

UNITED STATES TARIFF COMMISSION

PIANOS, EXCEPT GRAND PIANOS

Report to the President  
on Investigation No. TEA-I-EX-8  
Under Section 351(d)(3) of the Trade Expansion Act of 1962



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Washington, D. C.  
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UNITED STATES TARIFF COMMISSION

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Note.--The whole of the Commission's report to the President may not be made public since it contains certain information that would result in the disclosure of the operations of an individual concern. 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,  
January 30, 1973.

To the President:

This report is made pursuant to section 351(d)(3) of the Trade Expansion Act of 1962 (TEA) (76 Stat. 900), which provides that--

Upon petition on behalf of the industry concerned, filed with the Tariff Commission not earlier than the date which is 9 months, and not later than the date which is 6 months, before the date any increase or imposition referred to in paragraph (1) or (2) of subsection (c) is to terminate by reason of the expiration of the applicable period prescribed in paragraph (1) or an extension thereof under paragraph (2), the Tariff Commission shall advise the President of its judgment as to the probable economic effect on such industry of such termination.

On December 23, 1969, following an investigation in response to a petition on behalf of the domestic industry, the Commission found (Commissioners Thunberg and Newsom dissenting and Chairman Sutton not participating) that--

pianos (including player pianos, whether or not with keyboards), provided for in item 725.02 of the Tariff Schedules of the United States (TSUS)

were, as a result in major part of concessions granted under trade agreements, being imported into the United States in such increased quantities as to threaten to cause serious injury to the domestic industry producing like or directly competitive products. 1/

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1/ Pianos and Parts Thereof: Report to the President on Investigation No. TEA-I-14 Under Section 301(b)(1) of the Trade Expansion Act of 1962, TC Publication 309, 1969.

Of the Commissioners voting in the affirmative, a majority found that the rate of duty necessary to prevent serious injury was 13.5 percent ad valorem.

In response to the Commission's finding, the President suspended, effective February 21, 1970, the Kennedy Round tariff reductions on pianos, except grand pianos, at the second stage rate--13.5 percent ad valorem--for a period of 3 years. The President also announced that he had authorized firms and workers in the domestic piano industry to apply for adjustment assistance under the provisions of the TEA.

So long as the higher rate of duty remains in effect for upright pianos, the Commission is required, under the provisions of section 351(d)(1) of the TEA, to make an annual report on developments with respect to the piano industry. The first such report was made on February 19, 1971, 1/ and the second report was submitted to the President on February 15, 1972. 2/

On July 24, 1972, a petition on behalf of the National Piano Manufacturers Association was filed with the Tariff Commission under section 351(d)(3) of the Trade Expansion Act. Accordingly, on August 2, 1972, the Commission instituted the instant investigation to determine the probable economic effect on the industry concerned of termination of the modified escape action rates with respect to

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1/ Pianos (Except Grands): Report to the President on Investigation No. TEA-IR-9-71 Under section 351(d)(1) of the Trade Expansion Act of 1962, TC Publication 363, 1971.

2/ Pianos (Except Grands): Report to the President on Investigation No. TEA-IR-9-72. . . , TC Publication 462, 1972.

pianos of the kinds described in item 924.00 in part 2A of the appendix to the TSUS. 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 on August 8, 1972 (37 F.R. 15957). The hearing was held on October 31, 1972.

Probable Economic Effect of Termination of the  
Escape-Action Rate of Duty

When the Commission had this case for consideration in 1969, it found that the U.S. piano industry was threatened with serious injury, as evidenced by declining sales, profits, and employment, and attributed this threat of serious injury to increased imports resulting in major part from duty reductions. Domestic piano manufacturers 1/ are now completing the third year of competition with upright pianos imported under the 13.5 percent ad valorem rate of duty, the rate which had prevailed in 1969 and which the President established when he suspended further implementation of Kennedy Round tariff reductions. The experience of the domestic industry and the conditions of competition which have prevailed since the original investigation hold the key to the possible future of the industry.

The domestic industry has experienced a modest improvement in sales, employment, and profitability, but its operations overall are still marginal. From all appearances, imported and domestically produced pianos now compete on a roughly equal footing in an atmosphere of sluggish household and institutional demand. The rise in the imports' share of the domestic market, pronounced at the time of the 1969 finding, has been arrested but certainly not substantially reversed.

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1/ This statement relates only to pianos other than grands.

It should be noted that between 1969 and the present, four firms have left the industry and six operating establishments have closed, while several other firms have shifted production locations in search of lower costs. The dissenting arguments in the 1969 Investigation observed that the difficulties of the industry could be laid to the natural processes of rationalization and decline which should be anticipated and permitted in an "old line" industry such as piano manufacture. Clearly, these processes have not been thwarted in the past three years by the escape action taken. They simply have been reduced to orderliness, with the industry as a whole subjected to a viable, rather than an impossible, competitive environment.

The operating experience of the piano industry over the period under review divides rather naturally into three one-year segments. For the entire U.S. piano market, 1970 was a bad year. Clearly influenced by the recessionary conditions that prevailed throughout the economy at that time, both domestic shipments and imports dropped from their 1969 levels, with domestic employment and profits falling as well. Meanwhile, the imports' share of apparent U.S. consumption of new pianos eased to 8.8 percent from the 1969 peak of 11.2 percent. The 1970 ratio was well above the levels of earlier years.

In 1971, the entire market picked up significantly, as the economy began its liftout from recession. Domestic shipments rose

to nearly their 1969 levels, but remained well below shipments in any prior year since 1960. Imports also rose; their domestic market penetration increased by two full percentage points to 10.7 percent, less than in 1969 but still high by pre-1969 standards. Employment in the domestic industry again dropped, but by somewhat less than the year before, and profits increased modestly but remained relatively low.

Data for nine months' operations in 1972 show that the moderately rising trends of 1971 continued, with domestic employment in the industry showing a gain for the first time in three years. The import penetration ratio was off somewhat from 1971, at 9.4 percent, but remained higher than in any year prior to 1969. From all indications, imported pianos have participated about as fully in rising sales as have domestically produced instruments, despite the freezing of the duty rate at 13.5 percent in 1970. The best that can be said is that the steady erosion by imports of the market share held by domestic pianos that prevailed through 1969 has been stopped. Domestic instruments have regained little if any significant new market share since 1969.

The record of profitability of the domestic industry over the past three years is discouraging to an industry that faces the need for new investment in order to stay competitive with imports. A comparison of the profit and loss experience of U.S. producers on

their domestic production of upright pianos with all manufacturing in the United States shows the following percentages of net operating profit to net sales.

	<u>Upright Pianos</u>	<u>All Manufacturing</u>
1969	0.9	8.4
1970	-0.1 (loss)	6.8
1971	2.1	7.0

The domestic manufacture of upright pianos clearly is a marginal operation compared with the average of all manufacturing sectors in the United States. Any additional advantage obtained by imports will only increase the already difficult task of the domestic industry to retain its competitiveness. Indeed, there might be some question whether the domestic industry, with its low rate of profitability, can attract sufficient new capital to gain a more viable position.

Of the six domestic companies that have made application for benefits, five have been certified by the Department of Commerce as eligible to submit a proposal for adjustment assistance and one was determined to be ineligible. Only one firm has had a proposal for adjustment assistance approved by the Secretary of Commerce. All of these companies need time to put their plans for modernization into effect. Given this time and no further erosion of the market to imports, the domestic industry may have a chance to further improve its profitability.

Although some relief from lower prices of imports has occurred recently, it is not likely to persist. The prices of pianos

imported from Japan increased sharply in 1972 (about 20 percent over the previous year), a development attributed by the importers to revaluation of the Japanese yen. During 1965-71, prices of Japanese pianos had been consistently below those of comparable domestic pianos and had increased much more slowly than their domestic counterparts, but with the abrupt price rise in 1972 Japanese pianos were priced slightly above domestic pianos. This current edge in prices favoring domestic producers is likely to be temporary, however. The higher trend over time in domestic prices than in imported prices cannot very well be arrested by an industry that already lacks competitive strength. If the American economy continues its strong growth during the next few years and inflationary forces persist, it will be additionally difficult for the industry to hold down the trend of its price increases. Furthermore, data from Japan show that the unit costs of production in Japan are now substantially below comparable U.S. costs, so that no upward pressure on prices of imported pianos is apparent.

