanese firms first in monochrome receivers (1953) and then in color (1962), thus providing a technological base for production. The Japanese developed from that base a high technological competence.

(2) Incentives.--The Japanese government, by law, provided Japanese producers with incentives to produce for export. The incentives included favorable tax treatment, special financial treatment, an export insurance program, and the services of the Japan External Trade Research Organization. The incentives were significant to Japanese producers in the period of heavy investment in capital equipment and in their efforts to establish their products in the U.S. market.

(3) Cost structure.--The cost structure of the Japanese television industry by reason of relatively low wage labor, permanent employment,

harmonious labor relations, and a high debt to equity ratio resulted in high productivity and encouraged producers to maximize output (in contrast to maximizing profit as in the United States). In maximizing output, producers looked to export markets to absorb supply in excess of home market demand.

(4) Industry organization.--The Japanese television industry has been coordinated by associations of executives and by ministries of the Japanese government, as necessary, to achieve orderly marketing. Under various laws, the government has set minimum export prices, directed some research efforts and expenditures, and advised on production goals. The industry executives have participated in making policy, implementing policy, and consulting on common industry problems such as excess inventory and consumer problems.

No effort is made to quantify precisely the benefits accruing to Japanese interests as a result of the makeup of their television industry or the law of their land. It is maintained, however, that, during the period from 1951 through 1967, these benefits far outweighed a reduction of 2.5 percentage points in the ad valorem duty applicable to television receivers and parts. Further, the viability of the Japanese industry was well established during this period and the ability to compete effectively with U.S. producers was achieved. The Japanese television industry, because of factors other than concessions, had obtained a significant share of the U.S. market.

From 1968 through 1970, the rate of duty was reduced 3 percentage points to 7 percent ad valorem. During that period Japanese production increased to 12.4 million sets annually (6.0 million monochrome and 6.4 million color) and exports to the United States increased to 3.3 million sets an increase of 1.6 million sets over the number exported in 1967. The further duty reductions did not hurt the competitive position of the Japanese, but the die had been cast long before, and these Kennedy Round reductions were certainly not the major cause of the increase in imports during this period from Japan.

Imports from Taiwan and Mexico during the same period rose from 37,000 units to 1.2 million sets. Thus, in the short span of three years, imports from foreign subsidiaries of U.S. firms in the U.S. television receiver industry have captured 26 percent of U.S. imports and have accounted for approximately 42 percent of the increase in imports in those years.

The rapid increase in imports of television receivers into the United States from Taiwan and Mexico, likewise, were caused largely by economic factors other than tariff concessions. Since 1965 the governments of the Republic of China and Mexico have provided special incentives to foreign enterprises which produce for export. Foreign producers in Taiwan had the advantages of tax holidays for as many as five years and in both Taiwan and Mexico foreign producers benefited from duty-free import and export operations and an abundance of low-wage labor estimated to be one-fourth to one-half the cost of labor for similar operations in the United States. In Taiwan, some Japanese firms as well as some major U.S. producers availed themselves of those economies. In Mexico, these incentives

were available to U.S. firms which conducted operations within a zone 12.5 miles from the U.S. border.

Again, no effort is made to quantify precisely the benefits accruing to U.S. firms as a result of their foreign assembly operations. However, it is maintained that such benefits far outweighed a reduction of 3 percentage points in the ad valorem duty applicable to television receivers as an impetus to imports.

In conclusion, the makeup of the Japanese television industry including the use of U.S. technology, government incentives, a competitive cost structure, and industry coordination, and the incentives to producers to locate in Taiwan and Mexico were greater causes of increased imports of television receivers into the United States than were trade agreement concessions; and, therefore, increased imports are not in major part the result of trade agreement concessions.



## Dissenting Views of Commissioner Moore

On petition filed by three major unions representing U.S. workers producing television receivers and parts thereof, the Commission has conducted this investigation to determine whether the domestic industry producing TV sets meets the statutory criteria set forth in section 301(b)(1) of the Trade Expansion Act of 1962 to qualify for tariff adjustment and other assistance. This case is the most recent of several under the Trade Expansion Act involving imports of television receivers and parts provided for in item 685.20 of the Tariff Schedules of the United States. 1/

Section 301(b)(1) establishes four conditions which, if met, require that an affirmative determination be made. As applied to the case at hand, the four conditions are as follows:

- (1) Imports of television receivers must be increasing;
- (2) The increased imports must be a result in major part of trade-agreement concessions;
- (3) The domestic industry producing television receivers must be seriously injured or threatened with serious injury; and
- (4) The increased imports must be the major factor causing or threatening to cause the serious injury.

As in earlier decisions in cases under the Trade Expansion Act relating to television receivers, I have found here that each of the four conditions is met, and thus have made an affirmative determination that the domestic television industry is threatened with serious injury.

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1/ See table 1 in the Appendix.

Increased imports

It must be clear even to the casual observer, that television receivers are being imported into the United States in increasing quantities. In just 4 years, 1967-70, U.S. imports of television receivers nearly tripled in both quantity and value. Entries rose from 1.6 million sets valued at \$124 million in 1967 to 4.5 million sets valued at \$316 million in 1970. The upward trend has continued in 1971. Imports in the first half of 1971 amounted to 2.5 million sets valued at \$191 million as compared with 1.9 million sets valued at \$129 million in the corresponding period of 1970. Monochrome and color receivers shared about equally in the recent import growth; entries from abroad of monochrome sets, in terms of value for example, rose from \$71 million in 1967 to \$174 million in 1970, while imports of color sets increased from \$53 million in 1967 to \$142 million in 1970. These imports, moreover, captured a growing share of the U.S. market for television receivers; sets produced abroad accounted (in terms of quantity) for 37 percent of apparent U.S. consumption in 1970 and 40 percent in January-June 1971, compared with only 15 percent in 1967.

In major part

The second requirement of the statute is that the increased imports must have resulted in major part from trade-agreement concessions. In the Commission investigations cited earlier, I found that imports of television receivers could not have increased to the extent they

did without the advantages afforded by trade-agreement concessions and that consequently, for purposes of the statute, the increased imports of TV sets have resulted in major part from such concessions. The evidence obtained by the Commission in this investigation confirms my earlier conclusion.

It should be pointed out that imported television receivers consist almost entirely of sets that are 19" or smaller in screen size. They are largely portables, not console models which are items of decorative furniture and a source of home entertainment. They largely serve the market for inexpensive sets for those who cannot afford console models and for those who desire second or third sets in the household, especially for children's use. Price, then, is the single most important competitive factor determining sales of such TV sets in the marketplace. Hence, the U.S. trade-agreement concessions which directly affect the price at which imported TV sets can be sold are now, and have been, highly significant to the competitive position of the imported sets in the U.S. market.

The rate of duty applicable to television receivers has been reduced progressively to carry out trade agreements from 35 percent ad valorem in 1930 to 6 percent ad valorem in 1971; it will become 5 percent ad valorem in 1972 to carry out the last stage of the Kennedy-round concessions. As indicated in an earlier case, 1/ if the 1930 duty rate had not been reduced, the increased imports would not have

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1/ Television Receivers: Production and Maintenance Workers at RCA Corp. Plant, Memphis, Tenn. . . . , Investigation No. TEA-W-70, TC Publication 376, March 1971, p. 5.

occurred, because the duty applicable to an imported television receiver having a foreign value of \$200 would be \$70, or \$58 more than the \$12 duty in 1971. Under such circumstances imports would not have had a price advantage in the domestic marketplace. 1/

Applying the 1948 GATT concession rate of 15 percent ad valorem, imported TV sets would, in most instances in 1971, have an insignificant price advantage at the wholesale level under present market conditions.

Considering the sharp price competition among the various brands of television receivers available to the U.S. consumer, the advantage given to foreign producers by trade-agreement concessions frequently has been decisive in the marketplace.

I cannot concur with those who regard the earlier dumping of television receivers by Japan as a factor more important than trade-agreement concessions in influencing the rise in U.S. imports. Even assuming that such dumping contributed to an increase in imports at the time it occurred in 1970, nevertheless, imports of TV sets from Japan since the time dumping duties were imposed have been at record high levels. It must be concluded, therefore, that the dumping of TV sets is not now a factor affecting the present competitiveness of imports from Japan.

The report of the Commission which accompanies the Commissioner's opinions describes a number of considerations other than trade-agreement concessions which may have had an effect on increasing imports of television receivers into the United States. While it is

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1/ See page A-34 of the report.

true that these considerations have created favorable conditions under which TV sets could be exported from foreign countries, it is my opinion that these considerations were not the major cause of increased U.S. imports. The incentives which certain foreign governments provided for their exporters, plus advantages that may have accrued to foreign industries from the industrial and political environment in which they operated, were minimal as compared with trade-agreement concessions without which the U.S. market could not have been penetrated on a predictable basis. Principally as a result of the lower U.S. rates of duty, imported Japanese television sets could undersell domestically produced television receivers by a significant margin.

#### Serious injury

The third requirement of the statute is that the domestic industry producing television receivers must be seriously injured or threatened with serious injury. By any reasonable standard, the economic condition of the industry has been deteriorating--production facilities have been closed, output has declined sharply, employment is down substantially, profits have almost disappeared. These facts tell only one story--the industry is threatened with serious injury.

In the last 3 years, the number of concerns assembling television receivers in the United States has declined by a fourth, and in the last 4 years the number of television assembly plants has dropped by nearly a third. Fifteen U.S. firms were producing television receivers in 1971, compared with 20 in 1968. TV sets were being assembled in 24 establishments in 1971, compared with 34 in 1967. Shipments of domestically produced television receivers have declined sharply.

Such shipments were 35 percent smaller in 1970 than in 1966, declining from 12.0 million sets to 7.9 million. Although shipments of U.S.-made sets rose slightly in the first half of 1971 in response to markedly increased domestic demand, the domestic manufacturers continued to drop behind in their share of the market, supplying 60 percent of apparent U.S. consumption in January-June 1971 compared with 63 percent in the corresponding period of 1970.

The employment afforded workers in the assembly of television receivers in the United States has dropped substantially in recent years. The number of production and related workers so engaged declined by 36 percent between 1966 and 1970, and the number of man-hours worked in TV assembly lines declined by 42 percent in these years. Thus, not only were fewer workers employed in the assembly of TV sets, but average annual man-hours per worker were 9 percent smaller in 1970 than in 1966.

The financial condition of the domestic producers in the assembly of television receivers has suffered in recent years. During the investigation, firms accounting for the great bulk of shipments of domestically produced TV sets reported data on their financial experience to the Commission. In 1966 the net operating profit of establishments in which TV sets were assembled averaged 7.5 percent of net sales; fifteen of the 16 companies reporting data earned profits. By 1970, net operating profits had almost disappeared, averaging 0.6 percent of net sales; only 4 of the 16 companies earned profits in that year, while 11 sustained losses, and 1 had ceased the domestic production of

TV sets. Moreover, only 2 of the 16 companies have consistently earned profits on the operation of their TV-assembly establishments throughout the past 5 years, and their profit positions have worsened materially. The remaining 13 companies producing TV sets in 1970 sustained substantial aggregate losses in that year, equivalent on the average to 5 percent of their net sales.

In light of the above factors, it is eminently clear that the domestic industry producing television receivers is threatened with serious injury.

#### Major factor

The final requirement of the statute is that concession-generated increased imports must have been the major factor causing or threatening to cause serious injury to the domestic television industry.

In this case, an immediate and direct causal relationship between increased imports of television receivers and the serious injury threatening the domestic industry is clear. The deterioration in the economic vigor of the domestic operations of the industry--the decline in output, employment, and profits--has coincided with, and resulted from, the growing penetration by imported TV sets in the U.S. market as cited above.

With a crippling loss in sales and accompanying pressure on prices, the domestic television industry, as a last resort, turned to importing TV sets and parts thereof in an attempt to meet competition from foreign producers. Domestic producers imported television sets from Japan

under their own label; they have established overseas plants (Taiwan and Mexico), and imported television receivers under the provisions of item 807.00 of the Tariff Schedules of the United States (under which the duty is paid only on the value added abroad). By these actions U.S. producers have sought to avoid serious injury and to meet the competition of concession-generated increased imports. That these efforts have failed is abundantly clear from the evidence secured during this investigation. There are no factors other than concession-generated increased imports which fit the statutory language "the major factor" threatening to cause serious injury to the domestic industry.

#### Conclusion

Considering all the evidence secured during this investigation, I believe that the increasing imports due in major part to trade-agreement concessions is the major factor threatening serious injury to the domestic television industry.



## INFORMATION OBTAINED IN THE INVESTIGATION

## Description and Uses

A television receiver converts a transmitted television signal into its original elements--i.e., video, synchronizing, and audio--and by means of these elements reproduces the picture and sound originally transmitted. The video element controls the intensity of the electron beam(s) in the television picture tube. The synchronizing element positions the electron beam(s) in the picture tube. The audio element controls the sound emission.

Monochrome (black and white) receivers have one electron gun which directs an electron beam at the picture-tube face. The back of the picture-tube face is coated with a phosphor which glows in shades between black and white depending upon the intensity of the electron beam.

The rudiments of a color television receiver differ from those of a monochrome receiver. Most color television receivers utilize three electron guns in the picture tube, one each to energize red, blue, or green phosphors which are coated on the back of the picture-tube face. (Color television receivers marketed by Sony Corp., a Japanese producer, utilize a single electron gun. By means of a unique switching arrangement the single-gun tube achieves results similar to a three-gun tube.)

The circuits in a color television receiver are more numerous and complex than those in monochrome receivers. Color receivers also contain more active components (e.g., transistors and tubes) and

passive components (e.g., resistors, capacitors, and inductors). Consequently, the color receivers are more difficult to design, manufacture, and maintain than monochrome receivers.

