

UNITED STATES TARIFF COMMISSION

CERAMIC MOSAIC TILE

**Report in Response to the President's
Request for Information
Supplemental to the Report
on Escape-Clause
Investigation No. 7-100**



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U.S. Tariff Commission
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REPORT IN RESPONSE TO THE PRESIDENT'S REQUEST FOR INFORMATION SUPPLEMENTAL
TO THE REPORT ON ESCAPE-CLAUSE INVESTIGATION NO. 7-100

Introduction

On May 10, 1961, the Tariff Commission submitted to the President its report on escape-clause investigation No. 7-100 concerning ceramic mosaic tile, in which the Commission recommended escape action. ^{1/} By letters dated June 29 and September 5, 1961, the President requested the Commission to furnish additional information, as follows:

1. A more complete analysis of the impact of pricing practices by domestic and foreign producers upon the share of the market captured by imports, and information on the profit relationship to investment in productive facilities.
2. The effect of voluntary export quotas by Japan upon domestic production and sales.
3. The effect of domestic technological innovations and automation.
4. Information as to (a) any increase in productive capacity during the past 5 years; (b) the effect of that increase, if any, upon current profits; and (c) a judgment on the ability of domestic manufacturers to satisfy a market demand for less expensive tile.

^{1/} See U.S. Tariff Commission, Ceramic Mosaic Tile: Report to the President on Escape-Clause Investigation No. 7-100 . . ., 1961 (processed).

5. The extent to which imported unglazed tile has displaced resilient floor covering rather than similar domestic tile.

The report which follows is in five parts with each part addressed, in the order indicated, to the above categories.

Part I

Impact of pricing practices by domestic and foreign producers upon the share of the market captured by imports

The impetus to increased U.S. imports after 1958 is found largely in the difference in prices at which imported and domestically produced tile could be purchased by U.S. distributors and contractors, rather than to unusual or anomalous pricing practices of either domestic producers or importers. In recent years, imported ceramic tile has been available to domestic purchasers at prices averaging 30 to 40 percent less than the prices of comparable types and qualities of domestic tile.

One of the more representative types of ceramic mosaic tile produced domestically, as well as imported, is the unglazed light and dark green block-random tile of the 3/4 inch by 1-9/16 inch series. The Commission's report of May 1961 indicated that in 1960 the average price to contractors of such domestically produced tile was 54.7 cents per square foot. During the same year, the price of the comparable imported product averaged 37.3 cents. The imported tile could thus be purchased at an average price of 17.4 cents--or 32 percent--lower than the domestic product. Price differentials for sales to distributors were even greater.

The Commission's report of May 1961 also revealed that between 1955 and 1960 the spread between the price of the domestic and the imported product had

widened. Whereas the average price of the domestic product declined from 55.5 cents per square foot in 1955 to 54.7 cents in 1960 the average price of the comparable imported product declined from 43.3 cents to 37.3 cents.

Neither the price history in recent years nor the information assembled by the Commission reveals a pattern of price control by domestic producers that resulted in increased prices which, in turn, attracted increased imports. Prices of the more popular patterns of domestic tile were slightly lower in 1960 than in most years during the period 1955-59. Indexes of producers' net realized prices to contractors for two of the more popular patterns of ceramic mosaic tile for the years 1955-60 are as follows:

<u>Year</u>	<u>(1955=100)</u>
1955-----	100
1956-----	100
1957-----	99
1958-----	101
1959-----	100
1960-----	99

The increased imports thus occurred during a period of relative price stability for domestically manufactured tile. Meanwhile, the average price of imported tile declined. The imports between 1955 and 1960 rose from 13 to 37 percent of the total quantities consumed, largely precluding the success, had it been attempted, of price management by domestic producers. However, neither at the public hearings nor in the briefs submitted to the Commission by interested parties was there any intimation given or evidence presented of such pricing practice. Moreover, the information gained through interviews by the Commission's

staff with distributors, contractors, importers, and domestic producers supports the generalization that the increase in imports in the last 3 years was not stimulated by pricing practices adopted by, and subject to the control of domestic producers.