The interpretation which emerges from the foregoing review of the industry's 1970-1972 performance is that the domestic piano industry has managed more or less to hold its own. It has not gained significantly, nor has it in any way been immunized from the disciplinary forces of foreign competition, which have been particularly acute in this industry. Indications are that the industry is still a marginal one, a stance which would become

decidedly unsteady were substantial duty reductions to resume.

Hence, in the Commission's view, the termination of the increase in duty pursuant to section 351(a) would adversely affect the competitive position of the industry producing upright pianos and would likely worsen the economic condition of such industry.

## Dissenting Views of Commissioner Ablondi

I find that the probable economic effect of the termination of the escape-action rate of duty on pianos, except grand pianos, would not threaten serious injury to the domestic industry producing such articles.

The Commission in December of 1969,<sup>1/</sup> found that the piano industry was not seriously injured by imports of pianos and parts thereof. The Commission did find that the piano industry was threatened with serious injury, and recommended that the rate of duty necessary to prevent serious injury was 13.5 percent ad valorem.<sup>2/</sup> On February 21, 1970, the President suspended the Kennedy Round tariff reductions at the second stage rate of 13.5 percent ad valorem. Now, the Commission must review the experience of the domestic piano industry since the suspension of further Kennedy Round tariff reductions on February 21, 1970 and consider what would be the economic effect if these suspended duty rates were allowed to fall to 11.5 percent in 1973, 10 percent in 1974, and 8.5 percent in 1975.

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<sup>1/</sup> Pianos and Parts Thereof, . . . Inv. No. TEA-I-14, TC Publication No. 309 (December 1969).

<sup>2/</sup> In the 1969 piano case, Commissioners Clubb and Moore recommended a rate of duty of 13.5 percent ad valorem, Commissioner Leonard recommended a rate of duty of 20 percent ad valorem, and Commissioners Thunberg and Newsom found neither serious injury nor threat of serious injury.

It is axiomatic that the reduction of tariff rates is not beneficial to the piano industry. It is not necessary to review the overall reduction of 5 percent in 1975, but only a 2 percent reduction in 1973. The Trade Expansion Act of 1962, in section 301(b)(4), permits an industry to again petition the Tariff Commission for relief after a period of one year. It states:

"No investigation . . . shall be made . . . with respect to the same subject matter as a previous investigation . . . unless one year has elapsed since the Tariff Commission made its report to the President of the results of such previous investigation."

This option that an industry may petition again after one year provides the element of flexibility to again review the probable economic effect that the Commission is required to consider in the instant case. Furthermore, a period no longer than one year is desirable when one considers the dynamic state of the world economy wherein recent major currency realignments have added to the more usual imponderables of international competition.

In reviewing the economic developments of the piano industry from 1969 to the expiration date of the termination of the escape-action rate of duty (February 21, 1973), the significant improvement in the economic condition of the industry becomes apparent.

In 1969 the piano industry's net operating profits as a percent of net sales were 1.0 percent, whereas profits relating only to upright pianos were 0.9 percent. By 1971 operating profits for the piano industry had risen to 4.3 percent; such profits were 2.1 percent for upright pianos. In 1971, operating profits for the furniture and fixtures industries were 5.9 percent, whereas operating profits for all manufacturing corporations were 7.0 percent. However, when the piano industry is recognized as mature and its market as one in slow decline,<sup>1/</sup> such relatively low profits as occurred in 1971 are what might be expected (even if not acceptable to the industry). Sales and earnings estimates by industry leaders, confirmed by partial year 1972 financial reports for certain major companies, indicate improved profits in 1972.

Employment of production and related workers in the piano industry reached 4,837 during January-September 1972 on an average monthly basis (the highest level in 5 years) compared with 4,390 in 1969.

Sales of U.S. produced upright pianos were about 175,000 units in both 1969 and 1971; however, sales in January-September

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<sup>1/</sup> Expenditures for new pianos per household in the United States declined 0.1 percent annually between 1960 and 1971.

1972 were 16 percent above January-September 1971 and are estimated to have reached 200,000 units by year-end; sales in 1972 should be the highest since 1967.

By 1972, wholesale prices of Japanese pianos had increased significantly since 1969. For the first time, average prices of all types of best selling imported upright pianos were above the prices of comparable models of the domestic producers. In 1969, the price advantage favoring the Japanese piano ranged from 7.3 percent (spinets) to 19.2 percent (studios). By November 30, 1972, the price advantage had shifted to the domestic producers - their prices, on the average, ranged from 3.4 percent (studios) to 15.1 percent (spinets) below the prices of comparable Japanese pianos.

The duty rate on upright pianos of 13.5 percent ad valorem is scheduled to remain in effect until February 21, 1973, at which time the staging of duty reductions to carry out a U.S. trade-agreement concession granted at the Kennedy Round negotiations will be reinstated. The first stage of these scheduled reductions (to 11.5 percent on February 21, 1973), when applied to a best selling console piano imported from Japan in December 1972, would amount to a reduction in cost to the importer of about \$8.00. In December 1972, the average wholesale price of

a best selling console piano imported from Japan was \$56.00 more than the average price of a comparable domestic piano. The total duty savings on this console imported from Japan through the final staged reduction in January 1, 1975 (8.5 percent ad valorem) would be about \$19.00. Even if the duty rate were allowed to drop to the proposed January 1, 1975 level, the domestic industry would still have a price advantage on consoles of \$37.00 or 7 percent, based on December 1972 prices.

In response to severe competitive pressures from the Japanese piano industry as well as from within its own ranks, the U.S. piano industry, beginning in the mid-sixties, started to move from the higher cost areas of the north and midwest to the south. Most of the industry has now completed this transition. One of the newest plants, with an annual capacity of \* \* \* was completed in Utah in the fall of 1971. The efficiency of this new plant should permit lower costs and increased profits by 1973. The major plant of another large piano producer was closed by fire and production was interrupted between August 1969 through November 1969; production was resumed in another plant in December 1969 (about 70 percent of normal capacity). This experience contributed \* \* \* and caused declining employment during August 1969-December 1970. Full production began in the completely rebuilt plant with larger capacity in early 1971.

In summary, because of the improved economic position of the U.S. piano industry in the intervening years, I find that the probable economic effect of termination of the escape-action rate of duty would not threaten serious injury to the domestic piano industry.



## INFORMATION OBTAINED IN THE INVESTIGATION

## Description of Products

Pianos, which are complex stringed percussive instruments, are identified by the way they are strung. An upright piano, the more common type (currently accounting for about 97 percent of U.S. sales), has its strings running vertically; a grand piano has its strings running horizontally. Upright pianos are less expensive, and occupy less space, than grand pianos.

Both upright and grand pianos are produced in various sizes. The popular types of upright pianos are spinets (mostly 37 inches high and under), consoles (38 to 43 inches), and studio uprights (44 inches and over). Spinets and consoles are sold principally for home use; as furniture they are more suited to home settings than the bulkier uprights of the pre-1930's.

Size is an important factor in the quality of musical performance obtained from a piano. The spinet pianos are the least desirable with respect to tone. The larger studio uprights, which are popular for use in schools and institutional recreation centers, are generally superior in tonal quality to the smaller uprights. The grand piano, generally considered superior to uprights, is made in several lengths ranging from 5 to 9 feet. The smaller grands (baby or parlor grands) are used principally in homes, and the larger instruments (concert grands) are chiefly used by professionals for public entertainment.

Some upright pianos are equipped with a mechanical device for automatically playing music "written" on perforated music rolls. Such pianos, which can also be played by hand, perform automatically when special foot pedals are pumped or when a switch is thrown to actuate an electric motor running the mechanical device. These so-called player pianos, which were popular during the early 1920's, are currently being produced in the United States by three firms

A piano, which comprises thousands of parts of various materials, has four essential elements: Strings, an action, a soundboard, and a framework. Each piano has about 230 strings, usually of steel. By variations in length and thickness, each string is tuned to one of the 88 notes of the equal-temperament musical scale. 1/ The shortest string, in the treble or high section of the scale, is about 2 inches long, and the longest, in the bass or low section, may be as long as 80 inches in large pianos.

A piano action is a complex mechanism containing up to 9,000 separate pieces, mostly of wood. It includes hammers, consisting of a wooden head (usually of maple) covered with a special kind of felt; a keyboard consisting of a frame made of hard laminated wood and 88 keys generally covered with thermoplastics; 2/ a system of levers that propel the hammers toward the strings when the player

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1/ In recent years, a very few short-scale (generally 64-note) pianos have been produced or imported.