The largest single use of television receivers is for home entertainment. They are also used widely in industry and in educational systems.

#### U.S. Tariff Treatment

Television receivers were not an article of commerce at the time of the enactment of the Tariff Act of 1930 and consequently were not specially provided for in that legislation. However, as import trade developed for these articles, they were classified for duty purposes under the provisions of paragraph 353 of the 1930 act. Since August 31, 1963, the effective date of the TSUS, television receivers and those parts of such receivers not specially provided for have been dutiable under TSUS item 685.20. Tuners, deflection yokes, antennas, flyback transformers, chassis, and cabinets are included among the parts classifiable under item 685.20. 1/

Pursuant to successive trade-agreement concessions, the rate of 35 percent ad valorem applicable to television receivers under the 1930 act has been reduced to the current (1971) rate of 6 percent ad valorem. This rate will be further reduced to 5 percent when the final stage of the concession granted in the Kennedy Round negotiations becomes effective on January 1, 1972. No rate distinction exists

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1/ Prior to the effective date of the TSUS, most, if not all, of these parts were classified under paragraph 353 of the Tariff Act of 1930.

either between monochrome and color receivers or between receivers with varying screen sizes. The 1930-72 rate history applicable to television receivers and parts not specially provided for is given in the following table.

Television receivers and certain parts thereof: U.S. rates of duty, 1930-72

Effective date	Rate of duty	Authority
	<u>Percent</u>	
	<u>ad val.</u>	
June 18, 1930-----	35	Tariff Act of 1930.
Jan. 1, 1939-----	25	Trade agreement with the United Kingdom.
Jan. 1, 1948-----	15	GATT <u>1/</u> concession.
June 6, 1951 <u>2/</u> -----	12.5	Do.
June 30, 1956-----	11.5	Do.
June 30, 1957-----	11	Do.
June 30, 1958-----	10.5	Do.
July 1, 1962-----	10	Do.
Aug. 31, 1963-----	10	Adoption of TSUS (item 685.20).
Jan. 1, 1968-----	9	GATT concession.
Jan. 1, 1969-----	8	Do.
Jan. 1, 1970-----	7	Do.
Jan. 1, 1971-----	6 <u>3/</u>	Do.
Jan. 1, 1972-----	5	Do.

1/ General Agreement on Tariffs and Trade.

2/ The date television receivers were provided for by name under the provisions of the Tariff Act of 1930, as amended.

3/ An additional 10-percent import duty was imposed for an indefinite period effective Aug. 16, 1971 (Presidential Proclamation 4074).

In addition to the fully dutiable imports entered under item 685.20, television receivers are also entered under item 807.00. Under the provisions of this item, which has never been the subject of a trade-agreement concession, imported articles assembled in whole or in part of U.S.-fabricated components are dutiable only to

the extent of value added abroad; the value of the U.S. components is free of duty. <sup>1/</sup>

The President, by Proclamation 4074 of August 15, 1971, imposed, effective August 16, 1971, an additional temporary duty of 10 percent ad valorem or less on most imported articles, as provided for in new subpart C to part 2 of the appendix to the TSUS. The extra duty (import surcharge) applicable to television receivers and parts thereof is 10 percent ad valorem. The effects of the surcharge and of the U.S. Government's decision to discontinue supporting the dollar with gold in settling international accounts, on the costs of importing TV sets from Japan is discussed in a later section of this report.

In view of the likelihood that imports of TV sets from Japan were being sold at less than fair value within the meaning of the Antidumping Act, the Treasury Department has required that importers of these articles post a bond equal to 9 percent of the invoice value of such imports entered since August 20, 1970. As previously noted, the Commission subsequently determined that the less-than-fair-value imports were injuring an industry in the United States. The criteria for finding that an industry is being or is likely to be injured under the Antidumping Act are substantially different from those used to determine if an industry is seriously injured or threatened with serious injury under the Trade Expansion Act of 1962.

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<sup>1/</sup> Detailed information regarding the use of item 807.00 is reported in U.S. Tariff Commission, Economic Factors Affecting the Use of Items 807.00 and 806.30 of the Tariff Schedules of the United States, . . . TC Publication 339, 1970.

## U.S. Producers

Television receivers

For the purposes of this investigation, U.S. producers of television receivers are firms which assemble television receivers in the United States irrespective of whether some or all of the component parts used in their assembly are imported. During January-June 1971 the following firms assembled television receivers in the United States:

<u>Company (parent)</u>	<u>Principal offices</u>
Admiral Corp.	Chicago, Ill.
Andrea Radio Corp.	Long Island City, N.Y.
Curtis-Mathes Manufacturing Co.	Dallas, Tex.
General Electric Co.	New York, N.Y.
The Magnavox Co.	Ft. Wayne, Ind.
Motorola, Inc.	Franklin Park, Ill.
Packard Bell (Teledyne)	Los Angeles, Calif.
Philco-Ford Corp. (Ford Motor Co.)	Philadelphia, Pa.
RCA Corp.	New York, N.Y.
S C Electronics Inc. (Audiotronics Corp.)	New Brighton, Minn.
Sylvania Electric Products, Inc. (General Telephone & Electronics)	Batavia, N.Y.
TMA Co.	Wheeling, Ill.
Warwick Electronics, Inc.	Chicago, Ill.
Wells-Gardner Electronics Corp.	Chicago, Ill.
Zenith Radio Corp.	Chicago, Ill.

The number of U.S. firms producing television receivers increased from 19 in 1966 to 20 in 1968 and then declined to 15 in January-June 1971. One of these 15 firms ( \* \* \* ) does not produce TV sets for home entertainment, but exclusively for industrial and educational markets. During the period January-June 1971, 13 of the U.S. producers assembled monochrome sets, and all 15 producers assembled color sets. Firms that discontinued U.S.

production of TV sets in the period considered here included Arvin Industries, Cortron Industries (purchased by Admiral), Emerson TV and Radio, Olympic Radio and TV, Setchell Carlson, and Westinghouse.

The producers previously listed do not include a few firms which purchase complete television chassis, add a picture tube, and install this assembly in a cabinet. Such firms account for only a small part of U.S. output.

The number of U.S. establishments in which television receivers were assembled increased from 33 in 1966 to 34 in 1967 and then declined to 24 in January-June 1971. Data are not available regarding the level of capacity at which the industry has operated in recent years; however, several producers (both large and small) reported that their domestic facilities were operating at about 50 percent of capacity during 1970.

The principal U.S. producers of television receivers are large, diversified firms for which television receiver production is only one (although for many the most important) of several manufacturing activities. Six large firms ( \* \* \* ) accounted for 90 percent of U.S. production of monochrome and 78 percent of color receivers in 1970. The number of units produced by each of the two largest producers, \* \* \* , was significantly greater than the number produced by the third largest manufacturer.

U.S. producers of TV sets also frequently manufacture or import one or more related consumer electronic products such as radios,

phonographs, stereophonic music systems, and tape recorders and players. In addition, many firms produce industrial and defense electronic products which embody highly specialized technology. The larger firms produce sophisticated guidance, detection, communication, and test apparatus. Some of the smaller firms produce components and subassemblies for electronic equipment.

There is a concentration of plants in which television receivers are assembled in an area within a 200-mile radius of Chicago, Ill.; other production facilities are situated in New York, Pennsylvania, Virginia, North Carolina, Tennessee, Missouri, Arkansas, Texas, and California. Most of the production facilities in Virginia, North Carolina, Tennessee, Missouri, and Arkansas have been built since 1965; they are used primarily for the assembly of color receivers.

In an effort to reduce costs, most of the large U.S. producers have established television assembly plants in foreign countries where low wage rates and other incentives exist. As of July 1971, five U.S. producers had established assembly plants in Taiwan and one producer, in Mexico; two other U.S. producers will open assembly plants in Mexico before the end of the year. U.S. firms have also established foreign plants in which components for television receivers are made. Additional foreign assembly and component plants are being planned by U.S. producers.

Television receiver parts

Most U.S. producers of TV sets operate furniture manufacturing facilities in which wooden cabinets are produced. Many of the large producers also operate plants where they produce at least part of their requirements for one or more of the following components or subassemblies: Tuners, transformers, loudspeakers, picture tubes, receiving tubes, capacitors, transistors, and integrated circuits. The bulk of the components used in the manufacture of television receivers, however, are obtained from hundreds of independent suppliers (both foreign and domestic). Many of the independent U.S. producers of television receiver components are small firms.

In each of the years 1966-70, U.S. producers of television receivers produced a third or more of the total value of their parts requirements in captive plants. The bulk of the value of these components was probably accounted for by picture tubes and cabinets. According to data collected by the Commission, some of the large integrated U.S. producers of television receivers produce more than half of their total parts requirements, whereas other producers are wholly dependent upon purchased parts.

The Commission did not attempt to collect data with respect to changes in the number of U.S. producers of parts for TV sets or the number of establishments in which such parts were produced. It is known, however, that both the number of producers and the number of establishments in which these parts were produced declined sharply between 1966 and January-June 1971.



## U.S. Consumption

Background information

Since regularly scheduled TV broadcasting was inaugurated in 1946, the American public has purchased 175 million TV sets, including 30 million color sets. Moreover, more than half of all the TV sets sold in the United States are still in use. Today, more than 95 percent of U.S. households have at least one television set, and over 40 percent of those homes have two or more sets. There are more TV sets in use in the United States than telephones, refrigerators, or bathtubs. <sup>1/</sup> In recent years, TV sets, except for large console models which are frequently purchased for decorative as well as entertainment purposes, have become increasingly portable or mobile instruments.

Shipments of U.S.-produced sets have not kept pace with apparent consumption because imports, formerly nil or negligible, have supplied an increasing share of consumption, and exports, generally small, have not grown significantly.

Apparent consumption, 1966-70 and January-June 1971

Following a general upward trend during 1960-65, annual U.S. consumption of TV sets (monochrome and color) declined irregularly from 13.4 million sets in 1966, the peak year, to 12.3 million sets in 1970--a decrease of 8 percent (table 2). In the first 6 months of 1971, consumption amounted to 6.3 million units, an increase of 25 percent over the corresponding period in 1970.

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<sup>1/</sup> Electronic Industries Association, Electronic Market Data Book, 1971.

The total value of annual U.S. consumption of TV sets during the 1966-70 period declined 22 percent, from \$2.6 billion to \$2.0 billion. During the first half of 1971, the value of consumption amounted to \$1.1 billion, compared with \$0.8 billion in the first 6 months of 1970--an increase of 35 percent.

The ratio of imports to apparent consumption increased, for both quantity and value, in each successive year during 1966-70. The number of units imported represented 11 percent of U.S. consumption in 1966 and 37 percent in 1970. The value of imports amounted to 4 percent of consumption in 1966 and 15 percent in 1970. During the first half of 1971, the ratio of imports to apparent consumption for both quantity and value was greater than that during the same period in 1970.

#### New supply

Data compiled from responses to the Tariff Commission's questionnaires indicate that in 1966 new supply (production plus imports) of television receivers consisted predominantly of monochrome sets (table 3). The relationship between the supply of monochrome and color sets changed so that, in 1967, the new supply of color sets was larger than that of monochrome. However, in each year after 1967 and in the first 6 months of 1971, the larger part of the new supply consisted of monochrome sets.

Imports accounted for an increasing share of new supply of TV sets not over 13 inches in screen size (monochrome and color) in each successive year during 1966-70, and constituted the bulk of new supply of sets in this size category in the years 1968-70.

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U.S. production accounted for the bulk of new supply of both monochrome and color sets in screen size categories of over 13 inches in each of the years 1966-70. However, with the exception of color sets having a screen size of over 16 inches, not over 19 inches, the share of new supply represented by imports in each of these screen size categories increased during that period.

During the first 6 months of 1971, the share of new supply accounted for by imports increased over the share supplied during the first 6 months of 1970 in all size categories, except for that of color sets of over 9 inches, not over 13 inches, which experienced a decline of 1.3 percent, and that of color sets of over 19 inches, for which imports were negligible in both periods.

Data on U.S. imports as a percent of new supply for the first 6 months of 1971 are shown in the following table.

Television receivers: U.S. imports as a share of new supply in the United States, by types and screen sizes, January-June 1971

(In percent, based on quantity)

Screen size	Monochrome	Color
Not over 9 inches-----	98.5	100.0
Over 9 inches, not over 13 inches---	69.9	74.8
Over 13 inches, not over 16 inches--	52.9	32.9
Over 16 inches, not over 19 inches--	31.3	21.7
Over 19 inches-----	6.9	.1
Total-----	53.4	18.3

Source: Compiled from data submitted in response to questionnaires of the U.S. Tariff Commission.

Note.--These percentages are somewhat understated because imports reported by questionnaire for January-June 1971 accounted for only 95 percent of the total reported for the same period by the Bureau of the Census.

### Television receiver parts

Data on U.S. consumption of television receiver parts of types that are dutiable under TSUS item 685.20 are not available from the official statistics. Responses to the Commission's questionnaires, however, indicate that the value of U.S. consumption of all parts used in the production of TV sets declined annually from about \$1.7 billion in 1966 to \$1.1 billion in 1970 (table 4). Consumption of parts increased in value from \$0.4 billion during the first 6 months of 1970 to \$0.6 billion during the same period in 1971.

U.S. imports of parts used in the assembly of TV sets increased from 5 percent of total U.S. consumption of these articles in 1966 to 10 percent in 1970.