Manufacturers' list prices, as well as their net realized prices, f.o.b. plant, for the various types of ceramic mosaic tile have varied appreciably among the respective domestic producers. To enable them to compete in the "freight advantage territory" of other domestic manufacturers, domestic producers, whenever they deem it to their individual advantage to do so, "absorb freight." In so doing, they grant an allowance, or discount, from the invoice price to offset the excess in transportation charge over the amount that would be charged by the domestic producer located nearest the purchaser. In recent years apparently about two-thirds of the domestic sales were thus affected. In 1960 the freight "absorbed" by domestic producers constituted, on the average, an allowance of 2.3 percent of the sales value of the tiles subject to such allowances.

Such price controls as were exercised over Japanese exports were designed to minimize rather than to intensify the price competition of imports from Japan in the U.S. market. In 1958 the Japanese Ministry of International Trade and Industry (MITI) persuaded Japan's ceramic tile industry to adopt minimum price controls (check prices) on exports to the United States and Canada. In the autumn of 1960, after it became apparent that such controls were only partly effective, MITI urged the industry to adopt a more effective system. The present procedure for administering minimum price control for exports became effective on January 1, 1961; it applies to unglazed ceramic mosaic tile (table 1), which accounts for

about 60 percent of total U.S. imports of ceramic mosaic tile from Japan. It is enforced by the Japanese Pottery Exporters' Association. These controls have had little effect on the share of the market supplied by imports.

Profit relationship to investment in productive facilities

The Commission sought by questionnaire to obtain investment data on productive facilities for the years 1955-60 from all domestic concerns that produced ceramic mosaic tile in any of those years. Productive facilities include land, buildings, machinery, equipment, and other facilities used directly or indirectly in the manufacture of the product; they do not include warehouses used to store the finished product, equipment used in marketing or selling the product, and other nonmanufacturing equipment. The concerns were requested to furnish the actual cost of the productive facilities and also the depreciated or net book value of such facilities.

Eleven concerns, ^{1/} which together accounted for practically all of the domestic production of ceramic mosaic tile during 1955-60, furnished adequate data on their investment in productive facilities; such data are summarized in table 2. Six of the 11 concerns produced only ceramic mosaic tile, and 5 produced other products as well. The latter used certain productive facilities jointly in the production of tile and other products. For those concerns, an appropriate share of the total investment in such facilities was allocated to ceramic mosaic tile and is reported in table 2.

Some of the concerns for which investment data are shown in table 2 have old plants which are carried on their books at comparatively low values; others have new plants which are carried on their books at

^{1/} One of the concerns produced ceramic mosaic tile in three plants, two of which were operated by subsidiary corporations.

comparatively high values. Some concerns own the land, buildings, and other productive facilities they use; others lease in varying degrees such facilities. Because of these and other factors, the reported investment in productive facilities varied widely among the different concerns.

Table 3 shows for each of the years 1955-60 the ratio of the aggregate net operating profit of the 11 reporting concerns (a) to the reported aggregate actual cost of their productive facilities, and (b) to the reported aggregate depreciated or net book value of such facilities. The profit ratio based on the reported actual cost declined from 38 percent in 1955 to 9 percent in 1957, increased to 19 percent in 1958, and declined to 11 percent in 1960. The ratio based on net book value declined from 60 percent in 1955 to 15 percent in 1957, increased to 34 percent in 1958, and declined to 19 percent in 1960. While these ratios indicate in general the trend in the aggregate profits of the industry, there is serious question whether they measure its profitability. Because of the upward trend of prices, ratios based on actual cost of the productive facilities approach more nearly what the ratios would be if they were based on replacement cost. The ascertainment of replacement cost, however, would be an impossible task for the Commission to undertake.

Part II

Effect of voluntary export quotas by Japan upon domestic production and sales

The Japanese voluntary quota for exports of unglazed ceramic mosaic tile to the United States and Canada has been applicable only since January 1, 1961. No export limitation has been placed on glazed tile,

which accounts for about 40 percent of the Japanese exports of ceramic mosaic tile to the United States.