2/ The use of ivory for white keys and ebony for black keys has declined in recent years.

presses down the keys; 1/ and dampers which press against the strings, silencing them, when the player releases the keys.

The soundboard, consisting of a sheet of wood (usually of spruce) about three-eighths of an inch thick, serves as a resonator. The strings pass over strips of wood (called bridges) attached to the soundboard and thus transmit their vibrations to the soundboard.

The framework holds the whole piano mechanism together. It consists of a wooden case (usually of hardwood such as walnut, mahogany, fruitwood, or ebony) reinforced by wooden ribs and a grey-iron plate so as to withstand the heavy pull of the strings. The outer rim of many grand pianos has laminations that are 20 to 25 ply and measure over 4 inches in thickness. When the average piano is in tune, each string exerts a pull of about 150 pounds. The strings are attached to steel pegs (tuning pins) inserted in the plate. The plate also serves partly to reproduce and amplify some of the harmonics generated by the moving strings.

Although used pianos have continued to account for a significant share of annual domestic sales by retail dealers (currently about 20 percent according to reliable trade sources), very few U.S. firms now engage in rebuilding used pianos. In this report domestic sales do not include used pianos.

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1/ Because of the size of their frameworks, spinets are equipped with a system of levers (known as a drop action rather than a direct-blow action) that is difficult to service.

## U.S. Tariff Treatment and Related Factors

Tariff treatment

Upright pianos (including player pianos, whether or not with keyboards) are currently dutiable at the escape-clause rate of 13.5 percent ad valorem provided for in item 924.00 of part 2 of the appendix to the TSUS. This rate became effective February 21, 1970, <sup>1/</sup> and is scheduled to remain in effect until February 21, 1973, at which time the staging of duty reductions to carry out a U.S. trade-agreement concession granted at the Kennedy Round negotiations will be reinstated. Had there been no escape action, upright pianos would currently be dutiable at 8.5 percent ad valorem under item 725.01 (formerly item 725.02) of the TSUS. Upright pianos imported from countries designated as Communist-dominated or Communist-controlled are currently dutiable under item 725.01 at 40 percent ad valorem.

The escape-action rate of duty currently applicable to imports of pianos, except grand pianos, and the trade-agreement rates scheduled to become effective February 21, 1973, are shown in the following table.

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<sup>1/</sup> A surcharge of 10 percent ad valorem was applicable to certain imported articles, including pianos, from August 16, 1971 (Presidential Proclamation No. 4074), through Dec. 19, 1971 (Presidential Proclamation No. 4098). During that period, the aggregate duty applicable to upright pianos was 23.5 percent ad valorem and that applicable to grand pianos, 20 percent ad valorem.

Pianos (except grand pianos): Escape-action rate of duty effective Feb. 21, 1970, and trade-agreement rates scheduled to become effective Feb. 21, 1973 1/

Description	Escape-action rate	Trade-agreement rate and effective date	
		Rate	Date
	Percent <u>ad valorem</u>	Percent <u>ad valorem</u>	
Pianos (including	13.5	11.5	Feb, 21, 1973
player pianos,		10	Jan. 1, 1974
whether or not with		8.5	Jan. 1, 1975
keyboards), except			
grand pianos.			

1/ Presidential Proclamation No. 3964 (35 F.R. 3645).

The current trade-agreement rate of duty applicable to grand pianos provided for in item 725.03 of the TSUS is 8.5 percent ad valorem (table 1).

#### Adjustment assistance

The President, in his proclamation of February 21, 1970, authorized firms and workers in the domestic piano industry to apply for adjustment assistance under the provisions of the Trade Expansion Act of 1962 to help them adjust to the impact of import competition. Of the 15 firms which currently constitute the domestic piano industry, six have petitioned the U.S. Department of Commerce for adjustment assistance. Four firms have been certified eligible to apply for adjustment assistance, but none have as yet received aid; 1/ a request

1/ One of the four firms has submitted a proposal to the Department of Commerce to produce plastic pianos, i.e., pianos having a case made of plastics instead of the conventional case of wood; this proposal was certified by the Secretary of Commerce on Dec. 12, 1972. Another firm has submitted a proposal, details of which have not yet been made public, and no action has as yet been taken. The other two firms have not submitted their proposals.

by one firm has been denied; and a request by one other firm is pending. Workers in eight establishments have petitioned the U.S. Department of Labor for adjustment assistance; approximately 1,250 workers in seven establishments producing pianos have been certified eligible. An application by employees in one plant (about 30 workers) has been denied by the Department of Labor.

## U.S. Consumption

According to a marketing study conducted for the National Piano Manufacturers Association (NPMA), 1/ the total number of pianos in U.S. households in 1961 was estimated at about 9 million units; the number in institutions, at 400,000 units. On the basis of historical data relating to piano sales and ownership practices, the study forecast that the total number of pianos would decline by 1 million in 10 years and by about 2 million in 20 years. Expressed in annual terms, the projection was that 300,000 old pianos would be junked each year, while 200,000 new pianos would be purchased. The annual junk rate of 300,000 reflected the fact that pianos are junked, on the average, 50 years after the date of manufacture; 2/ the annual purchase rate of 200,000 represented sales in 1961.

The information obtained in the Commission's investigation indicates that the total number of pianos in the United States has probably declined inasmuch as the number of new pianos sold in the United States in recent years has been well below the estimated annual scrap rate. The number of new pianos sold in the U.S. market increased from 159,000 in 1958 to 247,000 in 1966, and then declined to about 227,000 in 1967 and 1968, 210,000 in 1969, and 194,000 in 1970. It increased to 206,000 in 1971 (table 2). In

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1/ Milton P. Brown, John B. Stewart, and Walter J. Salmon, A Study of the Piano Industry, Sept. 9, 1961.

2/ Ownership may change several times during the 40- to 60-year life of a piano. In recent years, sales of used pianos, including household-to-household transactions, probably have at least equaled sales of new pianos.

January-September 1972, sales in the U.S. market were about 15 percent above those in January-September 1971. Measured in terms of value, <sup>1/</sup> the trend of sales of new pianos in the United States has been only slightly different in recent years; whereas sales value peaked in 1966 (as did sales volume), the subsequent decline was less, primarily because of higher prices.

The recent trend in sales of new upright pianos in the United States (in terms of quantity, more than 95 percent of all pianos sold from January 1969 to September 1972 were uprights) has been irregular, with 196,825 units marketed in 1969, 184,104 units in 1970, and 195,521 units in 1971. Sales in January-September 1972 (155,255 units) indicate that sales for the full year 1972 probably were higher than in any other year during the period (table 3).

Pianos are sold for use in homes and institutions. The three principal product characteristics--price, appearance, and musical quality--generally differ in importance for customers selecting pianos for the home and those selecting for an institution. Price is important in both, but appearance is probably more important in the home market and musical quality, in the institutional market. Given these assumptions, purchasers of pianos for use in the living room overwhelmingly want either a spinet or console piano; for use in schools, churches, and hotels they prefer for the most part studio uprights and, in addition, some grands (for their better musical quality); and for use in concert halls, the large grands are chosen.

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<sup>1/</sup> Domestically produced pianos were valued at wholesale; imported pianos were valued f.o.b. foreign port.

During January 1964-September 1972, spinets and consoles accounted for about 85 percent, in terms of quantity, of all piano sales in the U.S. market (tables 4 and 5). Studio uprights accounted for 11 percent of the market and grands, 4 percent. The share of the piano market accounted for by studio uprights rose somewhat during this period (from 10.3 to 12.0 percent) as did the market share for grands (from 3.2 to 5.0 percent), as shown below.

Pianos: Percentage distribution <sup>1/</sup> of sales in the United States of domestically produced pianos and pianos imported from Japan by Yamaha International Corp. and by Kawai Piano (America) Corp., by types, 1964-71, January-September 1971, and January-September 1972

Period	All pianos	Uprights			Grands
		Total	Spinets and consoles	Studio uprights	
1964-----	100.0	96.8	86.5	10.3	3.2
1965-----	100.0	96.7	86.3	10.4	3.3
1966-----	100.0	96.4	84.6	11.8	3.6
1967-----	100.0	95.9	84.0	11.9	4.1
1968-----	100.0	95.4	83.7	11.7	4.6
1969-----	100.0	95.0	83.2	11.8	5.0
1970-----	100.0	95.2	83.7	11.5	4.8
1971-----	100.0	95.3	83.7	11.6	4.7
January-September--	:	:	:	:	:
1971-----	100.0	95.1	83.4	11.7	4.9
1972-----	100.0	95.0	83.0	12.0	5.0

<sup>1/</sup> Based on quantity. Excludes player pianos, manufactured only by domestic producers (sales volume of these pianos ranged from 2,900 units to 4,300 units annually during 1964-71), and sales by Yamaha's parent company direct to Hawaii, Alaska, and Puerto Rico; also excludes sales of grand pianos by Yamaha's parent company to the Baldwin Piano & Organ Co. and the Chicago Musical Instrument Co. (CMI)

Source: Compiled from data furnished the U.S. Tariff Commission by domestic producers, Yamaha International Corp., and Kawai Piano (America) Corp.