### Marketing Channels

Producers and importers of television receivers generally sell or distribute them through three principal types of marketing categories: (1) Private-label dealers or distributors, (2) merchandising syndicates and chain stores, and (3) regional distributors or local dealers in manufacturers' brand-name television receivers.

Private-label dealers or distributors usually supply prospective producers with specifications on a desired model of television receiver and then purchase under their own brand name from a selected producer for their retail stores. Private-label dealers and distributors, in order to offer their customers a complete variety of

models, often purchase from more than one source (foreign or domestic); however, they usually purchase a particular model from only one source.

Merchandising syndicates and chain stores which distribute manufacturers' brand-name television receivers on a nationwide or regional basis purchase directly from U.S. producers or importers. These firms may also carry their own private-label receivers.

Regional distributors (either independent or producer-owned) or local dealers in manufacturers' brand-name television receivers may purchase from national distributors or from domestic or foreign producers. Such dealers or distributors are the first level of marketing only when they purchase directly from producers.

#### U.S. Production, Shipments, and Inventories

##### U.S. production

U.S. production of television receivers (monochrome and color) reached a peak of 11.7 million sets in 1966, and then declined irregularly to 7.5 million units in 1970 (table 5). Production during the first half of 1971 amounted to 4.2 million units--28 percent higher than in the corresponding period in 1970. Prior to 1967, monochrome sets accounted for the largest share of U.S. production, but a sharp decline in monochrome production in 1967 (owing in part to the increased popularity of color receivers) resulted in the predominance of color sets in that and subsequent years.

Annual U.S. output of monochrome sets, by screen-size categories, declined between 1966 and 1970, as follows: Not over 9 inches,

35 percent; over 9 inches, not over 13 inches, 57 percent; over 13 inches, not over 16 inches, 51 percent; over 16 inches, not over 19 inches, 50 percent; and over 19 inches, 61 percent. This decline was intensified by U.S. producers moving part of their production of these units to their foreign manufacturing facilities.

U.S. production of color sets increased by 8 percent between 1966 and 1967, remained relatively static during 1968 and 1969, and then declined by 17 percent in 1970. However, during the first 6 months of 1971, production of color sets was 43 percent greater than during the same period in 1970. Sets having screen sizes of over 19 inches accounted for 83 percent of total color production in 1966; this share declined annually, beginning in 1968, to 59 percent in 1970. A steady increase in production of intermediate-size sets partially offset this decline. Production of color sets in the not-over-13-inch size categories consists predominately of \* \* \*. Sets not over 13 inches accounted for 5 percent of color production in 1966 and 2 percent in 1970.

#### U.S. producers' shipments

Annual shipments of U.S.-made TV sets (monochrome and color) followed the same general trend as that reported for production; shipments declined irregularly from a record high of 12 million sets in 1966 to 7.9 million sets in 1970, a decline of 35 percent (table 6). During the first 6 months of 1971, shipments amounted to 3.8 million sets, compared with 3.2 million sets for the same period in 1970.

Shipments of color TV sets exceeded shipments of monochrome sets for the first time in 1967. The predominance of color sets continued each year and in the period January-June 1971.

The value of annual U.S. shipments of television receivers (monochrome and color) declined irregularly from \$2.5 billion in 1966 to \$1.8 billion in 1970. In each of the years, 1966-70, the value of color sets shipped accounted for the larger share of the total value of shipments, ranging from 68 percent in 1966 to 82 percent in 1969. For the first half of 1971, color sets accounted for 86 percent of the total value of shipments.

Shipments of U.S.-made TV sets to distributors or dealers for resale or distribution under the distributors or dealer's own brand name (private-label sets) account for a small portion of the U.S. industry's total shipments. In each of the years 1966-70, the quantity of shipments of U.S.-made private-label sets accounted for less than 10 percent of U.S. producers' total shipments. Private-label shipments of monochrome sets declined from year to year during 1966-70, whereas private-label shipments of color sets remained relatively stable during 1966-69 and then increased sharply in 1970 when they accounted for 12 percent of U.S. producers' shipments, as shown in the table below.

Television receivers: Shipments of U.S.-made, private-label sets, by types, 1966-70, January-June 1970, and January-June 1971

Period	Monochrome		Color		Total	
	Quantity	Ratio of private-label shipments to U.S. producers' total shipments	Quantity	Ratio of private-label shipments to U.S. producers' total shipments	Quantity	Ratio of private-label shipments to U.S. producers' total shipments
	<u>1,000</u> <u>units</u>	<u>Percent</u>	<u>1,000</u> <u>units</u>	<u>Percent</u>	<u>1,000</u> <u>units</u>	<u>Percent</u>
1966-----	611	8.5	389	8.1	1,000	8.3
1967-----	378	8.3	346	6.9	724	7.6
1968-----	303	6.4	367	6.9	670	6.7
1969-----	200	5.0	373	7.4	573	6.3
1970-----	167	4.9	540	12.0	707	9.0
Jan.-June--						
1970-----	52	3.5	120	7.0	172	5.4
1971-----	90	6.5	298	12.2	388	10.1

Source: Compiled from data submitted in response to questionnaires of the U.S. Tariff Commission.

### U.S. producers' inventories

TV sets (monochrome and color) in U.S. producers' inventories at the end of each calendar year declined irregularly from 1.1 million sets in 1966 to 0.8 million sets in 1970 (table 7). Inventories as of June 30, 1971, totaled about 1.3 million sets, 6 percent more than on June 30, 1970, and 54 percent more than on December 1, 1970. The increase in midyear inventories was due mainly to greater consumer demand for TV sets in the second half of the year.

U.S. production of color television receivers surpassed production of monochrome receivers in 1967, and inventories of color sets accounted for the bulk of total inventories during 1967-70.



The number of monochrome sets in inventory declined steadily from 0.9 million sets in 1966 to 0.3 million sets in 1970. Inventories of color sets increased irregularly from 0.2 million in 1966 to 0.6 million in 1969 and then declined to 0.5 million in 1970.

#### U.S. Exports

U.S. exports of television receivers declined irregularly from 168,000 units in 1966 to 126,000 units in 1970. The value of exports increased from \$26.3 million in 1966 to \$33.3 million in 1969 and then declined to \$26.2 million in 1970. In each of the years 1966-70 the quantity exported accounted for less than 2 percent of U.S. factory shipments. The unit values of exports ranged between \$156 and \$212, as shown in the table below.

Television receivers, whether or not combined with radio or phonograph:  
U.S. exports, 1966-1970, January-June 1970, and January-June 1971

Period	Quantity	Value	Unit value
	Number	<u>1,000</u> dollars	
1966-----	168,274	26,291	\$156
1967-----	139,127	23,577	169
1968-----	144,302	27,771	192
1969-----	156,997	33,287	212
1970-----	126,174	26,166	207
January-June--			
1970-----	51,277	9,979	195
1971-----	54,566	11,086	203

Source: Compiled from official statistics of the U.S. Department of Commerce.

During the period 1966-70, about 75 percent of the total quantity of U.S. exports of television receivers was shipped to markets in the Western Hemisphere, principally Canada, Mexico, Panama, Venezuela, and, more recently, Brazil. In 1969, exports of color television receivers accounted for 37 percent of total receivers exported <sup>1/</sup> and in 1970 increased to 40 percent. Canada is by far the largest recipient of color receivers exported from the United States; Mexico is the second largest.

The unit value of exported television receivers increased from \$156 per receiver in 1966 to \$212 in 1969 and then declined slightly to \$207 in 1970. The increase in the unit values indicates the trend of exporting more of the premium-type receivers (console and color).

The market for U.S.-made television receivers in Western Europe may not have reached its full potential, owing to differences between U.S. and European standards for receiving a television signal. The European signal is made up of 625 lines per field at 50 cycles, compared with the U.S. signal of 525 lines per field at 60 cycles. However, with minor modifications U.S. television receivers can be adapted to European standards.

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<sup>1/</sup> The first year the U.S. Department of Commerce recorded export data for monochrome and color television receivers as separate items was in 1969.

## U.S. Imports

Television receivers 1/

U.S. imports of television receivers were not separately reported in official statistics until July 1962. Imports amounted to 0.4 million sets, valued at \$23 million, in 1963; thereafter, they increased to 1.0 million sets, valued at \$60 million, in 1965, to 2.7 million, valued at \$203 million, in 1968, to 4.0 million, valued at \$296 million, in 1969, and to 4.5 million, valued at \$316 million, in 1970. Data on apparent U.S. consumption of TV sets and the ratio of imports to consumption for the years 1961-70 are set forth in the table below.

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1/ Excluding radio-television-phonograph combinations and other combinations incorporating TV-receiving apparatus, imports of which are very small. Such imports do not enter under TSUS item number 685.20; therefore, they are beyond the scope of this investigation.

Television receivers (monochrome and color): U.S. shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1961-70

Year	U.S. shipments	Imports	Exports	Apparent consumption	Ratio of imports to consumption
	Million units	Million units	Million units	Million units	Percent
1961-----	6.0	<u>1/</u>	0.1	5.9	<u>1/</u>
1962-----	6.6	<u>2/</u> 0.1	.1	<u>2/</u> 6.6	1.5
1963-----	7.7	.4	.1	8.0	5.0
1964-----	8.7	.7	.2	9.2	7.6
1965-----	9.9	1.0	.2	10.7	9.3
1966-----	11.7	1.5	.2	13.0	11.5
1967-----	9.7	1.6	.1	11.2	14.3
1968-----	10.3	2.7	.1	12.9	20.9
1969-----	8.7	4.0	.2	12.5	32.0
1970-----	7.5	4.5	.1	11.9	37.8

1/ Negligible.

2/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.--Data are not entirely consistent with that reported in appendix table 2 because of variations between U.S. producers' shipments reported by the U.S. Department of Commerce and those reported in response to questionnaires of the U.S. Tariff Commission; data on U.S. producers' shipments for the years 1961-65 are not available from questionnaires.

The ratio of U.S. imports to apparent consumption, when computed on a value basis, followed the same trend as that indicated above (annual increases during 1961-70), although on this basis imports accounted for a significantly smaller share (e.g., 15 percent in 1970). This is attributable in large part to the fact that imports have accounted for the bulk of the new supply of the less expensive

small-screen-size sets (monochrome and color) in recent years. Also, the value of imports is in terms of the value in the exporting country rather than in terms of the wholesale value in the U.S. market (which includes transportation costs to the United States, import duty, and the importer's markup).

Data on imports as a percent of the total U.S. supply of new TV sets by type and screen size are reported in table 3 and are discussed in the section on new supply.

#### Sources of imports

For a number of years, virtually all imports were of Japanese origin; however, largely as a result of the establishment of foreign assembly plants by U.S. producers of TV sets, the United States currently receives imports from other countries. Despite Japan's declining share of U.S. imports, Japanese TV sets are supplying a growing share of U.S. consumption, as shown in the table below.

Television receivers: Japanese share of U.S. imports and consumption, 1965-70, January-June 1970, and January-June 1971

Period	Ratio (percent) of imports from Japan to--	
	Total imports	Apparent consumption
1965-----	99.9	9.7
1966-----	94.5	10.7
1967-----	95.2	13.9
1968-----	84.9	18.3
1969-----	76.5	23.9
1970-----	73.0	26.9
January-June--		
1970-----	73.7	27.4
1971-----	72.2	28.6

Source: Compiled from official statistics of the U.S. Department of Commerce and responses to questionnaires of the U.S. Tariff Commission.

In 1970, when Japan supplied 73 percent of total U.S. imports, Taiwan supplied 20 percent and Mexico supplied 6 percent. As new TV production facilities become fully operational in the latter two countries, it is likely that they will account for a significantly larger share of U.S. imports.

The great bulk of imports from countries other than Japan have been produced by subsidiaries of U.S. firms: Taiwan--Philco Ford Corp., Motorola, Inc., Admiral Corp., and RCA; Mexico--Warwick Electronics, Inc.; Hong Kong--Sylvania Electric Products, Inc. (this firm is no longer producing TV sets at this location); and Canada--Westinghouse Electric Corp. In addition, Zenith Radio Corp. has begun to produce sets in Taiwan, for export to the United States this year. Magnavox and Packard Bell are scheduled to begin operations in Mexico in December 1971. A share, believed to be small, of the receivers from foreign subsidiaries of U.S. firms are imported as unfinished receivers. Receiving tubes, picture tubes, and cabinets are added to these unfinished receivers in U.S. manufacturing facilities.

#### Imports under item 807.00

The share of the total quantity of imports entered under TSUS item 807.00 during 1966-70 increased from a low of 4 percent in 1967 to a high of 27 percent in 1970 (table 8). Imports under item 807.00 were largely monochrome receivers imported by U.S. producers. The following table shows the principal suppliers of U.S. imports under item 807.00 in 1966-70.

Television receivers: U.S. imports entered under TSUS item 807.00,  
by principal sources, 1966-70

(In thousands of units)

Source	1966	1967	1968	1969	1970
Taiwan-----	-	31	355	654	807
Mexico-----	-	<u>1/</u>	38	199	272
Japan-----	26	9	39	24	75
Hong Kong-----	-	-	2	37	27
Canada-----	68	29	3	25	17

1/ Less than 500.

Source: Compiled from official statistics of the U.S. Department of Commerce.

The value of the U.S. components contained in imports entered under item 807.00 varied considerably by country. Such imports from Mexico contained about 72 percent by value of U.S. goods returned in 1970. The imports from Taiwan contained about 19 percent of U.S. goods returned, as shown in the table below.