The quota for exports of unglazed tile to the United States and Canada was established at 9.5 million square feet for the first 6 months of 1961; subsequently, the export quota for the second half of 1961 was also set at 9.5 million square feet. Thus the aggregate quota for exports to the two countries in 1961 is 19.0 million square feet compared with the previous peak of annual total exports to the same countries, of 16.9 million square feet, attained in 1960. ^{1/}

Japanese exports to the United States in the first 6 months of 1961 amounted to 6.5 million square feet. No figures are available for exports to Canada in the first 6 months of 1961, but it is estimated that they did not exceed 0.8 million square feet. Therefore, total exports to the two countries in the first half of 1961 were about 7.3 million square feet, or 23 percent less than the export quota.

Inasmuch as exports from Japan in the first 6 months of 1961 were substantially below the export quota, the quota was not a factor in restricting U.S. imports in that period and domestic producers reported to the Commission that the existence of the quota had no effect on their production or sales. Information is not presently available on Japanese exports to the United States and Canada in the last half of 1961.

^{1/} Exports to the United States in 1960 were 15.2 million square feet; to Canada, 1.7 million square feet.

Part III

Effect of domestic technological innovations and automation

Technical progress in the domestic ceramic mosaic tile industry has been achieved mainly by the installation of more efficient machinery and equipment for performing the various separate production operations and by improvements in raw materials and manufacturing controls and methods. However, there are limits to the extent that mechanization is feasible since the production of many shapes of tile in a wide variety of colors and decorative patterns requires a batch system of manufacture, as distinguished from a continuous-flow system. Moreover, certain operations--such as the labor-costly task of mounting mosaic tile--have not yet been successfully mechanized and must still be done by hand. Thus while the domestic industry has achieved substantial technical progress as a result of many innovations, it still has a large labor requirement per unit of product in comparison with certain large domestic industries where continuous-flow manufacturing processes are fully mechanized and are either partially or fully automated.

In response to the Commission's request, domestic producers reported technological innovations and changes that were instituted at their plants during the period 1955-60. The following items were reported by one or more producers: (1) Pneumatic material handling, (2) semiautomatic body preparation, (3) development of cushion edge on both sides of tile, (4) automatic pressing of some tile, (5) automatic take-off from presses, (6) trim tile fettling machine, (7) automatic sagger loader, (8) automatic kiln controls, (9) improved mounting equipment, and (10) back-mounting of tile. In addition to the changes listed above, producers

also indicated that improvements in raw materials, bodies, glazes, pressing dies, firing methods, manufacturing controls, packaging, and improved methods of tile installation resulted in product improvement, more efficient operation, or an increased market.

Domestic producers were also asked to report the effect of technological innovations and changes on the man-hours expended by production and related workers, and the total cost that would have been incurred, as well as the net operating profit that would have been obtained, had the technical improvements not been made. However, owing to many factors in addition to technological progress that influenced production operations--such as extensive upgrading of products through increased variety of colors and designs and through back-mounting, as well as rising material and wage costs, that at least partially offset cost saving in processing operations--an appraisal of the effect of technological advances proved extraordinarily difficult. Six domestic producers were unable to supply the Commission with any meaningful information on this matter. The eight producers (accounting for about 60 percent of production) that attempted to assess the effect of technological innovations indicated that total man-hours expended and cost of goods manufactured would have been greater, and dollar profits would have been less, had they not made the improvements.