Although domestic producers and importers sell to both the home and institutional markets, the two major importers, Yamaha and Kawai (who account for the bulk of the U.S. imports of pianos), have obtained an increasing share of the institutional market. In January-September 1972, Yamaha and Kawai sold \* \* \* percent of all studio uprights and \* \* \* percent of all grands in the U.S. market. The share of the market accounted for by Yamaha and Kawai during the period January 1964-September 1972, by type of piano, is shown in the following table.

Pianos: Ratio of sales by Yamaha and Kawai to total sales in the U.S. market, 1/ by types, 1964-71, January-September 1971, and January-September 1972

\* \* \* \* \*

A large number of social, economic, and technological factors have influenced U.S. sales of pianos in recent years: the increasing popularity of television and stereophonic equipment, which provide alternative forms of recreation within the home; the rise of automobile ownership, which increases mobility of consumers and provides access to entertainment outside the home; and a growing interest in other musical instruments (especially fretted string instruments and electronic organs) and other forms of recreation. Expenditures for pianos have not kept pace with total personal consumption expenditures in recent years. From 1960 to 1971, for example, the average annual rate of decrease in the dollar value of retail sales of new pianos per household was 0.1 percent, compared with an increase in personal consumption expenditures per household of 4.8 percent for all goods and services, 8.0 percent for radio and television receivers, records, and musical instruments, and 5.5 percent for all other types of recreational goods and services. The foregoing rates of changes in per-household expenditures were computed from the data on personal consumption expenditures shown in the following table (in current dollars).

Expenditures in the United States for new pianos and certain other competitive products or services, total and per household, specified years 1960 to 1971

Year	Total			Per household <u>1/</u>		
	Pianos <u>2/</u>	Radio and television receivers, records, and musical instruments <u>3/ 4/</u>	Other recreational goods and services <u>4/</u>	Pianos	Radio and television receivers, records, and musical instruments	Other recreational goods and services
	Million dollars	Billion dollars	Billion dollars			
1960-----	\$149	\$3.4	\$14.9	\$2.82	\$65	\$282
1962-----	161	3.9	16.6	2.95	72	303
1964-----	171	5.4	19.2	3.05	97	342
1966-----	193	6.9	21.9	3.32	119	378
1967-----	183	7.1	23.5	3.11	126	399
1968-----	186	7.7	25.9	3.08	131	428
1969-----	181	8.3	28.6	2.93	134	463
1970-----	164	9.3	30.9	2.61	148	491
1971-----	179	9.7	32.8	2.78	151	510
Percentage change						
1960 to 1971:						
Total-----	20	185	120	-1.4	132	81
Annual average----	1.7	10.1	7.4	-.1	8.0	5.5

1/ Computed on the basis of the number of households on Mar. 1 of years shown, as reported in Statistical Abstract of the United States, 1968-71.

2/ From the American Music Conference, 1972 Review of the Music Industry.

3/ Retail sales in the entire music industry (including new musical instruments, sheet music, instrument accessories, and instructional aids) increased in every year during 1960-71 except for 1967 and 1968; during that period, sales rose 121 percent or at an annual rate of 7.5 percent. From the American Music Conference, 1972 Review of the Music Industry.

4/ From U.S. Department of Commerce, Office of Business Economics, National Income and Product Accounts of the United States, 1929-1965, and Survey of Current Business, July 1968, July 1969, and July 1972.

## U.S. Producers

In 1969 (the year before the escape-action on upright pianos was taken), 18 firms operating 24 plants had manufactured upright pianos in the United States; in 1972, 14 firms operating 18 plants produced upright pianos.

A comparison of the firms constituting the U.S. piano industry in 1969 and 1972 is shown in the following table.

Establishments in the U.S. piano industry, by companies,  
1969 and 1972

Producer	1969 Number	1972 Number
Aeolian Corp -----	4	2
Baldwin Piano & Organ Co -----	3	2
Chicago Musical Instrument Co ----	<u>1/</u> 2	<u>1/</u> 1
Estey Piano Corp -----	1	<u>2/</u>
Everett Piano Co -----	1	1
Grand Piano Co., Inc -----	1	1
Grinnell Brothers-----	1	<u>3/</u>
The Gulbransen Co -----	1	<u>3/</u>
International Musical Instru- ments, Inc. (Currier Piano Co.)-----	1	1
Janssen Piano Co., Inc -----	1	<u>4/</u>
Kimball Piano & Organ Co -----	1	1
Kohler & Campbell, Inc.-----	1	1
Krakauer Brothers-----	1	1
Gordon Laughead Co -----	1	1
Sohmer & Co., Inc -----	1	1
Steinway & Sons-----	1	1
The Walter Piano Co -----	<u>4/</u>	1
The Wurlitzer Co -----	2	3
Total-----	24	18

1/ Lowrey and Story & Clark (CMI's 2 plants) were treated as separate firms in 1969; operations were combined in one establishment in 1970.

2/ Factory closed May 1971 pending certification of an adjustment assistance proposal being considered by the Department of Commerce.

3/ Factory closed effective March 1970.

4/ Janssen ceased operations late 1969; Janssen pianos were produced by a new firm (in a different location), Walter, in 1970.

The distribution of the 18 plants that were operating in September 1972 is shown in the following table.

U.S. piano industry: Distribution of plants, by States, September 1972

State	:	Number	::	State	:	Number
	:	of plants	::		:	of plants
New York-----	:	4	::	Arkansas-----	:	1
Michigan-----	:	3	::	Tennessee-----	:	1
North Carolina--	:	3	::	Utah-----	:	1
Indiana-----	:	2	::	Illinois-----	:	1
Mississippi-----	:	2	::		:	
	:		::		:	

All 14 firms produced upright pianos, and seven produced grand pianos.

Three of the firms--The Wurlitzer Co., Baldwin Piano & Organ Co., and Aeolian Corp.--accounted for about 54 percent of the number of domestically produced upright pianos sold in the United States in each of the years 1964 through 1969, 54 percent in 1971, and 51 percent in the period January-September 1972. Four other firms--Chicago Musical Instrument Co. (Lowrey Piano Co. and Story & Clark Piano Co.), Kimball Piano & Organ Co., Everett Piano Co., and Kohler & Campbell, Inc.--accounted for 29 percent of the number sold in 1964, 36 percent in 1969, 35 percent in 1971, and 38 percent in the period January-September 1972.

## Sales by U.S. Producers

Sales of new pianos in the United States by the domestic producers of such articles rose until the middle 1960's, declined steadily through 1970 (when the escape-action on upright pianos was taken), and then rose in 1971 and 1972. In 1964, total domestic sales of new pianos of all types by U.S. producers amounted to 220,000 units, valued at \$97 million. The trend of such sales was upward through 1966, when they approximated 236,000 units, with a value of \$110 million (table 2). Sales then declined each year through 1970, amounting to 173,000 units, valued at \$89 million, in that year. Sales of domestic pianos in 1971, however, showed a slight increase in units, 180,000 (4 percent), and in value, \$93 million (5 percent). Sales during the period January-September 1972 increased 16 percent in quantity and 19 percent in value from the corresponding period of 1971.

Inasmuch as upright pianos accounted for the very great bulk of total sales of all pianos by U.S. producers, sales of new upright pianos in the United States by the domestic producers have followed the same trends as their sales of all types of new pianos. Sales of domestic upright pianos in the United States amounted to about 214,000 units, valued at \$88 million, in 1964 (table 4). The trend of such sales was upward through 1966, when they approximated 229,000 units, valued at \$98.4 million. They then declined to about 168,000 units, valued at \$78.5 million, in 1970. The decline from the peak year (1966) to 1970 in terms of quantity and value was 27 percent and 20 percent, respectively. Sales in 1971 were about 4 percent greater in quantity and value than in 1970. During the period January-September

1972, sales increased about 16 percent in quantity and 19 percent in value from the corresponding period of 1971.