Television receivers: Value content of U.S. imports entered under  
TSUS item 807.00, by sources, 1970

Source	Total	Dutiable component	U.S. component	Ratio of U.S. component to total value <u>1/</u>
	<u>1,000</u> <u>dollars</u>	<u>1,000</u> <u>dollars</u>	<u>1,000</u> <u>dollars</u>	<u>Percent</u>
Taiwan-----	32,761	26,662	6,099	18.6
Mexico-----	16,492	4,600	11,892	72.1
Canada-----	3,034	1,743	1,291	42.6
Japan-----	2,377	2,076	301	12.7
Hong Kong-----	1,405	1,311	94	6.7

1/ Computed on the basis of unrounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Typical of the U.S. goods contained in the 807.00 imports of television receivers were molded plastic parts, metal stampings, printed circuit boards, resistors, capacitors, receiving tubes, and other small electronic parts and subassemblies. The small value of U.S. goods returned in receivers assembled in Japan consisted in large part of clock movements included in receivers imported by a large U.S. retailer.

#### Private-label imports

U.S. imports of private-label television receivers (units imported by, or for sale to, a distributor or dealer for resale or distribution under his own brand name, not the manufacturers' brand name) increased irregularly from about 1.0 million units in 1966 to 1.7 million units in 1970 (table 9). Although imports of private-label television receivers increased significantly during 1966-70, in each successive year during the period they accounted for a declining share of total imports (63 percent in 1966, 58 percent in 1967, 50 percent in 1968, 44 percent in 1969, and 37 percent in 1970). At the Commission's hearing, importers stated that part of their success in supplying the U.S. market with TV sets was attributable to U.S. producers' unwillingness to produce sets for the private-label market. The Commission subsequently contacted representative importers of private-label sets, who advised that during the early and mid-1960's most large U.S. producers of manufacturers' brand-name sets were "not interested" in supplying private-label sets. This situation has changed somewhat within the last 2 years because one large producer that had not been



interested in private-label business is now supplying private-label sets and is aggressively seeking additional orders; at least one other producer has recently indicated a willingness to supply private-label sets. Five U.S. producers reported shipments of private-label sets during January-June 1971.

#### Inventories of imported TV sets

Yearend inventories of imported TV sets (monochrome and color) increased from 228,000 units in 1966 to 531,000 in 1969 (table 10). As a result of a 57-percent decline (125,000 units) in inventories of imported color sets in 1970, total inventories in that year declined to 496,000 units.

Inventories on June 30, 1971, were 20 percent greater than they were on June 30, 1970, as a result of an increase of 144,000 units in inventories of monochrome sets. This increase was probably attributable to anticipation of the west coast dock strike which began on July 1, 1971, and lasted until October 9, 1971.

#### Parts dutiable under TSUS item 685.20

Many of the parts of television receivers enter under item 685.20. As previously indicated, tuners, deflection yokes, antennas, flyback transformers, chassis, and cabinets are included among the components which are classifiable under this item. Imports were not reported separately for any of these parts until 1970, when a statistical class was established for tuners.

During 1966-70, imports of parts dutiable under item 685.20, including tuners, increased in value from about \$39 million in 1966 to \$75 million in 1970 (table 11). Imports were valued at \$31 million during January-June 1970 and \$54 million during the corresponding period in 1971. These data are slightly overstated because the statistical class in which they are reported also includes small amounts of television apparatus other than parts of receivers.

In 1970, imports of TV tuners totaled 10.6 million units, valued at \$27.5 million, and in January-June 1971, imports of these articles totaled 8.1 million units, valued at \$22.2 million. The great bulk of these imports in both periods were entered under TSUS item 807.00.

The relative positions of the leading countries supplying TV receiver parts of a type which are dutiable under item 685.20 have changed from time to time. In 1966 Japan was the principal supplier. In 1970 Mexico was the leading supplier, followed by Taiwan and Japan in that order.

#### Prices

Data developed by the Commission's staff show that prices of U.S.-produced television receivers declined during the June 1966-June 1971 period (table 12). Although prices for the four types of sets for which representative data were collected all showed declines over the 5-year period, the decline was more pronounced for 12-inch monochrome and 18-inch color sets (13 and 12 percent, respectively) than the 6-percent decline applicable to 19-inch monochrome and

23-inch color sets. The 23-inch color console model was the only one of the four representative types of sets that did not encounter competition from imports (table 3). Price indexes of the U.S. Bureau of Labor Statistics also showed annual declines in the prices of TV sets between June 1966 and June 1970; unlike the data developed by the Commission, however, that agency's reports indicate a sharper decline in the prices of color console units than in the prices of portable monochrome units.

The above price history indicates that the temporary price freeze effective August 16, 1971, occurred at a time when U.S. producers' prices were at the lowest level reported during the period, June 1966 to June 1971.

In the period from June 1966 to June 1970 the index of net wholesale selling prices of consumer durable goods increased without interruption from 100.1 (1957-59=100) to 108.1. The movement in opposite directions of the prices for consumer durable goods and television receivers resulted in part from intensive competition for sales of TV sets among domestic producers and between domestic producers and importers and from the maturing of the color segment of the TV industry. This segment of the industry experienced its period of greatest growth in the mid-1960's.

Prices reported to the Commission by U.S. producers and importers of TV sets indicate that in most instances the net wholesale selling prices of imported sets are less than those for comparable U.S.-made units. Based on the average net wholesale selling price in effect

on June 30, 1971, for manufacturers' brand-name sets sold to distributors, imported sets were priced below U.S.-made sets by the amounts shown below.

Extent by which the average net wholesale selling prices of certain imported TV sets sold to distributors were lower than those for U.S.-made sets, as of June 30, 1971

Set specifications <sup>1/</sup>	Difference per set	
	Amount	Percent
12" monochrome, table model or portable, plastic cabinet-----	\$0.35	1
14" color, table model or portable, metal or plastic cabinet-----	3.97	2
18" color, table model or portable, metal or plastic cabinet-----	10.65	4
19" monochrome, table model or portable, plastic cabinet-----	13.89	16

<sup>1/</sup> The specifications of the sets for which data were reported varied in some areas, but they were believed to be sufficiently comparable to provide a basis for a valid comparison.

Source: Derived from data shown in appendix table 13.

The differences between importers' and U.S. producers' prices for sets sold to private-label customers were small. In all instances, however, both importers and U.S. producers reported significantly lower selling prices for sets sold to private-label customers than for comparable manufacturers' brand-name sets which were sold to distributors or chain stores.

Costs of Producing TV Sets in the United States  
and in Certain Foreign Countries

U.S. firms reported to the Commission that approximately 75 percent of the direct costs involved in producing television receivers in the United States represent cost of materials; 12 percent, labor; and 13 percent, other manufacturing costs. With some small variations among companies, these percentages held true for all concerns reporting. The 12-percent labor costs are for final assembly only. The direct labor expended in producing the components which are used in the final assembly of the sets is included in the cost of materials.

Additional information regarding the costs of assembling selected types of TV sets in the United States and in foreign countries was supplied by individual concerns. Manufacturing costs varied significantly from one country to another, as is shown below.

Television receivers: Costs of producing selected sets, by principal elements of cost which account for the differential in costs between countries, by specified countries, June 1971

\* \* \* \* \*

The number of hours of direct labor involved in the final assembly of representative TV sets and the ratio of labor costs (direct and indirect) to the total costs of producing these units in the United States, Mexico, and Taiwan or Korea are shown below.

Television receivers: Direct-labor content and the ratio of labor costs (direct and indirect) to the total cost of producing certain TV sets, by specified countries, June 1971

\* \* \* \* \*

It is evident from the above table that in all countries labor constitutes a greater share of the total cost of producing monochrome sets than it does in producing color sets. Furthermore, in most instances, labor accounts for a greater share of the total costs of producing small-screen-size sets than for the larger screen sizes. As a result, importers initially concentrated their sales efforts in the area of small-screen monochrome sets, where they had the greatest cost advantage over U.S. producers.

The Commission obtained information regarding the costs of assembling TV sets in Japan from several sources; the most detailed information was provided by \* \* \* and is reported below.

\* \* \* \* \*

The information provided by \* \* \* and that provided by other Japanese producers indicate that labor costs (direct and indirect) represent about 8 percent of the total costs of manufacturing TV sets in Japan.

\* \* \*. The more rapid decline in the cost of manufacturing color sets was attributed to the fact that production in this category is at an earlier stage of accumulated production experience and consequently is moving down the learning curve more rapidly than is production of monochrome sets.

## Costs of Importing Television Receivers Into the United States

### Costs of importing TV sets as of June 1971

In order to assess the extent to which imported TV sets have a cost advantage in the U.S. market, it is necessary to add to the foreign value of the imported units such additional costs as freight and insurance to the United States, customhouse brokerage fees, U.S. import duties, and handling charges and transportation costs from the port of entry to the importer's warehouse. With respect to representative sets imported from Japan, such costs, as of June 1971, represented the following percentages of the average net price, f.o.b. foreign port; 12-inch monochrome, 15.1 percent; 19-inch monochrome, 19.5 percent; and 18-inch color, 13.4 percent (derived from table 15).

Data obtained from the Commission's questionnaires indicate that the costs of importing TV sets, excluding the purchase price, from Far Eastern countries other than Japan are essentially the same as those applicable to sets of Japanese origin. The additional costs applicable to imports from Mexico are significantly less, however, because of reduced transportation costs and because approximately 75 percent of the value of imports from Mexico enter duty free under TSUS item 807.00.

### Effect of U.S. import surcharge and currency revaluation

Since August 16, 1971, when the President imposed a 10-percent surcharge on dutiable imports for an indefinite period, and the U.S. Government discontinued backing the dollar with gold, the costs of importing TV sets has increased significantly. Assuming that the

increase in costs resulting from the surcharge and changes in currency valuation was passed on in its entirety to the importer (which is unlikely) and that all other elements of costs remained unchanged, the average costs of importing certain TV sets from Japan increased between June 30, 1971 and November 1, 1971, as follows (derived from table 15): 12-inch monochrome, \$8.81 or 17.6 percent; 19-inch monochrome, \$11.74 or 17.1 percent; and 18-inch color, \$35.63 or 17.8 percent. These increases were based on currency exchange rates that were in effect on November 1, 1971, when the dollar had declined in value by 8.33 percent relative to the yen.

Although U.S. producers' costs of manufacturing television receivers are greater than those applicable to producing in foreign countries by varying amounts, an increase in the U.S. duty such as the recent 10-percent surcharge makes the U.S. article much more competitive. An indication of the effect of the imposition of a 35-percent ad valorem rate (the statutory rate) on the relative costs of imported and U.S.-made sets are set forth below.

Television receivers: Comparison of delivered costs of selected TV sets imported from Japan, based on 1971 and 1930 rates of duty, and U.S. producers' costs in manufacturing comparable units, June 1971

(Cost per unit)			
Item	: 12" : mono- : chrome	: 19" : mono- : chrome	: 18" color
Net price, f.o.b., foreign port-----	\$43.41	\$57.32	\$176.73
Ocean freight, insurance, customhouse brokerage fees, handling charges, and transportation from port of entry to the importer's warehouse-----	3.94	7.74	13.06
Duty:			
Based on 1971 rate of duty (6 percent)-----	2.60	3.44	10.60
Based on 1930 rate of duty (35 percent)-----	15.19	20.06	61.86
Total delivered cost:			
based on 1971 rate of duty-----	49.95	68.50	200.39
Based on 1930 rate of duty-----	62.54	85.12	251.65
U.S. producers' manufacturing costs-----	***	***	***
U.S. producers' manufacturing costs more or (less) than importers' costs:			
Based on 1971 rate of duty-----	***	***	***
Based on 1930 rate of duty-----	***	***	***

Source: Net prices and costs of importing selected sets were obtained from responses to U.S. Tariff Commission questionnaires (appendix table 15); U.S. producers' manufacturing costs were obtained from \* \* \*.



## Employment

The average number of persons employed in U.S. establishments in which television receivers were assembled declined from 62,473 in 1966, the peak year for employment in these establishments, to 42,703 in 1970, a decline of 32 percent (table 16). During the same period the number of production and related workers engaged in the production of television receivers declined 36 percent, from 48,069 to 30,543. Average employment of all persons in these establishments declined further, from 41,348 in January-June 1970 to 40,511 in January-June 1971, whereas the average number of production and related workers engaged in the production of television receivers increased 3 percent, from 29,375 to 30,140.

The number of man-hours worked by production and related workers producing all products in U.S. establishments in which television receivers were assembled declined from 116.0 million in 1966 to 67.6 million in 1970, or 42 percent (table 17). In those same establishments the number of man-hours worked in producing television receivers also declined by 42 percent, from 96.6 million in 1966 to 55.6 million in 1970. The number of man-hours worked producing all products increased 7 percent, from 31.3 million in January-June 1970 to 33.7 million in the corresponding period of 1971, and the number worked in producing television receivers increased 10 percent, from 25.8 to 28.5 million. This 10-percent increase, accompanied by the increase of

only 3 percent in the number of production and related workers producing these articles, resulted in a significant increase in the number of hours worked per employee during January-June 1971.

The Commission did not obtain statistics regarding employment in U.S. establishments in which television receiver components and subassemblies were produced; however, aggregate employment in such establishments (plants in which cabinets, picture tubes, receiving tubes, capacitors, semiconductors, tuners, transformers, inductors, coils, chokes, deflection yokes, and so forth are produced) is known to be much greater than employment in television receiver assembly plants. Furthermore, in recent years the percentage decline in employment in the manufacture of television receiver components was greater than that experienced in television assembly plants, because such employment was affected not only by the decline in the level of U.S. production of television receivers but also by the increasing share of the total U.S. market for components supplied by imports (table 4).

The principal job classifications of production workers in television assembly plants are assemblers and inspectors. Workers can generally perform these jobs after about 2 weeks of training. Women constitute more than half of the work force in domestic radio and television receiver assembly plants.