The composition of sales (excluding exports) of domestic pianos, by types, in specified years is shown in the following table.

Pianos: Composition of U.S. producers' sales in the United States, by types, 1964, 1969, and January-September 1972

Type	Percent of unit sales		
	1964	1969	Jan.-Sept. 1972
Total-----	100	100	100
Uprights, total-----	97	97	97
Spinets-----	51	47	39
Consoles-----	34	38	47
Studios-----	10	10	9
Players-----	2	2	2
Grands-----	3	3	3

U.S. exports of pianos, mostly uprights, account for a small portion of domestic producers' shipments (table 1); exports in 1970 changed little in volume or value from those in previous years. In the period 1958-70, exports ranged between 1,000 and 2,000 units a year; the average value of annual exports during this period was about \$820,000, and the average unit value was about \$500. Exports increased in 1971 to 2,314 units, valued at \$1.2 million, and almost doubled in January-September 1972, compared with the corresponding period of 1971. About a third of the domestic firms producing pianos sell to foreign countries; principal markets for such exports are Canada and Mexico.

## U.S. Imports

U.S. imports of pianos of all types in 1969, the last full year prior to the implementation of the escape-action rate on upright pianos, amounted to 29,000 units--nearly 14 percent of apparent U.S. consumption (table 6). They declined to 21,000 units in 1970, but rose to 26,000 units in 1971, when they supplied 12.7 percent of apparent consumption (table 2). Imports in January-September 1972 amounted to 19,193 units, compared with 17,412 units in the corresponding period of 1971. During the late 1950's and throughout the 1960's, imports of pianos had increased substantially; imports in 1958--less than 2,000 units--had accounted for only 1 percent of consumption.

U.S. imports of upright pianos in 1969, the first year separate data were recorded in official statistics, totaled 22,142 units (table 7). Imports declined by 27 percent to 16,168 units in 1970, but increased by 30 percent to 20,981 units in 1971. They totaled 15,914 units in January-October 1972, compared with 15,143 units in the corresponding period of 1971, representing an increase of 5 percent. Imports of grand pianos declined about 35 percent from 1969 to 1970, but increased about 14 percent in 1971 and 30 percent in January-October 1972, compared with the corresponding period of 1971.

Japan accounted for more than 95 percent of the quantity and value of all upright pianos imported in the 10-month period ending October 1972, as it has done for several years. Two importers probably accounted for all the U.S. imports of Japanese-made uprights--Yamaha International Corp. of Buena Park, Calif., and Kawai Piano

(America) Corp. of Harbor City, Calif.; 1/ they are sales affiliates of Japan's two leading manufacturers of pianos and other musical instruments--Nippon Gakki Seizo Co., Ltd., and Kawai Musical Instrument Mfg. Co., Ltd. In 1971, 82 percent of the quantity and 61 percent of the value of the U.S. sales made by these two importers were of uprights.

Of the number of upright pianos imported from Japan in the period January-September 1972, spinets accounted for about 10 percent; consoles, for about 53 percent; and studies, for about 37 percent.

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1/ The number of upright pianos reportedly imported by these two concerns in the period January 1971 through September 1972 was equivalent to 99 percent of the total recorded in the official U.S. import statistics.

## Marketing Practices

The distribution of pianos--domestic and imported--is overwhelmingly made through independent retail dealers. Certain domestic producers 1/ reported that about 90 percent of their sales are currently to such dealers. Other outlets in order of importance are company-owned retail dealers, distributors, tuner-technicians, and furniture stores. Yamaha and Kawai currently distribute all of their pianos through independent dealers, although Yamaha previously owned a few retail outlets.

There are reported to be around 8,000 music dealers in the United States, many of which sell various types of musical merchandise, including pianos, electronic organs, band instruments, fretted stringed instruments, sheet music, and related supplies. Each manufacturer has a network of dealers throughout the country; such dealers are usually the only franchise of a particular manufacturer in a geographic area. Most dealers handle the pianos of several producers; one is likely to find a dealer handling products of three, four, or five different manufacturers in order to offer customers a wide choice. Yamaha and Kawai pianos usually are sold by dealers that handle the pianos of one or more domestic firms.

Yamaha and Kawai currently sell all pianos outright, although Kawai previously made a few sales on consignment. Most domestic

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1/ These producers were Wurlitzer, Baldwin, Kimball, Everett, Kohler & Campbell, Laughead, Sohmer, Steinway, and International (Currier). They accounted for 73 percent, in terms of quantity, of total sales by domestic producers in 1971.

producers sell pianos outright; only the Baldwin Piano & Organ Co. has a significant consignment sales plan (Sohmer sells a few pianos on consignment). Baldwin dealers may either sign a consignment contract or settle on a 30-day net basis. Baldwin dealers who buy on consignment pay a monthly display charge; there is no limit to the length of time pianos can be on consignment. At the time of consignment sale, dealers make settlement to Baldwin in cash if the sale is for cash or by sending Baldwin the installment contract if the sale is made on that basis.

\* \* \* \* \*

Newspaper and magazine advertising were important media during 1964-72 for most of the domestic firms and Yamaha. Television and radio were important media for a few domestic producers. Kawai and several domestic producers cooperated with dealers in advertising. Other outlets for advertising and sales promotion expenditures were sales literature, catalogs, direct-mail advertising, dealer trip incentives, and conventions.

Domestic producers manufacture pianos in a somewhat wider range of woods and case stylings than do importers, although the Japanese offer some of the more popular types of models for the home market. Both domestic producers and importers make large sales in the home and institutional markets. The two Japanese manufacturers market their pianos under one name each, Kawai and Yamaha; some U.S. piano firms market under one name, while others use several names, partly

to capitalize on a well-known brand or to be able to employ multiple dealers in a given area while still maintaining exclusive dealerships.

Both domestic producers and the principal importers of Japanese pianos sponsor group instructional programs intended to stimulate piano sales. Yamaha offers a "music school" to dealers which is designed to foster music appreciation among preschool children. The NPMA through its National Piano Foundation conducts seminars for music teachers to improve the quality of music instruction. Certain domestic manufacturers also offer teaching programs through their dealers. All of these programs are voluntary on the part of the dealer, and individual dealers may elect not to sponsor them.

## Prices

During January 1964-June 1971, average wholesale prices for most best selling models 1/ of upright pianos imported by Yamaha and Kawai were less than the average wholesale prices of similar models of domestic producers. 2/ During 1964-68, average prices of Yamaha and Kawai spinet and studio pianos actually declined, while console prices rose 13 percent. During 1969-71, however, prices of all types of Yamaha and Kawai upright pianos increased between 10 and 12 percent. Prices of Yamaha and Kawai upright pianos increased sharply in 1972, largely owing to currency revaluation, according to the importers. By November 30, 1972, these prices were higher than the prices of similar models of domestic producers.

In evaluating the significance of the various prices in the accompanying table, the size of the various markets (spinet, consoles, and studios) and the market penetration by Yamaha and Kawai are relevant. During 1964-71, about 90 percent of all uprights sold in the U.S. market were either spinets or consoles--sold in about equal number, principally to homes. The remaining share of the upright market--10 percent--consisted of studios, purchased principally by institutions.

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1/ Prices include one piano, a bench, and a box (shipping container). These average prices were based on individual prices of best selling models that were sold during 1964-72 as reported to the Commission by producers and importers.

2/ It is difficult to compare prices of pianos without considering the quality of each instrument. However, dependable quality information is difficult to obtain. Consumer Bulletin published an evaluation of domestic and imported pianos in 1967 and reissued this article in 1972. Although Consumer Bulletin rated the Yamaha and Kawai pianos relatively high, it is possible that another technician's evaluation would obtain somewhat different results.

During January-September 1972, Yamaha and Kawai obtained \*\*\* percent of the market for spinets and consoles and \*\*\* percent of that for studios, based on quantity. The following table includes the average wholesale prices of domestic producers and Yamaha and Kawai for best selling spinets, consoles, and studio pianos during 1964-72; the sharp increase in Yamaha and Kawai prices after 1969 is evident from the price indexes.

Upright pianos: Average wholesale prices 1/ and price indexes of best selling models of domestic producers, 2/ Yamaha, and Kawai, by types, June 30, 1964-71 and Nov. 30, 1972

Type of upright	June 30							Nov. 30,
	1964	1965	1966	1967	1968	1969	1970	1972
Prices								
<b>Spinets:</b>								
Domestic producers-----	\$358	\$363	\$373	\$388	\$415	\$413	\$436	\$449
Yamaha 3/-----		*	*	*	*	*	*	
<b>Consoles:</b>								
Domestic producers-----	475	475	496	514	518	542	549	547
Yamaha and Kawai-----		*	*	*	*	*	*	
<b>Studios:</b>								
Domestic producers-----	461	477	476	501	528	540	562	588
Yamaha and Kawai-----		*	*	*	*	*	*	

Price indexes (1964=100)

<b>Spinets:</b>								
Domestic producers-----	100	101	104	108	116	115	122	125
Yamaha 3/-----		*	*	*	*	*	*	
<b>Consoles:</b>								
Domestic producers-----	100	100	104	108	109	114	116	115
Yamaha and Kawai-----		*	*	*	*	*	*	
<b>Studios:</b>								
Domestic producers-----	100	103	103	109	115	117	122	128
Yamaha and Kawai-----		*	*	*	*	*	*	

1/ Prices include boxes and benches, but exclude a 10-percent excise tax levied on the wholesale price of domestic and imported pianos in 1964 and 1965.

2/ Prices are weighted according to each producer's or importer's share of total sales, by type of piano. Total sales were the sales of all producers referred to below. Spinnet prices for domestic pianos included data from Aeolian (Ivers and Pond plant only), Baldwin, Wurlitzer, Kimball, Everett, and International (Gurrrier); these producers accounted for about 85 percent of total sales of domestic spinet pianos during January 1964-June 1972. Console prices for domestic pianos included data from Aeolian, Baldwin, Wurlitzer, Kimball, Everett, Kohler & Campbell, Sohmer, and Steinway; these producers accounted for about 70 percent of total sales of domestic console pianos during January 1964-June 1972. Studio prices for domestic pianos included data from Aeolian, Baldwin, Wurlitzer, Kimball, Everett, Kohler & Campbell, Sohmer, and Steinway; these producers accounted for about 90 percent of total sales of domestic studio pianos during January 1964-June 1972.

3/ Kawai does not sell an 88-key spinet piano in the U.S. market.  
 4/ For June 30, 1972; however, only one domestic producer raised prices between June 30 and Nov. 30, 1972. Therefore, the average price and price index for the entire industry would not be significantly affected.

Source: Compiled from data furnished the U.S. Tariff Commission by certain domestic producers, Yamaha International Corp., and Kawai Piano (America) Corp.

During June 30, 1967-August 31, 1972, the index of wholesale prices of all musical instruments, as reported by the Bureau of Labor Statistics of the U.S. Department of Labor, rose from 99.2 in June 1967 (1967=100) to 111.7 in October 1972. The index of wholesale prices for all durable manufactured goods rose from 99.5 in June 1967 (1967=100) to 121.9 in September 1972.

The data shown above were weighted average prices of given sizes of pianos for the various suppliers. Prices of any producer or importer for individual models of pianos will vary considerably depending on the size of the piano, the quality of the internal parts, and the wood and style of the case. Furthermore, the prices of the best selling models for each domestic producer will deviate significantly from this overall average; for example, whereas in most years and for most models, the Yamaha and Kawai average prices were lower than the average prices of these domestic producers during 1964-71, in any year and for any type of piano there were certain domestic pianos priced both below and above the average Yamaha and Kawai prices. The following table illustrates the wide range of producers' and importers' prices and prices within individual producers' and importers' lines.

Range of wholesale prices of certain domestic producers and  
importers for upright pianos (including bench and box),  
by types, June 30, 1972

\* \* \* \* \*

Average price increases, as reflected by the price indexes in the table on p. A-24, disguise the movement of prices of individual producers and importers. The following table indicates such price changes, comparing 1964 and 1972 (as of June 30 of each year).

\* \* \* \* \*

## Employment

The average number of production and related workers employed annually in the U.S. piano industry increased during 1964-66, but then declined in each subsequent year through 1971. However, the downward trend in employment reversed in January-September 1972-- employment of production and related workers in the industry averaged 4,837 persons, compared with 4,007 persons in the corresponding period of 1971, an increase of 20.7 percent. If employment remains at the same level in the last quarter of 1972 as in the first three quarters, employment for the year will be 2 percent above the 1968 level, but still 16 percent below the 1966 peak.

Aeolian's Ivers and Pond plant in Memphis, Tenn., was closed by fire on August 15, 1969, and resumed full production in the fall of 1970. Employment cutbacks at that plant explained part of the drop in industry employment in 1969; between 1970 and 1971, the increase of \*\*\* production and related workers at Ivers and Pond--as full production resumed--helped offset a general decline in employment. Aggregate employment of production and related workers by producers dropped in 1971, as shown in the accompanying table.

In 1971, three firms which during 1964-71 each sold an average of more than 25,000 pianos per year 1/ accounted for 64 percent of the total number of production and related workers employed by the industry; four firms which each sold an average of 10,000 to 25,000 pianos per

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1/ Although employment is being considered here, the firms are grouped by average yearly number of pianos sold between 1964 and 1971 in order to maintain a consistent grouping throughout the report.

year accounted for 20 percent; and eight firms which each sold an average of fewer than 10,000 pianos per year accounted for 16 percent.

U.S. piano industry: Average number of production and related workers, by size of firm, specified years 1964 to 1971, January-September 1971, and January-September 1972

Item	1964	1966	1968	1969	1970	1971	Jan.-Sept. 1971	Jan.-Sept. 1972
Average number of production and related workers employed by firms selling 1/--								
More than 25,000 pianos each (Aeolian, Baldwin, Wurlitzer)	3,376	3,658	2,991	2,666	2,623	2,579	2,523	3,195
10,000 to 25,000 pianos each (Kimball, 2/ CMI, 3/ Everett, Kohler & Campbell)	4/ 1,146	4/ 1,187	4/ 984	4/ 1,017	891	822	822	946
Fewer than 10,000 pianos each (Grand, International (Currier), Steinway, Sohmer, Estey, 5/ Laughead, Krakauer, Walter 6/)	7/ 815	7/ 880	7/ 778	7/ 707	687	666	662	696
Total	5,337	5,725	4,753	4,390	4,201	4,067	4,007	4,837
Index (1966=100)	93.2	100.0	83.0	76.7	73.4	71.0	-	-

1/ Based on average annual sales during 1964-71.

2/ Beginning in 1968, data excludes that proportion of Kimball production and related workers who make piano cases. Such workers were included in data for 1964 and 1966; subsequently, cases were produced in another plant.

3/ Before 1970, CMI data are for Story & Clark and Lowrey.

4/ Includes Grinnell; Grinnell pianos manufactured by Everett effective March 1970.

5/ Ceased production in May 1971.

6/ Began production in 1970.

7/ Includes Gulbransen; Gulbransen pianos manufactured by Estey effective March 1970.

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

Following the same general trend as employment of production and related workers, the average number of all persons employed in the piano industry increased 8.6 percent, from 6,340 in 1964 to 6,937 in 1966, but then declined annually to 5,174 in 1971--a decrease of 25.4 percent. Such employment increased from an average of 5,074 persons in January-September 1971 to 5,891 in the corresponding period of 1972--an increase of 16.1 percent.

During January 1964-September 1972, the trend in man-hours worked by production and related workers in the industry 1/ was similar to the trend for employment, except in 1969 when man-hours increased slightly instead of declining as is shown in the accompanying table.

Man-hours worked by production and related workers in the industry amounted to 7.5 million in 1971. Man-hours worked in the first 9 months of 1972 amounted to 6.6 million, up 26.0 percent from the corresponding period of 1971. Average man-hours worked per production and related worker per week for the first 9 months of 1972 amounted to 36.1, up 4.0 percent from the corresponding period of 1971.

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1/ Laughead and Grand were not included for lack of complete data. These firms accounted for 2.7 percent of industry employment in 1971.

U.S. piano industry: 1/ Man-hours worked by production and related workers, specified years 1964 to 1971, January-September 1971, and January-September 1972

Period	: Man-hours worked by production and related workers	
	Number	Index (1966=100)
1964-----	9,714,156	92.8
1966-----	10,462,974	100.0
1968-----	8,673,749	82.9
1969-----	8,713,385	83.3
1970-----	7,819,054	74.7
1971-----	7,462,837	71.3
January-September--		
1971-----	5,253,706	-
1972-----	6,620,960	-

1/ Grand and Laughead were not included for lack of complete data.