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The average hourly earnings (excluding welfare benefits and payroll taxes paid by employers) of workers in the U.S. radio and television receiving-set industry increased from \$2.37 in 1966 to \$3.16 in June 1971, according to reports of the U.S. Bureau of Labor Statistics.

Data published by the Bureau of Labor Statistics indicate that the output per production worker in the U.S. industry that assembles radio and television receivers (SIC 3651) increased by 31 percent between 1966 and 1969, an average annual increase of about 10 percent. Preliminary data further indicate that there was a decline of about 3 percent in the output per worker in this same classification in 1970. The significant increase in U.S. output of TV sets that occurred during January-June 1971, which was accompanied by a relatively small increase in employment, indicates that output per worker experienced a substantial gain in this period. Data showing output per employee for all employees in this industry and output per employee man-hour closely followed the trend reported for production workers (table 18).

## Profit-and-Loss Experience of Domestic Producers

In response to the Commission's request for financial information on the operations of the establishments in which television receivers were produced and sold, 16 producers reported profit-and-loss information for the period 1966-70 on their entire domestic establishments in which television receivers were produced. Of these, 14 domestic producers, which together accounted for approximately 95 percent of the domestically produced television receivers, submitted profit-and-loss data covering their operations on television receivers only. One of the domestic producers, Westinghouse Electric Corp., ceased operations on television receivers in 1968, and another concern, Emerson TV and Radio Co., ceased operations in 1970. Both of these concerns are included in the group of 14 producers mentioned previously. One concern, \* \* \*, which accounted for approximately 5 percent of domestic sales, did not furnish any profit-and-loss data. \* \* \*.

For eight of the 14 producers the profit-and-loss data on television receivers only was the same as the profit-and-loss information for the establishments in which television receivers were produced. For the other six, television receiver operations ranged from approximately 30 to 90 percent of establishment operations, and varied somewhat from year to year (tables 19, 20, and 21).

Reported combined net sales of the establishments in which television receivers were produced amounted to approximately \$3.0 billion in 1966, \$2.9 billion in 1967, \$3.0 billion in 1968, \$2.7 billion in

1969, and \$2.4 billion in 1970 (table 22). Total combined net sales of television receivers only amounted to \$2.4 billion in 1966, \$2.4 billion in 1967, \$2.4 billion in 1968, \$2.1 billion in 1969, and \$1.8 billion in 1970 (table 20).

Other items produced in the same establishments as television receivers include phonographs, radios, and stereo sets.

In establishments in which television receivers are produced, one domestic producer sustained an operating loss in 1966; six sustained operating losses in 1967; nine, in 1968; six, in 1969, and 10, in 1970. In television receiver operations only, three sustained losses in 1966; seven, in 1967; nine, in 1968; eight, in 1969; and 10, in 1970. One concern dropped the production of television receivers in 1968 and another, in 1970. Combined net operating profit before provision for Federal and State income taxes and other nonoperating income and expense for the reporting establishments in which television receivers were produced was \$223 million in 1966, \$72 million in 1967, \$174 million in 1968, \$132 million in 1969, and \$14 million in 1970 (table 23). Combined net operating profit on television receivers only amounted to \$181 million in 1966, \$66 million in 1967, \$155 million in 1968, \$134 million in 1969, and \$22 million in 1970 (table 24).

Combined net operating profit for the establishments in which television receivers were produced as a percentage of sales was 7.5 percent in 1966, 2.4 percent in 1967, 5.8 percent in 1968, 4.9 percent in 1969, and 0.6 percent in 1970 (table 22). As a percentage of

combined net sales for television receivers only, net operating profit was 7.5 percent in 1966, 2.8 percent in 1967, 6.5 percent in 1968, 6.3 percent in 1969, and 1.2 percent in 1970 (table 24).

Net sales for the establishments in which television receivers were produced showed a 12-percent decline from 1969 to 1970, while net operating profits for these same establishments declined by 89 percent. From the beginning of 1966 to the end of 1970, net sales for these establishments declined approximately 21 percent, while net profits declined approximately 94 percent.

Net sales on television receivers only showed a 13-percent decline from 1969 to 1970, while net operating profits declined by 83 percent. From the beginning of 1966 to the end of 1970, net sales of television receivers declined by 24 percent, and net operating profits declined by approximately 88 percent.

In most cases, the profit-and-loss figures for television receiver operations include some other items which each of the concerns classify into their product line of television receivers. None of the sales of these other items, such as tape recorders, stereo sets, and radio phonographs, amount to more than 20 percent of the reported net sales for television receivers. Amounts shown in this report, under the headings "operations on television receivers" include the other items.

Only two concerns, \* \* \*, showed net operating profits for all years reported. \* \* \*.

The table below indicates the top five producers of television receivers, ranked by net sales for the period 1966-70.

\* \* \* \* \*

Together these five producers accounted for approximately 75 percent of total domestic television receiver sales in all years, 1966-70.

\* \* \* \* \*

Table 25 shows the profit-and-loss operations stated in percentages for 14 television receiver producers during the years 1966-70.

Television Receiver Industries in Countries Supplying  
Most of the U.S.-Imported Receivers

Introduction

Prior to the early 1960's, imports of television receivers were not a significant competitive factor in the United States. 1/ Sets manufactured in Europe were generally incompatible with transmissions from U.S. broadcasting stations. Sets of Japanese origin, although compatible with U.S. broadcasting, were not being produced in sufficient quantities to supply both the growing Japanese and foreign markets. 2/

The Japanese producers were and are, for the most part, highly diversified corporations having licensing agreements with \* \* \* American and European corporations. 3/ Moreover, according to press reports, some U.S. producers are minority stockholders of some of the Japanese producers of television receivers. These holdings probably do not exceed 10 percent of the capital stock.

As the productive capacity of the Japanese producers grew, they expanded their marketing activities and service facilities in the United States, and their export sales increased. Some Japanese

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1/ In 1960 the total value of television receivers exported from Japan amounted to about 1 percent of the value of Japanese production and less than 1 percent of U.S. factory sales. Imports from other countries were also very small.

2/ According to the May 10, 1969, issue of Foreign Trade, published by the Canadian Government, Japan adopted the U.S. system for monochrome TV in 1952.

3/ Industrial Japan, Spring 1970, No. 19, p. 182.



manufacturers and exporters of TV sets established distributorships and subsidiaries in the United States in the early-to-mid 1960's. In more recent years, additional numbers of Japanese companies have done so.

The growing competition of Japanese-produced TV sets increased the interest of U.S. assemblers in obtaining parts and components from abroad. U.S. producers, however, had begun to import components for TV sets on a limited basis prior to encountering competition from Japanese-produced sets. <sup>1/</sup> The components were supplied by both affiliated and nonaffiliated foreign companies. The utilization of imported components enabled U.S. companies to achieve savings in the costs of assembling TV sets in the United States. (According to U.S. industry sources, domestic producers of TV sets also achieved savings through innovations in the design of the sets, and through improvements in production methods.)

In 1965-68, some U.S. assemblers ( \* \* \* ) transferred some of their output of completely assembled TV sets to foreign countries. Spokesmen for the U.S. assemblers state that these transfers were made in an effort to compete more effectively with imported Japanese sets in the United States. Sets assembled abroad and imported under the brand name of the U.S. assemblers, are known as "domestic label" imports. Taiwan and Mexico have been the sources of most of the imports of domestic-label sets in recent years.

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<sup>1/</sup> U.S. annual imports of components were nominal in the late 1950's and small in the early 1960's; they have been substantial since the mid-1960's.

As a preponderance of the engineering, research, and development embodied in the domestic-label imports is of U.S. origin and as the workers in the foreign affiliated plants generally perform well (according to U.S. industry sources) the domestic-label imports, when having essentially the same specifications, are about equal in quality to the sets assembled by the parent company in the United States. Moreover, the domestic-label imports also share--with the U.S.-assembled sets--the results of the marketing and sales promotion activities of the parent company.

The technology of the industries supplying TV sets to the United States

Executives of U.S. assemblers of TV sets assert that the "state of the art" in the design of television receivers is about the same in the United States, Japan, and in a number of third countries.

As previously noted, the domestic-label imports, which predominate in imports from non-Japanese sources, are U.S.-designed. Moreover, the basic technology embodied in the Japanese sets is largely based on know-how sold to Japanese producers of TV sets and components by U.S. producers of TV sets and components. Although Japan has made rapid strides in training engineers and scientists, her companies continue to buy more know-how than they sell in dealing with foreign companies. Considering her economy as a whole, Japan's payments

to foreign entities under technological assistance agreements have been several times as large as her receipts from abroad under such agreements in recent years. According to the U.S. Embassy in Tokyo, Japan paid royalties of \$413 million for the importation of technology in 1970, and she received \$55 million for the exportation of technology in that year. As far as TV sets are concerned, Japan's importation of know-how, combined with Japanese research and development work, probably has resulted in Japan's catching up to the United States in TV-receiver technology according to many industry executives in the United States and Japan.

Japanese TV sets exported to the United States have consisted primarily of 19-inch and smaller screen sizes. This condition reflects an extension of marketing strategy inherent in the Japanese home market. Large screen-size sets produced in Japan are not as popular as smaller ones in the home market. Furthermore, shipping costs for large screen-size sets, to the United States, are virtually prohibitive.

Miniaturization of TV sets has been made possible by the invention and development of transistors, integrated circuits, and other semiconductor devices. Most of these components were first developed in the United States in connection with defense-oriented and industrial-products-oriented research and development work. However, Japan utilized some of these components in the production of television receivers before they were used for this application in the United States.

Export incentives and/or promotion methods

Japan.--Japan has had many programs and techniques to promote exports of Japanese products and to strengthen that country's balance-of-payments position. The incentives for export have included favorable tax treatment, preferential export financing, an export insurance program, and the services of the Japan External Trade Research Organization. 1/

The programs that have been most effective in stimulating Japan's exports of consumer electronic products, including television receivers, have been preferential export financing and accelerated depreciation allowances for plant and equipment. Both of these programs have been in effect for more than 10 years, and both are being phased out.

The Japanese export incentives were significant for Japanese exporters of television sets in the period of heavy investment in order to develop overseas markets, roughly the late 1950's through the late 1960's, but recently the government incentives have not been a major factor. At present, these incentives are only of marginal importance in the export of television sets. Of more importance during the past several years have been the competitive cost structure of the Japanese industry and the unique system of industry coordination through associations of executives and through guidance from the Japanese government.

Taiwan.--Exports of TV sets from Taiwan (Republic of China) to the United States stem from the establishment there of subsidiaries and plants by U.S. assemblers of TV sets. The U.S. companies were attracted by the very low wage rates, the availability of easily trained

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1/ Report of the U.S. Embassy, Tokyo, 1968.

and conscientious workers, the impressive development of the Taiwanese economy, governmental incentives, 1/ and the relatively high degree of political stability in the Republic of China. These conditions are also attracting Japanese television manufacturers.

The Government of the Republic of China has the objectives of economic diversification and growth, expansion of exports, relatively less dependence on trade with the United States and Japan, and strengthened trade ties with other countries. 2/

Mexico.--The expansion of exports of Mexican-assembled TV sets to the United States is based on the establishment of subsidiary corporations and branch plants in Mexico by U.S. assemblers of TV sets. Many persons refer to the latter development as the "twin plants" concept, which stems from the Mexican Government's program of border industrialization (inaugurated in 1965). The program involves relaxation of certain laws on foreign investments in border zones.

The aforementioned subsidiaries are permitted duty-free importation of capital goods and materials as long as the total output of the plants is exported from Mexico. Many of the products exported from Mexico contain both Mexican and U.S.-produced components.

Under TSUS item 807.00, the U.S. import duty is levied only on the value added abroad; the U.S. content is duty free. The existence of "807" facilitates the establishment of "twin plants". Because of the substantially lower Mexican wage-rates, coupled with readily trained labor and a high degree of political stability, a number of

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1/ Tax holidays for up to 5 years and duty-free imports in connection with their assembly operations.

2/ Report of the U.S. Embassy, Tokyo, 1970.

U.S. companies, engaged in the production of TV sets and/or components, have been attracted to Mexico. The duty-free treatment of the U.S. content of the imported products, of course, encourages the maximization of the U.S. content.

The subsidiary plants in Mexico are manned almost exclusively by Mexican labor; in some instances, however, management and technical personnel are U.S. citizens living on the U.S. side of the border.

Mexico levies no export duty on products exported under the aforementioned program. Consequently, such exports are free of Mexican import duties on imported materials and components, free of Mexican export duties on the finished product, and subject only to U.S. import duty on the value-added abroad. Furthermore, finished products which are exported to member countries of the Latin American Free Trade Association are entitled to duty-free entry.

#### The Japanese Television Industry

The Japanese Television Industry (JTI) is coordinated essentially by a formal association of executives of producing firms, by the Electronic Industries Association of Japan (EIAJ), the Machinery Export Association, and by various agencies of the Japanese Government. The JTI executives hold regular meetings for industry discussions (a government official(s) is often in attendance) and as necessary with officials of EIAJ and the government. The EIAJ gathers and disseminates statistics on industry performance as does the government's Ministry of Trade and Industry (MITI), the Ministry of Labor (MOL), and the Ministry of Finance (MOF).

Control of the JTI is exercised principally by the association of executives (at one time known as the Okura Club) 1/, and, as necessary for orderly marketing, by the EIAJ and MITI. 2/ Japanese firms achieve orderly marketing through agreement between the executives of competing producers rather than by legal proceedings. When necessary to resolve disputes the EIAJ or a higher order of business executives will act to invoke discipline on recalcitrant firms or, as a last resort, MITI or other Government agency will invoke sanctions against an errant producer.