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

Based on data obtained from 12 of 16 domestic producers, 1/ which accounted for 73.2 percent of industry employment in 1971, average output of production and related workers in the piano industry (in terms of the number of units produced per man-hour worked) fluctuated between 0.0174 and 0.0189 during 1964-71. Two major factors that could affect such data as a measure of productivity are changes in the input mix (buying parts versus producing them) and in the output mix (upright versus grand pianos with their divergent labor content). However, for the most part the input mix for the industry did not change significantly during January 1964-September 1972, and the ratio of grand pianos produced to total production has remained relatively constant, varying between 2.9 percent and 3.5 percent in terms of quantity. Industry output per man-hour during January 1964-September 1972 is shown in the following table.

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1/ Grand and Laughead were not included for lack of complete data. Kimball and Wurlitzer were not included because of discontinuities in their data. \* \* \* \* \*

U.S. piano industry: <sup>1/</sup> Average output per man-hour worked by production and related workers, specified years 1964-1971, January-September 1971, and January-September 1972

Period	Average output per man-hour worked by production and related workers	
	Number of units	Index (1966=100)
1964-----	0.0189	100.5
1966-----	.0188	100.0
1968-----	.0188	100.0
1969-----	.0176	93.6
1970-----	.0174	92.6
1971-----	.0174	92.6
January-September--		
1971-----	.0176	-
1972-----	.0173	-

<sup>1/</sup> Based on data supplied by 12 firms which accounted for 73.2 percent of industry employment in 1971.

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

## Wages

Average hourly wages 1/ paid to production workers in the piano industry 2/ started from a low of \$2.30 in 1964 and increased steadily to \$2.91 in 1970--an increase of 26.5 percent for the 6 years. In 1971, average hourly wages were \$2.82--down 3.1 percent from 1970; the decline was partly due to a continued shift of production from Northern States to Southern States and to a single plant in the Far West. In 1971, wage rates were lower for five of the seven largest producers, remained constant for one, and increased for one, compared with those in 1970. For the multiple-plant firm whose wages remained constant they were significantly higher in each of its plants, but the firm was able to keep its overall wage rate the same by shifting production to the plants where wages were lower. Average hourly wages paid to production workers in the industry increased from \$2.81 in the first 9 months of 1971 to \$2.92 in the corresponding period of 1972.

Average hourly wages paid in the first 9 months of 1972 to workers by plants in Southern States--Arkansas, Mississippi, Tennessee, and North Carolina--ranged from \$2.35 to \$2.74; wages paid by plants in Midwestern States--Illinois, Indiana, and Michigan--ranged from \$2.85 to \$4.21; those in plants in New York State ranged from \$3.00 to \$4.27; and those in the sole Far West plant were \* \* \*.

Average hourly wages paid per firm and average hourly wages paid by all firms are shown in the following table.

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1/ Includes payments for holidays, sick leave, and vacations. Such payments are included in all wage data in this section.

2/ Grand and Laughead not included.

U.S. piano industry: 1/ Average hourly wages paid to production and related workers by individual firms, specified years 1964 to 1971, January-September 1971, and January-September 1972

Period	: Range of average : hourly wages paid : by individual firms:	: Average hourly : wages, all firms
1964-----	\$1.70-\$3.66	2/ \$2.30
1966-----	1.71- 3.69	2/ 2.44
1968-----	1.86- 4.12	2/ 2.73
1969-----	2.05- 3.74	2.79
1970-----	2.17- 4.02	3/ 2.91
1971-----	2.23- 4.10	4/ 2.82
January-September--		
1971-----	2.25- 3.89	2.81
1972-----	2.35- 3.96	2.92

1/ Grand and Laughead were not included for lack of complete data.

2/ Includes Grinnell and Gulbransen; Grinnell pianos manufactured by Everett effective March 1970, and Gulbransen pianos manufactured by Estey effective March 1970.

3/ Walter began production in 1970.

4/ Estey Piano Corp. ceased piano production in May 1971.

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

## Financial Experience of U.S. Producers

All 18 domestic producers of upright pianos operating during 1967-71 submitted financial data.

Net sales of all products of those establishments in which upright pianos are produced increased from \$127 million in 1967 to \$140 million in 1968, and then decreased to \$122 million in 1969 and \$124 million in 1970. In 1971, net sales increased to \$143 million (tables 8 and 9).

Net operating profits were irregular and low during 1967-71. In 1967, net operating profits were \$992,000, increasing to \$3.0 million in 1968. They decreased to \$1.2 million in 1969 and \$694,000 in 1970. In 1971 an increase to \$6.2 million was reported.

The ratio of net operating profit to net sales was 0.8 percent in 1967, 2.2 percent in 1968, 1.0 percent in 1969, 0.6 percent in 1970, and 4.3 percent in 1971.

Net sales of upright pianos accounted for 63 to 71 percent of net sales of all products during the period 1967-71. Even though the number of producers decreased, net sales of upright pianos remained approximately the same in 1971 compared with 1967 (table 10).

The production of upright pianos was not very profitable from 1967 to 1971. The total industry reported an aggregate loss of \$18,000 in 1967. Net operating profits were \$1.4 million in 1968 and \$771,000 in 1969. Another loss of \$107,000 was sustained by the industry in 1970, while an operating profit of \$1.9 million was reported in 1971.

The ratio of net operating profit or loss to net sales on upright pianos showed a loss of less than 0.05 percent in 1967, profits of 1.4 percent in 1968 and 0.9 percent in 1969, a loss of 0.1 percent in 1970, and a profit of 2.1 percent in 1971. The number of firms reporting operating losses was eight in 1967, seven in 1968 and 1969, eight in 1970, and five in 1971. Only three firms posted profits for all 5 years \* \* \*. The four producers who ceased operations on upright pianos during 1967-71 sustained substantial operating losses.

Table 11 presents the ratio of cost of goods sold to net sales, showing the ability of the various firms to sell upright pianos above cost and make a reasonable gross profit from 1967 to 1971.

\* \* \* \* \*

The industry average shows a net decrease of 3.1 percent from 1967 to 1971.

#### Unit Costs

Yamaha International Corp. and Kawai Piano (America) Corp. were requested to furnish recent unit costs of purchasing their best-selling upright pianos in the United States from their parent companies.

They were also requested to furnish their parent companies' unit cost of production (material, labor, and overhead) in Japan. Three major domestic producers of upright pianos furnished data on their recent unit cost of production of pianos that were comparable to the Japanese pianos by model number.

The data obtained are reported in table 12,

\* \* \* \* \*

As shown in table 12, the costs of producing the three types of pianos in Japan are substantially below the costs of the U.S. domestic industry. However, when freight and insurance and other expenses in shipping to the United States are added to the cost of the Japanese pianos, the differences in costs are less pronounced.

The costs shown in table 12 and discussed above were accepted as they were submitted to the Commission without verification.

Table 13 shows the average unit cost of all upright pianos produced from 1967 to 1971 by the domestic producers. The average unit cost is derived by dividing the number of upright pianos sold into the cost of goods sold. The trend in cost of producing pianos was upward in all years except 1969. The average cost for the industry increased by 21 percent in 1967-71.

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## Statistical Appendix



Table 1.--Pianos: 1/ U.S. rates of duty and imports for consumption, 1950-72

Period	Rate of duty		Imports			
	Percent ad valorem	Number	Quantity	Value		
1950				\$48,918		
1951	2/ 40	363		81,796		
1952	3/ 20	439		169,754		
1953	20	548		262,347		
1954	20	815		171,138		
1955	20	627		198,148		
1956	4/ 19	910		315,111		
1957	4/ 18	857		248,367		
1958	4/ 17	1,882		419,644		
1959	17	3,193		692,237		
1960	17	4,926		1,146,137		
1961	17	3,036		1,002,653		
1962	17	5,282		1,553,105		
1963	17	5,537		1,867,106		
1964	17	6,866		2,423,869		
1965	17	7,636		2,881,076		
1966	17	10,812		4,213,358		
1967	17	15,661		6,131,966		
1968	5/ 15	24,832		8,379,947		
Upright pianos						
	Rate of duty	Quantity	Value	Rate of duty	Quantity	Value
	Percent ad valorem	Number		Percent ad valorem	Number	
1969	5/ 13.5	22,142	\$6,704,039	5/ 13.5	6,917	\$3,996,651
1970	6/ 13.5	16,168	4,809,817	5/ 11.5	4,520	3,691,733
1971	6/ 13.5	20,981	6,265,521	5/ 10	5,138	4,354,989
1972 (January-November)	6/ 13.5	18,356	6,454,498	5/ 8.5	5,616	5,523,557
Grand pianos						

See footnotes on p. A-43.