Manufacturers.--The principal manufacturers of television receivers in Japan are Matsushita Electric Industrial Company, Ltd., (selling under the "National" label in Japan and "Panasonic" in the United States), Hitachi, Ltd., Tokyo Shibaura Electric Company (Toshiba), Sony Corporation, and Hayakawa Electric Company, Ltd. (Sharp Electronics). Other important producers include Sanyo Electric Company, Ltd., Victor Company of Japan, Nippon Electric Company, Ltd., Nippon Columbia Co., Ltd., Mitsubishi Electric Corp., and the General Corp. The total number of producers is about 19. All the firms mentioned are moderate to large sized with employment on all operations ranging from about 2,300 workers (Crown Radio) to more than 140,000 workers (Hitachi). All the manufacturers produce other consumer electronic products in addition to television receivers. The larger firms produce a range of electric and electronic apparatus and components, with both industrial and consumer applications. The most

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1/ Fairchild News Service, Tokyo Bureau, December 1966.

2/ Television Digest, November 1, 1971.

diversified also have operations in fields other than the electrical machinery and electronic industries.

Capital.--Japanese producers of TV invest a large share of profit into capital equipment and process improvement. 1/ The producers also borrow heavily to fund investment in plant and equipment. 2/ With a few major exceptions, 3/ the debt-equity relationship of the producers is about 70/30. Consequently, the interest paid by Japanese producers is a significant fixed cost.

Labor.--Japanese producers of TV, like most Japanese firms, employ personnel on a permanent basis, i.e., once hired, an employee remains with the firm until retirement. 4/ (\*\*\*) is a notable exception in that nearly 4,500 employees of the total 15,000 in 1971 are temporary employees with few, in any, of the benefits of permanent employees.) Virtually all firms remunerate employees with a basic wage, incentive pay, semiannual bonus, and a lump-sum retirement payment. Many firms provide other fringe benefits such as transportation allowances, housing allowances or quarters, food allowances, educational benefits, health care, and other social benefits. Since retirement and welfare benefits supplied by the Japanese Government are small, the firm is the main source of employee income and security while working and after retirement. The firm's success is reflected in the income and security of the employee, and the employee has a strong sense of

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1/ Industrial Japan, Spring 1970, No. 19, pp. 193 and 194.

2/ "How Japanese Run a Business," New York Times, November 17, 1971, William Rapp.

3/ For example, \* \* \* have a debt/equity relationship of about 15/85 similar to the relationship for U.S. producers.

4/ Labor Department Abroad, March 1971, Vol. 16, No. 3, pp. 9-15, Bureau of Labor Statistics.



identity with the company. The firms experience few strikes, minimal absenteeism, and a high input of employee suggestions for product and process improvement.

Virtually all firms bargain each April with a union limited to company employees. The firm's offer, which is seldom modified in any significant way, is commensurate with productivity and includes larger increases for some job classifications than others, based on performance.

Labor costs in Japan are difficult to ascertain owing to the Japanese method of compensating employees on the basis of education qualifications, age, and length of service and providing a variety of fringe benefits which vary by the employee and by the firm. <sup>1/</sup> The (U.S.) Bureau of Labor Statistics estimates that the average hourly compensation to the Japanese worker is about \$1.08, based on an exchange rate of 360 yen per U.S. dollar. If the average rate of exchange during September 1971 (338 yen per dollar) were used, the cost to the Japanese industry <sup>2/</sup> would be \$1.15. (For a comparison of average hourly compensation in the United States and Japan, see table 26).

The authoritarian position of the Japanese firm in setting the wage bill, the minimal time lost owing to strikes and absenteeism, and the phenomenon of permanent employment are factors which aid the firm in predicting labor cost for the next fiscal year. Many economists consider unit labor costs fixed under such circumstances.

Materials.--The cost of materials to Japanese producers of TV sets probably varies significantly owing to the large number of cottage

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<sup>1/</sup> Labor Developments Abroad, March 1971, Vol. 16, No. 3, pages 9-15 BLS.

<sup>2/</sup> Electrical machinery

industries (small specialty suppliers, often retired employees who have set up businesses with their retirement payments) and independent producers of components. Many firms, however, are believed to produce a large share of components in-house. Matsushita, for example, manufactures picture tubes, receiving tubes, semiconductors, resistors, capacitors, transformers, and a host of other components used in television receivers.

Japanese-made components for TV sets are highly competitive in world markets. Many are imported by U.S. producers. A large share of these components are produced by Japanese television manufacturers. The Japanese (as well as other) assemblers of TV sets, to the extent that they have a captive production of components, have greater latitude in allocating materials cost than do those assemblers who do not have such captive production, e.g., a firm can impute profits on the captively produced components utilized in some sets and not do so on such components used in the assembly of other sets.

Productivity.--Japanese firms have achieved a rapid increase in productivity. Although specific data on the JTI are not available, information of the electrical machinery, equipment, and supplies industry, in which the assembly of TV sets is an important part, indicates that output per man-hour and per employee increased by about 70 percent from 1965 to 1969 and over 36 percent from 1967 to 1969. Output doubled during 1966-69 (see table 27).

Executives of Matsushita, Toshiba, and Sony who were interviewed recently by TC employees were proud of the advance of the JTI. Among the factors, to which they attributed the success of the industry, were the use of imported technology, the competitiveness of Japanese

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producers in Japan and other markets, and the diligence of their employees. Mr. Matsushita noted that Matsushita Electric Co. employees--about 63,000--contributed 420,000 suggestions for product and process improvement in 1969 and 660,000 in 1970. The 8,000 Matsushita TV assembly workers in 1969 contributed an average of about 20 suggestions each. The bulk of the suggestions were utilized. Under the permanent-employment system, the Japanese worker has little fear of automating himself out of a job or suffering a loss in remuneration.

Trends in production and exports.--Japanese production and total exports of television receivers, as well as exports of such receivers to the United States, have increased each year since 1965. In 1970 all three were more than three times as large (by quantity) as they had been in 1965. Exports of television receivers generally comprised about 35 percent of production. The United States was by far the most important export market for Japanese TV sets, accounting for

more than 70 percent of the sets exported. Shown below are quantities and indexes of Japanese television-receiver production, total exports, and exports to the United States.

Television receivers: Japanese production, total exports, and exports to the United States, 1965-70

Year	Quantity			Index (1965=100) of--		
	Produc- tion	Exports		Produc- tion	Exports	
		Total	To United States		Total	To United States
	<u>1,000</u> units	<u>1,000</u> units	<u>1,000</u> units			
1965-----	4,190	1,457	1,089	100	100	100
1966-----	5,651	2,094	1,561	135	144	143
1967-----	7,037	2,263	1,572	168	155	144
1968-----	9,140	3,529	2,505	218	242	230
1969-----	12,120	4,290	3,240	289	294	298
1970-----	13,782	4,724	3,351	329	324	308

Source: Statistics of the Japanese Government.

During the years shown an approximate average of one-fourth of annual exports to the United States have been in **screen sizes** not over 9 inches; three-eighths in sizes over 9 inches, not over 13 inches; one-sixth in sizes over 13 inches, not over 16 inches; and one-fifth in sizes over 16 inches, not over 19 inches. Less than one percent of the exports to the United States have been in **screen sizes** over 19 inches.

Japanese manufacturers have generally been expanding TV production capacity, particularly capacity for producing color TV sets. Estimated capacity increased from about 7.6 million sets in 1966 to

to about 15.1 million sets in 1969. <sup>1/</sup> Production is believed to have equaled 80 percent or more of estimated capacity in recent years. This relatively high ratio of output to capacity, coupled with strong domestic and external demands for Japanese sets and the increasing labor shortage in Japan, suggests that the TV manufacturers were operating near their maximum practical limits throughout the 1966-70 period. In addition to expanding their domestic facilities for producing TV sets, Japanese manufacturers are also establishing off-shore production facilities in countries where labor is more abundant, and wage rates are lower.

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<sup>1/</sup> Obtained by multiplying by 12 the highest monthly production data for 1966 and 1969. Calculated on the same basis, capacity in 1970 would have been about 14 million sets; however, it is unlikely that a decline in capacity actually occurred between 1969 and 1970.

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry should be supported by a valid receipt or invoice. This ensures transparency and allows for easy verification of the data.

In the second section, the author outlines the various methods used to collect and analyze the data. This includes both primary and secondary data collection techniques. The analysis focuses on identifying trends and patterns over time, which is crucial for making informed decisions.

The third part of the document provides a detailed breakdown of the results. It shows that there has been a significant increase in sales volume, particularly in the online channel. This is attributed to the implementation of the new marketing strategy and the improved user experience on the website.

Finally, the document concludes with a set of recommendations for future actions. It suggests continuing to invest in digital marketing and exploring new product lines to further drive growth. Regular monitoring and reporting will be essential to track the success of these initiatives.

STATISTICAL APPENDIX





Table 1.--Television receivers and parts thereof, investigations by the U.S. Tariff Commission: Investigation number and product, TC publication number and date, and the Commissioners' findings, July 1970-October 1971

Investigation number and product	TC publication number and date	Commissioners' findings	
		Affirmative	Negative
TEA-W-21--Tuners and deflection components-----	329, July 1970:	<u>1/</u> 2	2
TEA-F-11--Electrolytic capacitors--	335, Aug. 1970:	<u>1/</u> 2	2
AA1921-64--Tuners from Japan-----	341, Nov. 1970:	4	0
TEA-W-31--Vertical output transformers-----	351, Jan. 1971:	2	1
AA1921-65--Ferrite cores from Japan-----	360, Jan. 1971:	3	2
TEA-F-16 and TEA-W-55--Paper cones for loudspeakers-----	362, Feb. 1971:	0	4
AA1921-66--Television receivers from Japan-----	367, Mar. 1971:	5	0
AA1921-67--Capacitors from Japan---	368, Mar. 1971:	0	5
TEA-W-70--Television receivers-----	376, Apr. 1971:	<u>1/</u> 2	2
TEA-W-77--Television receivers-----	380, Apr. 1971:	<u>1/</u> 2	2
TEA-F-19--Coils and antennas-----	385, Apr. 1971:	<u>1/</u> 2	2
TEA-W-80--Deflection yokes and horizontal output transformers---	386, Apr. 1971:	<u>1/</u> 2	2
TEA-F-22--Capacitors and semi- conductors-----	394, May 1971:	1	2
TEA-W-82 to W-88--Capacitors and semiconductors (7 investi- gations)-----	395, May 1971:	1	2
TEA-W-89--Electronic receiving tubes and transistors-----	396, May 1971:	0	4

1/ The President accepted the affirmative finding in each of the investigations in which the vote of the Commission was evenly divided, thereby making the petitioner eligible for adjustment assistance.

Source: Compiled from official reports of the U.S. Tariff Commission.

Table 2.--Television receivers (monochrome and color): U.S. shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1966-70, January-June 1970, and January-June 1971

(Quantity in thousands of units; value in millions of dollars)

Period	U.S. shipments	Imports	Exports	Apparent consumption	Ratio (percent) of imports to consumption
Quantity					
1966-----	12,029	1,518	168	13,379	11.3
1967-----	9,566	1,608	139	11,035	14.6
1968-----	10,032	2,708	144	12,596	21.5
1969-----	9,050	4,034	157	12,927	31.2
1970-----	7,873	4 509	126	12,256	36.8
Jan.-June--					
1970-----	3,183	1,859	51	4,991	37.2
1971-----	3,832	2,484	55	6,261	39.7
Value					
1966-----	2,527	115	26	2,616	4.4
1967-----	2,210	124	24	2,310	5.4
1968-----	2,300	203	28	2,475	8.2
1969-----	2,093	296	33	2,356	12.6
1970-----	1,757	316	26	2,047	15.4
Jan.-June--					
1970-----	679	129	10	798	16.2
1971-----	896	191	11	1,076	17.8

Source: U.S. shipments compiled from data submitted in response to questionnaires of the U.S. Tariff Commission; imports and exports from official statistics of the U.S. Department of Commerce.