Footnotes for table 1

- 1/ Data for 1950-68 include harpsichords, clavichords, and other keyboard stringed instruments; imports of such instruments have been negligible. Data on imports of upright and grand pianos were not separately reported in official statistics until 1969.
- 2/ Effective June 18, 1930.
- 3/ Effective June 6.
- 4/ Effective June 30.
- 5/ Effective Jan. 1.
- 6/ Presidential Proclamation No. 3964.

Table 2.--Pianos: U.S. producers' shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, specified years 1958 to 1971, January-September 1971, and January-September 1972

(Quantity--number; value in thousands of dollars)						
Period	U.S. producers' shipments <u>1/</u>	U.S. imports <u>2/</u>	Exports	Apparent consumption <u>3/</u>	Ratio (percent) of imports to consumption	
Quantity						
1958-----	159,000	1,882	1,486	159,000	1.2	
1960-----	198,000	4,926	1,726	201,000	2.4	
1962-----	203,000	5,282	1,092	207,000	2.5	
1964-----	220,161	6,866	1,616	227,000	3.0	
1965-----	232,809	7,636	1,644	240,000	3.2	
1966-----	235,811	10,812	1,627	247,000	4.4	
1967-----	211,138	15,661	1,866	227,000	6.9	
1968-----	201,902	24,832	2,049	227,000	10.9	
1969-----	180,737	29,059	1,704	210,000	13.8	
1970-----	173,123	20,688	1,323	194,000	10.7	
1971-----	179,816	26,119	2,314	206,000	12.7	
January-September--						
1971-----	124,994	17,412	1,361	142,406	12.2	
1972-----	145,201	19,193	2,462	164,394	11.7	
Value						
1958-----	<u>4/</u>	<u>4/</u>	705	<u>4/</u>	<u>4/</u>	
1960-----	<u>4/</u>	<u>4/</u>	804	<u>4/</u>	<u>4/</u>	
1962-----	<u>4/</u>	<u>4/</u>	659	<u>4/</u>	<u>4/</u>	
1964-----	97,334	2,424	806	99,758	2.4	
1965-----	104,479	2,881	837	107,360	2.7	
1966-----	109,789	4,213	841	114,002	3.7	
1967-----	101,388	6,132	897	107,520	5.7	
1968-----	99,899	8,380	902	108,279	7.7	
1969-----	93,434	10,701	846	104,135	10.3	
1970-----	88,828	8,502	897	97,330	8.7	
1971-----	93,356	10,621	1,200	103,977	10.2	
January-September--						
1971-----	64,578	7,121	799	71,699	9.9	
1972-----	77,057	9,481	1,167	86,538	11.0	

1/ U.S. producers' domestic sales, except for 1958, 1960, and 1962.

2/ Data for 1958-68 include harpsichords, clavichords, and other keyboard stringed instruments; imports of such instruments have been negligible. The value of imports was compiled from official statistics and is stated in terms of foreign value.

3/ Producers' domestic sales plus imports, except for 1958, 1960, and 1962.

4/ Not available.

Source: U.S. producers' shipments compiled from data furnished the U.S. Tariff Commission by domestic producers; import and export data compiled from official statistics of the U.S. Department of Commerce.

Table 3.--Upright pianos: U.S. producers' domestic sales, imports for consumption, and apparent consumption, 1969-71, January-September 1971, and January-September 1972

Period	U.S.	U.S.	Apparent	Ratio
	producers' domestic sales	imports	consumption <sup>1/</sup>	of imports to consumption
	Number	Number	Number	Percent
1969-----	174,683	22,142	196,825	11.2
1970-----	167,936	16,168	184,104	8.8
1971-----	174,540	20,981	195,521	10.7
January-September--				
1971-----	121,297	13,912	135,209	10.3
1972-----	140,645	14,610	155,255	9.4

<sup>1/</sup> Producers' domestic sales plus imports; exports are not separately reported in official statistics but are known to be negligible.

Source: U.S. producers' sales compiled from data furnished the U.S. Tariff Commission by domestic producers; import data compiled from official statistics of the U.S. Department of Commerce.

Table 4. --Pianos: U.S. producers' sales in the United States, by types, 1964-71, January-September 1971, and January-September 1972

Period	Uprights				Total	Grands	Total
	Players	Spinets	Consoles	Studios			
	Quantity (number)						
1964	3,710	113,760	75,118	21,157	214,075	6,086	220,161
1965	3,460	124,029	76,606	22,377	226,472	6,337	232,809
1966	4,146	119,516	79,601	25,806	229,099	6,712	235,811
1967	4,254	103,669	74,110	22,780	204,813	6,325	211,138
1968	3,306	97,933	73,430	20,875	195,544	6,358	201,902
1969	2,935	85,722	67,800	18,226	174,683	6,054	180,737
1970	3,597	75,938	72,251	16,150	167,936	5,187	173,123
1971	3,155	79,610	75,465	16,310	174,540	5,276	179,816
January-September--							
1971	2,068	55,834	51,978	11,417	121,297	3,697	124,994
1972	2,586	56,809	67,880	13,370	140,645	4,556	145,201
	Value (1,000 dollars) 2/						
1964	3,067	43,141	32,210	9,570	87,988	9,346	97,334
1965	2,880	46,347	34,525	10,274	94,027	10,452	104,479
1966	3,573	45,474	37,019	12,357	98,425	11,364	109,789
1967	3,535	40,951	34,907	11,183	90,577	10,811	101,388
1968	2,668	39,278	35,369	10,539	87,852	12,047	99,899
1969	2,329	35,433	34,000	9,697	81,458	11,975	93,434
1970	2,835	30,946	35,967	8,753	78,501	10,327	88,828
1971	2,541	32,133	37,738	9,061	81,473	11,884	93,356
January-September--							
1971	1,664	22,464	23,939	6,442	56,456	8,121	64,578
1972	2,115	25,887	33,845	7,557	67,456	9,601	77,057
	Average unit value 3/						
1964	\$820	\$379	\$427	\$452	\$411	\$1,536	\$442
1965	832	374	451	459	415	1,649	447
1966	862	380	465	479	430	1,693	466
1967	831	395	471	491	442	1,709	480
1968	807	401	482	505	449	1,895	495
1969	794	413	501	532	466	1,978	517
1970	788	408	498	542	467	1,991	513
1971	805	404	500	556	467	2,252	519
January-September--							
1971	805	402	498	564	465	2,197	517
1972	818	421	499	565	480	2,107	531

See footnotes on p. A-47.

Footnotes for table 4

- 1/ Because of rounding, value figures may not add to the totals shown.
- 2/ Net sales value of pianos (exclusive of benches), i.e., gross sales value f.o.b. plant, less discounts and other allowances.
- 3/ Computed from unrounded figures.

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

Table 5.--Pianos: Sales by Yamaha International Corp. and Kawai Piano (America) Corp. in the United States, by types, 1964-71, January-September 1971, and January-September 1972

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Table 8.--Profit-and-loss experience of U.S. producers on their operations producing pianos and their establishments in which upright pianos were produced, 1967-71

	Net sales	Cost of goods sold	Gross profit	Administrative and selling expenses	Net operating profit or (loss)	Ratio of operating profit or (loss) to net sales
	<u>1,000</u> dollars	<u>1,000</u> dollars	<u>1,000</u> dollars	<u>1,000</u> dollars	<u>1,000</u> dollars	Percent
Upright pianos:						
1967-----	90,783	76,496	14,287	14,305	(18)	<u>1/</u>
1968-----	97,049	80,725	16,324	14,938	1,386	1.4
1969-----	85,880	70,294	15,586	14,815	771	.9
1970-----	84,447	69,625	14,822	14,929	(107)	(.1)
1971-----	91,107	73,969	17,138	15,195	1,943	2.1
All products:						
1967-----	127,280	106,696	20,584	19,592	992	.8
1968-----	140,073	116,610	23,463	20,495	2,968	2.2
1969-----	121,886	100,067	21,819	20,580	1,239	1.0
1970-----	123,874	102,410	21,464	20,770	694	.6
1971-----	143,495	115,732	27,763	21,597	6,166	4.3

1/ Less than 0.05 percent.

Source: Financial information submitted by the domestic industry.

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