Table 3.--Television receivers: U.S. production, imports, and new supply, by types and screen sizes, 1966-70, January-June 1970, and January-June 1971

Screen size and period	Production		Imports <sup>1/</sup>		New supply		Ratio of imports to new supply <sup>1/</sup>	
	Monochrome	Color	Monochrome	Color	Monochrome	Color	Monochrome	Color
	<u>1,000 units</u>	<u>1,000 units</u>	<u>1,000 units</u>	<u>1,000 units</u>	<u>1,000 units</u>	<u>1,000 units</u>	Percent	Percent
Not over 9":								
1966-----	170	-	268	-	438	-	61.2	-
1967-----	133	-	323	-	456	-	70.8	-
1968-----	169	-	539	1	708	1	76.1	100.0
1969-----	161	-	794	2	955	2	83.1	100.0
1970-----	110	-	904	37	1,014	37	89.2	100.0
January-June--								
1970-----	27	-	393	14	420	14	93.6	100.0
1971-----	7	-	468	21	475	21	98.5	100.0
Over 9", not over 13":								
1966-----	1,262	258	518	-	1,780	258	29.1	-
1967-----	853	153	517	8	1,370	161	37.7	5.0
1968-----	899	86	915	103	1,814	189	50.4	54.5
1969-----	710	141	1,270	194	1,980	335	64.1	57.9
1970-----	545	102	1,499	265	2,044	367	73.3	72.2
January-June--								
1970-----	256	38	582	121	838	159	69.5	76.1
1971-----	344	64	797	190	1,141	254	69.9	74.8
Over 13", not over 16":								
1966-----	718	51	161	13	879	64	18.3	20.3
1967-----	473	220	114	149	587	369	19.4	40.4
1968-----	505	389	158	317	663	706	23.8	44.9
1969-----	553	438	223	286	776	724	28.7	39.5
1970-----	354	472	238	202	592	674	40.2	30.0
January-June--								
1970-----	194	205	111	77	305	282	36.4	27.3
1971-----	170	277	191	136	361	413	52.9	32.9
Over 16", not over 19":								
1966-----	2,926	507	237	195	3,163	702	7.5	27.8
1967-----	1,640	624	198	171	1,838	795	10.8	21.5
1968-----	1,985	812	219	233	2,204	1,045	9.9	22.3
1969-----	1,528	1,000	409	399	1,937	1,399	21.1	28.5
1970-----	1,459	1,225	488	336	1,947	1,561	25.1	21.5
January-June--								
1970-----	565	491	180	123	745	614	24.2	20.0
1971-----	610	864	278	239	888	1,103	31.3	21.7
Over 19":								
1966-----	1,755	4,078	11	-	1,766	4,078	.6	-
1967-----	1,081	4,295	9	-	1,090	4,295	.8	-
1968-----	1,197	4,023	3	3	1,200	4,026	.3	.1
1969-----	811	3,653	15	2	826	3,655	1.8	.1
1970-----	686	2,539	50	3	736	2,542	6.8	.1
January-June--								
1970-----	385	1,098	18	1	403	1,099	4.5	.1
1971-----	406	1,414	30	1	436	1,415	6.9	.1
Total:								
1966-----	6,831	4,894	1,195	208	8,026	5,102	14.9	4.1
1967-----	4,180	5,292	1,161	328	5,341	5,620	21.7	5.8
1968-----	4,755	5,310	1,834	657	6,589	5,967	27.8	11.0
1969-----	3,763	5,232	2,711	883	6,474	6,115	41.9	14.4
1970-----	3,154	4,338	3,179	843	6,333	5,181	50.2	16.3
January-June--								
1970-----	1,427	1,832	1,284	336	2,711	2,168	47.4	15.5
1971-----	1,537	2,619	1,764	587	3,301	3,206	53.4	18.3

<sup>1/</sup> These data are somewhat understated because imports reported in response to questionnaires (the only source for data on imports by screen size for the entire period covered in this table) accounted for only 90 percent of the total reported by the U.S. Bureau of the Census.

Source: Compiled from data submitted in response to questionnaires of the U.S. Tariff Commission.

Table 4.--Television receiver parts: Sources of parts used in the assembly of U.S.-made sets, 1966-70, January-June 1970, and January-June 1971.

Period	Parts produced in the United States by firms assembling TV sets	Purchased parts produced in the United States <sup>1/</sup>	Imported parts <sup>1/</sup>
	Value (million dollars)		
1966-----	540	1,038	86
1967-----	639	846	71
1968-----	617	749	90
1969-----	534	754	100
1970-----	394	583	107
January-June--			
1970-----	166	235	47
1971-----	201	322	58
	Percent of total		
1966-----	33	62	5
1967-----	41	54	5
1968-----	42	52	6
1969-----	39	54	7
1970-----	36	54	10
January-June--			
1970-----	37	52	11
1971-----	35	55	10

<sup>1/</sup> Data on parts produced in the United States are overstated and data on imported parts are understated by like amounts because respondents to the Commission's questionnaires did not know in all instances whether parts purchased from U.S. concerns were produced in the United States or were imported.

Source: Compiled from data submitted in response to questionnaires of the U.S. Tariff Commission.

Table 5.--Television receivers: U.S. production, by types and screen sizes, 1966-70, January-June 1970, and January-June 1971

(In thousands of units)

Type and screen size	1966	1967	1968	1969	1970	Jan.- June 1970	Jan.- June 1971
<b>Monochrome:</b>							
Not over 9"-----	170	133	169	161	110	27	7
Over 9", not over 13"----	1,262	853	899	710	545	256	344
Over 13", not over 16"----	718	473	505	553	354	194	170
Over 16", not over 19"----	2,926	1,640	1,985	1,528	1,459	565	610
Over 19"-----	1,755	1,081	1,197	811	686	385	406
Total-----	6,831	4,180	4,755	3,765	3,154	1,427	1,537
<b>Color:</b>							
Not over 9"-----	-	-	-	-	-	-	-
Over 9", not over 13"----	258	153	86	141	102	38	64
Over 13", not over 16"----	51	220	389	438	472	205	277
Over 16", not over 19"----	507	624	812	1,000	1,225	491	864
Over 19"-----	4,078	4,295	4,023	3,653	2,539	1,098	1,414
Total-----	4,894	5,292	5,310	5,252	4,338	1,832	2,619
<b>Total:</b>							
Not over 9"-----	170	133	169	161	110	27	7
Over 9", not over 13"----	1,520	1,006	985	851	647	294	408
Over 13", not over 16"----	769	693	894	991	826	399	447
Over 16", not over 19"----	3,433	2,264	2,797	2,528	2,684	1,056	1,474
Over 19"-----	5,833	5,376	5,220	4,464	3,225	1,483	1,820
Total-----	11,725	9,472	10,065	8,995	7,492	3,259	4,156

Source: Compiled from data submitted in response to questionnaires of the U.S. Tariff Commission.

Table 6.--Television receivers: Shipments of U.S.-made sets, by types, 1966-70, January-June 1970, and January-June 1971

Period	Monochrome	Color	Total
Quantity (1,000 units)			
1966-----	7,219	4,810	12,029
1967-----	4,562	5,004	9,566
1968-----	4,708	5,324	10,032
1969-----	3,992	5,058	9,050
1970-----	3,387	4,486	7,873
January-June--			
1970-----	1,470	1,713	3,183
1971-----	1,380	2,452	3,832
Value (1,000 dollars)			
1966-----	814,633	1,712,688	2,527,321
1967-----	434,417	1,775,288	2,209,705
1968-----	453,679	1,845,832	2,299,511
1969-----	377,683	1,714,904	2,092,587
1970-----	320,497	1,436,971	1,757,468
January-June--			
1970-----	136,681	542,546	679,227
1971-----	129,459	766,546	896,005

Source: Compiled from data submitted in response to questionnaires of the U.S. Tariff Commission.

Table 7.--Television receivers: Inventories of U.S.-made sets, by types and screen sizes, as of Dec. 31 of 1966-70 and June 30 of 1970 and 1971

(In thousands of units)							
Type and screen size	Dec. 31--					June 30--	
	1966	1967	1968	1969	1970	1970	1971
<b>Monochrome:</b>							
Not over 9"-----	14:	1:	38:	57:	31:	29:	12
Over 9", not over 13"---	325:	131:	114:	94:	61:	114:	101
Over 13", not over 16"---	93:	71:	34:	57:	21:	46:	44
Over 16", not over 19"---	335:	125:	139:	88:	163:	117:	195
Over 19"-----	140:	88:	85:	74:	50:	119:	140
Total-----	907:	429:	410:	370:	326:	425:	492
<b>Color:</b>							
Not over 9"-----	-:	-:	-:	-:	-:	-:	-
Over 9", not over 13"---	32:	28:	10:	23:	28:	18:	39
Over 13", not over 16"---	-:	21:	45:	54:	81:	85:	88
Over 16", not over 19"---	25:	64:	77:	113:	139:	187:	235
Over 19"-----	135:	384:	317:	415:	248:	482:	410
Total-----	192:	497:	449:	605:	496:	772:	772
<b>Total:</b>							
Not over 9"-----	14:	14:	38:	57:	31:	29:	12
Over 9", not over 13"---	357:	159:	124:	117:	89:	132:	140
Over 13", not over 16"---	93:	92:	79:	111:	102:	131:	132
Over 16", not over 19"---	360:	189:	216:	201:	302:	304:	430
Over 19"-----	275:	472:	402:	489:	298:	601:	550
Total-----	1,099:	926:	859:	975:	822:	1,197:	1,264

Source: Compiled from data submitted in response to questionnaires of the U.S. Tariff Commission.

Table 8.--Television receivers: U.S. imports, total and imports entered under TSUS item 807.00, by types and principal sources, 1966-70, January-June 1970, and January-June 1971

Type and source	1966			1967			1968			1969		
	Total quantity of imports	807.00 imports	Total quantity of imports	807.00 imports	Total quantity of imports	807.00 imports	Total quantity of imports	807.00 imports	Total quantity of imports	807.00 imports	Total quantity of imports	
	:Quantity: of imports	:Percent: of total	:Quantity: of imports	:Percent: of total	:Quantity: of imports	:Percent: of total	:Quantity: of imports	:Percent: of total	:Quantity: of imports	:Percent: of total	:Quantity: of imports	:Percent: of total
	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units	1,000 units
<b>Monochrome:</b>												
Japan-----	1/	1/	1,216	9	0.7	1,637	13	0.8	2,209	6	0.3	
Taiwan-----	1/	1/	37	31	83.8	361	355	98.3	649	632	97.4	
Mexico-----	1/	1/	-	-	-	40	38	95.0	208	199	95.7	
Hong Kong---	1/	1/	-	-	-	2	2	100.0	40	37	92.5	
Canada-----	1/	1/	36	26	72.2	1	2/	-	15	14	93.3	
All other---	1/	1/	1	2/	-	2	-	-	1	-	-	
Total---	1/	1/	1,290	66	5.1	2,043	408	20.0	3,122	888	28.4	
<b>Color:</b>												
Japan-----	1/	1/	315	2/	-	662	26	3.9	879	18	2.0	
Taiwan-----	1/	1/	2/	-	-	-	-	-	22	22	100.0	
Mexico-----	1/	1/	2/	-	-	-	-	-	2/	2/	-	
Hong Kong---	1/	1/	-	-	-	-	-	-	-	-	-	
Canada-----	1/	1/	3	3	100.0	3	3	100.0	11	11	100.0	
All other---	1/	1/	2/	-	-	2/	-	-	2/	-	-	
Total---	1/	1/	318	3	.9	665	29	4.4	912	51	5.6	
<b>Total:</b>												
Japan-----	1,434	26	1,531	9	.6	2,299	39	1.7	3,088	24	.8	
Taiwan-----	-	-	2/	31	83.8	361	355	98.3	671	654	97.5	
Mexico-----	-	-	2/	2/	-	40	38	95.0	208	199	95.7	
Hong Kong---	-	-	-	-	-	2	2	100.0	40	37	92.5	
Canada-----	84	68	39	29	74.4	4	3	75.0	26	25	96.2	
All other---	2/	-	1	-	-	2	-	-	1	-	-	
Total---	1,518	94	1,608	69	4.3	2,708	437	16.1	4,034	939	23.3	

See footnotes at end of table



Table 8.--Television receivers: U.S. imports, total and imports entered under TSUS item 807.00, by types and principal sources, 1966-70, January-June 1970, and January-June 1971--Con.

Type and source	1970			January-June 1970			January-June 1971		
	Total quantity of imports	807.00 imports	Percent of total	Total quantity of imports	807.00 imports	Percent of total	Total quantity of imports	807.00 imports	Percent of total
	1,000 units	1,000 units		1,000 units	1,000 units		1,000 units	1,000 units	
<b>Monochrome:</b>									
Japan-----	2,441	73	3.0	1,017	9	0.9	1,216	21	1.7
Taiwan-----	840	766	91.2	343	331	96.5	475	390	82.1
Mexico-----	273	272	99.6	96	96	100.0	166	166	100.0
Hong Kong-----	32	27	84.4	26	23	88.5	1	-	-
Canada-----	9	8	88.9	2	2	100.0	3	2	66.7
All other-----	2/	-	-	2/	-	-	3/	5	-
Total-----	3,595	1,146	31.9	1,484	461	31.1	1,866	579	31.0
<b>Color:</b>									
Japan-----	850	2	.2	353	2	.6	577	5	.9
Taiwan-----	53	41	77.4	19	19	100.0	38	12	31.6
Mexico-----	-	-	-	2/	-	-	2/	-	-
Hong Kong-----	-	-	-	-	-	-	-	-	-
Canada-----	11	9	81.8	3	3	100.0	3	2	66.7
All other-----	2/	-	-	2/	-	-	2/	-	-
Total-----	914	52	5.7	375	24	6.4	618	19	3.1
<b>Total:</b>									
Japan-----	3,291	75	2.3	1,370	11	.8	1,793	26	1.5
Taiwan-----	893	807	90.4	362	350	96.7	513	402	78.4
Mexico-----	273	272	99.6	96	96	100.0	166	166	100.0
Hong Kong-----	32	27	84.4	26	23	88.5	1	-	-
Canada-----	20	17	85.0	5	5	100.0	6	4	66.7
All other-----	2/	-	-	2/	-	-	3/	5	-
Total-----	4,509	1,198	26.6	1,859	485	26.1	2,484	598	24.1

1/ Not available.

2/ Less than 500.

3/ Includes 3 thousand units imported from the Republic of Korea.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 9.--Television receivers: U.S. imports of private-label sets,  
by types, 1966-70, January-June 1970, and January-June 1971

(In thousands of units)

Period	Monochrome	Color	Total
1966-----	758	192	950
1967-----	670	258	928
1968-----	936	412	1,348
1969-----	1,250	510	1,760
1970-----	1,309	376	1,685
January-June--			
1970-----	556	151	707
1971-----	712	213	925

Source: Compiled from data submitted in response to questionnaires  
of the U.S. Tariff Commission.

Table 10.--Television receivers: Inventories of sets imported into the United States, by types and screen sizes, as of Dec. 31 of 1966-70 and June 30 of 1970 and 1971

Type and screen size	(In thousands of units)						
	Dec. 31--					June 30--	
	1966	1967	1968	1969	1970	1970	1971
Monochrome:							
Not over 9"-----	33	45	52	115	169	192	221
Over 9", not over							
13"-----	59	60	58	116	145	170	210
Over 13", not over							
16"-----	36	17	8	30	27	39	44
Over 16", not over							
19"-----	46	61	25	49	56	38	93
Over 19"-----	-	-	-	2	5	3	18
Total-----	174	183	143	312	402	442	586
Color:							
Not over 9"-----	-	-	-	-	4	8	14
Over 9", not over							
13"-----	-	-	33	79	23	86	59
Over 13", not over							
16"-----	2	18	34	61	29	55	52
Over 16", not over							
19"-----	52	31	29	79	35	71	88
Over 19"-----	-	-	-	-	3	5	-
Total-----	54	49	96	219	94	225	213
Total:							
Not over 9"-----	33	45	52	115	173	200	235
Over 9", not over							
13"-----	59	60	91	195	168	256	269
Over 13", not over							
16"-----	38	35	42	91	56	94	96
Over 16", not over							
19"-----	98	92	54	128	91	109	181
Over 19"-----	-	-	-	2	8	8	18
Total-----	228	232	239	531	496	667	799

Source: Compiled from data submitted in response to questionnaires of the U.S. Tariff Commission.

Table 11.--Certain parts of television receivers: 1/ U.S. imports for consumption, by principal sources, 1966-70, January-June 1970, and January-June 1971 2/

(In millions of dollars)

Source	1966	1967	1968	1969	1970	Jan.-June 1970	Jan.-June 1971
Mexico-----	1.1	1.1	5.6	12.5	25.4	9.3	21.8
Taiwan-----	5.8	5.8	9.5	10.5	17.4	6.0	10.1
Japan-----	12.9	8.2	11.1	15.8	14.2	6.9	10.1
Hong Kong-----	8.6	12.3	11.8	8.8	5.7	2.5	3.9
Canada-----	3.8	4.7	5.4	5.1	5.5	2.7	3.0
All other-----	7.1	6.5	9.9	9.2	6.9	3.3	5.3
Total-----	39.3	38.6	53.3	61.9	75.1	30.7	54.2

1/ Parts dutiable under TSUS item 685.20, including tuners valued at \$27.5 million in 1970, \$10.1 million in January-June 1970, and \$22.2 million in January-June 1971, the only periods for which such data were separately reported.

2/ Data include an unknown but probably small amount of television apparatus other than television receivers.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 12.--Television receivers: Index of net wholesale selling prices of U.S.-produced sets, by types and screen sizes, on June 30 of 1966-71

(June 30, 1966, prices=100)

Type and screen size	June 30--					
	1966	1967	1968	1969	1970	1971
12" monochrome, table model or portable-----	100	96	96	90	88	87
18" color, table model or portable-----	100	96	94	92	89	88
19" monochrome, table model or portable-----	100	98	98	94	94	94
23" color, console, wood cabinet-----	100	99	96	92	93	94

Source: Compiled from data submitted in response to questionnaires of the U.S. Tariff Commission.

Table 13.--Television receivers: Average net wholesale selling prices <sup>1/</sup> of imported and U.S.-made sets, by types and screen sizes and by class of customer, as of June 30, 1971

Type and screen size	(Price per unit)					
	Imported receivers			U.S.-produced receivers		
	Private-label customers	Manufacturers' brand-name sets sold to--		Private-label customers	Manufacturers' brand-name sets sold to--	
		Distributors	Chain stores		Distributors	Chain stores
9" monochrome, table model or portable, plastic cabinet, solid-state circuitry-----	\$51.26	\$72.07	\$72.16	<u>2/</u>	<u>3/</u>	<u>3/</u>
12" monochrome, table model or portable, plastic cabinet-----	50.57	63.41	66.40	<u>2/</u>	\$63.76	<u>3/</u>
12" color, table model or portable, plastic cabinet-----	143.73	174.84	181.66	<u>3/</u>	<u>3/</u>	<u>2/</u>
14" color, table model or portable, metal or plastic cabinet-----	<u>4/</u> 172.85	200.52	201.74	<u>2/</u>	204.49	<u>3/</u>
18" color, table model or portable, metal or plastic cabinet-----	202.45	240.62	244.81	\$213.11	251.27	\$267.48
19" monochrome, table model or portable, plastic cabinet-----	72.79	85.04	85.91	<u>3/</u>	98.93	102.52
23" color, console, wood cabinet-----	<u>2/</u>	<u>2/</u>	<u>2/</u>	295.65	357.92	368.30

<sup>1/</sup> The net wholesale selling price is based on each respondent reporting the price applicable to its best selling model in three of the seven types shown. Prices are f.o.b., the seller's factory or warehouse; they reflect all discounts (maximum quantity discount, "cash" discount, etc.) and transportation or other allowances.

<sup>2/</sup> None reported.

<sup>3/</sup> Data were reported by a single respondent; therefore there was no basis for computing an average price.

<sup>4/</sup> Price applicable to a 15" screen size receiver.

Source: Compiled from data submitted in response to questionnaires of the U.S. Tariff Commission.

Table 15.--Television receivers: Average costs of importing from Japan, by types and specified screen sizes, as of June 30, 1971 and Nov. 1, 1971<sup>1/</sup>

Item of cost	(Dollars per unit)					
	12" monochrome		19" monochrome		18" color	
	June 30, 1971	Nov. 1, 1971	June 30, 1971	Nov. 1, 1971	June 30, 1971	Nov. 1, 1971
Net price, f.o.b. foreign port-----	\$43.41	\$47.03	\$57.32	\$62.09	\$176.73	\$191.45
Ocean freight, insurance, and customhouse brokerage fees <sup>2/</sup> -----	3.19	3.46	5.75	6.23	10.41	11.28
U.S. import duty (6 percent ad valorem)-----	2.60	2.82	3.44	3.72	10.60	11.49
Import surcharge (10 percent ad valorem)-----	<u>3/</u>	4.70	<u>3/</u>	6.21	<u>3/</u>	19.15
Handling charges and transportation from port of entry to importers' warehouse-----	.75	.75	1.99	1.99	2.65	2.65
Total cost <sup>4/</sup> -----	\$49.95	\$58.76	\$68.50	\$80.24	\$200.39	\$236.02
Cost increase between June 30, 1971, and Nov. 1, 1971-----	<u>3/</u>	8.81	<u>3/</u>	11.74	<u>3/</u>	35.63

<sup>1/</sup> Data for Nov. 1, 1971, are based on an exchange rate of 330 yen per dollar (the equivalent of a 3.33 percent decline in the value of the dollar relative to the rate prevailing on June 30, 1971). Data are also based on the assumption that changes in costs resulting from the currency revaluation will be passed on to the importer.

<sup>2/</sup> These data are overstated to the extent that the customhouse brokerage fees will not be affected by the currency revaluation.

<sup>3/</sup> Not applicable.

<sup>4/</sup> Data do not include the cost of the 9 percent bond required by the U.S. Bureau of Customs until determination is made as to whether the imports are subject to dumping duties in addition to the normal duty and surcharge.

Source: Compiled from data submitted in response to questionnaires of the U.S. Tariff Commission, except as noted.

Table 16.--Average number of persons employed in U.S. establishments in which television receivers were assembled, 1966-70, January-June 1970, and January-June 1971

Period	All employees	Production and related workers engaged in the production of television receivers
1966-----	62,473	48,069
1967-----	57,491	42,152
1968-----	54,385	39,118
1969-----	51,223	36,653
1970-----	42,703	30,543
January-June		
1970-----	41,348	29,375
1971-----	40,511	30,140

Source: Compiled from data submitted in response to questionnaires of the U.S. Tariff Commission.



Table 17.--Man-hours worked by production and related workers in U.S. establishments in which television receivers were assembled, 1966-70, January-June 1970, and January-June 1971

(In thousands of man-hours)

Period	Man-hours worked producing--	
	All products	Television receivers
1966-----	115,999	96,566
1967-----	97,769	80,124
1968-----	93,699	75,901
1969-----	86,002	69,719
1970-----	67,587	55,642
January-June--		
1970-----	31,343	25,806
1971-----	33,675	28,528

Source: Compiled from data submitted in response to questionnaires of the U.S. Tariff Commission.

Table 18.--Radio and television receiving-set industry (SIC 3651):  
Indexes of output per employee and per man-hour, all employees  
and production workers, 1958-70

Period	All employees		Production workers	
	Output per employee	Output per man-hour	Output per employee	Output per man-hour
Indexes (1967=100)				
1958-----	63.9	63.1	67.3	66.4
1959-----	68.2	67.4	70.0	69.2
1960-----	69.8	69.1	73.3	72.6
1961-----	69.9	70.7	74.3	75.3
1962-----	79.5	78.8	82.2	81.4
1963-----	88.5	87.5	89.0	88.0
1964-----	89.9	87.3	90.4	87.4
1965-----	99.7	95.6	99.0	94.4
1966-----	100.4	98.5	98.2	96.0
1967-----	100.0	100.0	100.0	100.0
1968-----	117.0	116.8	118.1	118.0
1969-----	125.8	124.8	129.4	128.1
1970 <sup>1/</sup> -----	119.8	118.6	126.3	124.8
Average annual rate of increase (percent)				
1958-70-----	6.0	6.0	5.7	5.7

<sup>1/</sup> Preliminary.

Source: Compiled from the U.S. Bureau of Labor Statistics publication, "Indexes of Output Per Man-Hour, Selected Industries, 1939 and 1947-70", p. 101.

Table 23.--Aggregate profit-and-loss experience of 16 U.S. producers on the operations of their establishments in which television receivers were produced, 1966-70 1/

Year	Net sales	Net operating profit before income taxes	Ratio of net operating profit to net sales
	<u>1,000 dollars</u>	<u>1,000 dollars</u>	<u>Percent</u>
1966-----	2,988,711	223,492	7.5
1967-----	2,929,604	71,551	2.4
1968-----	3,006,190	174,283	5.8
1969-----	2,671,346	131,747	4.9
1970-----	2,355,614	14,331	.6

1/ - producer did not operate in the years 1969 and 1970.

Source: Compiled from data submitted to the U.S. Tariff Commission by domestic producers.

Table 24.--Aggregate profit-and-loss experience of 15 U.S. producers on their television-receiver operations, 1966-70 1/

Year	Net sales	Net operating profit before income taxes	Ratio of net operating profit to net sales
	<u>1,000 dollars</u>	<u>1,000 dollars</u>	<u>Percent</u>
1966-----	2,410,521	180,798	7.5
1967-----	2,389,315	66,031	2.8
1968-----	2,400,985	154,887	6.5
1969-----	2,106,802	133,755	6.3
1970-----	1,831,691	22,361	1.2

1/ 1 producer did not operate in the years 1969 and 1970.

Source: Compiled from data submitted to the U.S. Tariff Commission by domestic producers.

Table 26.--Average hourly compensation 1/ of production workers in the electrical machinery, equipment, and supplies industry in the United States and in Japan, 1966-70 and January-September 1971

Period	Country	
	United States	Japan <u>2/</u>
1966-----	\$3.23	\$0.51
1967-----	3.38	0.56
1968-----	3.57	0.67
1969-----	3.77	0.81
1970-----	4.00	0.92
January-September 1971---	4.25	1.08

1/ Basic average hourly earnings plus estimated average supplementary compensation per hour, calculated on a per-hour worked basis.

2/ All data are based on an exchange rate of 360 yen per U.S. dollar. During September 1971 the rate of exchange averaged 338 yen per dollar. If that rate were applied to the current Japanese average hourly compensation, the compensation would be \$1.15 per hour.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Table 27.--Electrical machinery, equipment, and supplies industry of Japan:  
Indexes of output per employee, per man-hour, and unit labor requirement  
per employee and per man-hour, 1955-69

(1967=100)							
Year	Output per--		:Unit labor require-:		Related data		
	Employee	Man-hour	Employee	Man-hour	Output	Employee	Man-hour
1955---	21.7	21.2	460.7	471.4	5.6	25.8	26.4
1956---	29.9	27.6	334.9	362.8	8.6	28.8	31.2
1957---	35.3	32.8	282.9	304.9	12.3	34.8	37.5
1958---	38.9	36.6	257.0	273.2	14.9	38.3	40.7
1959---	50.1	46.3	199.6	216.1	24.2	48.3	52.3
1960---	50.8	46.6	196.7	214.7	33.3	65.5	71.5
1961---	55.7	52.5	179.7	190.6	43.8	78.7	83.5
1962---	59.0	57.0	169.6	175.5	50.3	85.3	88.3
1963---	62.2	60.7	160.9	164.8	53.4	85.9	88.0
1964---	69.8	69.0	143.3	144.9	63.3	90.7	91.7
1965---	67.9	69.3	147.2	144.3	61.6	90.7	88.9
1966---	83.4	83.9	120.0	119.2	75.9	91.0	90.5
1967---	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968---	120.6	121.0	82.9	82.7	135.0	111.9	111.6
1969---	136.9	139.5	73.0	71.7	175.4	128.1	125.7

Source: Compiled from data in Japan Statistical Yearbook, 1966 and 1970.

Note.--Testimony before the U.S. Tariff Commission by Robert R. Nathan on behalf of the Electronic Industries Association of Japan contained specific data on productivity in the Japanese radio and TV industry. These data, obtained from the Japanese Ministry of Trade and Industry by telex, fluctuated to a greater extent than those obtained by the staff; however, the magnitude of increased productivity shown by the 2 sets of data is generally similar.