Part IV

Increase in productive capacity during the past 5 years

In peak production months in the years 1955-57, when imports were still relatively moderate, output at domestic plants was at, or near,

full capacity. This situation, plus the anticipated future growth in U.S. demand for ceramic mosaic tile, encouraged certain domestic producers to undertake the enlargement of plant capacity. As indicated in the Commission's report on escape-clause investigation No. 7-100, total plant capacity has increased as follows over the past 5 years:

<u>Year</u>	<u>Capacity</u> <u>(million sq. ft.)</u>
1956-----	47.9
1957-----	51.5
1958-----	53.6
1959-----	56.3
1960-----	57.0

In considering the relationship of capacity to production, it may be observed that plant capacity is more fully utilized in summer and fall, which are usually periods of peak demand, than in other portions of the year. Thus, whereas total annual output in the years 1958, 1959, and 1960 was, respectively, 68 percent, 71 percent, and 62 percent of indicated capacity, production in the months of peak demand in the same years was, respectively, 86 percent, 88 percent, and 80 percent of capacity.

Effect of the increase in capacity on current profits

Slightly more than three-fourths of the capacity that was added in the 1956-60 period is accounted for by four companies. In that period the aggregate capacity of the four companies that significantly expanded their facilities was as follows:

<u>Year</u>	<u>Capacity</u> <u>(million sq. ft)</u>
1956-----	20.2
1957-----	23.5
1958-----	24.5
1959-----	26.4
1960-----	27.1

Of the total increase in the domestic industry's capacity to produce ceramic mosaic tile (9.1 million square feet in 1956-60), the four expanding companies accounted for 6.9 million square feet. They also accounted for somewhat more than half of the total dollar value of sales of domestic tile in each of the years 1956-60.

Information on the production, sales, capacity, and profits of the 4 expanding concerns is compared in table 4 with similar information for the 10 nonexpanding companies. The table shows that the ratio of profits to net sales for the 4 expanding concerns declined from a peak of 13.1 percent in 1956 to 6.2 percent in 1957, then rose to 9.2 percent in 1958; and then declined to 7.7 percent in 1959 and to 4.1 percent in 1960. For concerns which did not expand, the ratio of profit to net sales declined from 10.5 percent in 1956 to 1.2 percent in 1957, rose to 5.6 percent in 1958 and to 6.9 percent in 1959, and declined to 5.5 percent in 1960. Only in 1960 was the profit ratio higher for the nonexpanding, than for the expanding, concerns. The average ratio of profits to net sales during the period 1956-60 was 8.0 percent for the plants which expanded and 6.0 percent for those which did not expand.

Ability of domestic producers to satisfy a market demand
for less expensive tile

The Commission requested domestic producers to determine whether they could profitably produce a low-priced utility ceramic tile meeting U.S. Government specifications, and if so, to estimate at what price it would sell. Only five producers reported that they would be able to manufacture such tile, and they estimated selling prices which would average 43 cents per square foot in large lots. Since the average price

of all imported unglazed tile was 30 cents per square foot in 1960, and since the imported tile was generally superior to the aforementioned utility-grade tile and included a wide range of designs and colors, it appears most unlikely that domestically produced utility tile selling approximately at the price indicated would "satisfy a market demand" for less expensive ceramic mosaic tile.

Part V

Extent to which imported unglazed tile has displaced resilient floor covering rather than similar domestic tile

The increase in imports of unglazed ceramic mosaic tile in recent years greatly exceeded the decline in domestic sales. It is estimated that the U.S. consumption of unglazed ceramic mosaic tile in 1960 was 9.3 million square feet greater than in 1955 (table 5); this represents an increase of about 25 percent. Sales of the imported tile in the United States in 1960 were 11.7 million square feet greater than they were in 1955, whereas sales of domestically produced unglazed mosaic tile were 2.4 million square feet smaller. The increase in sales of imported tile in 1960 over those in 1955 was thus 5 times the decrease in sales of domestic tile.

No data are available that would make it possible to measure the relative importance of the several factors that accounted for a net increase in consumption of unglazed mosaic tile in 1960 over that in 1955. The Commission believes that the following two factors accounted for the major part of the increased consumption: (1) The greater volume of new building construction in 1960 than in 1955, particularly in office buildings and apartments; and (2) new uses that have recently been developed for unglazed tile.

The index of the physical volume of all new building construction in the United States was about 6 percent greater in 1960 than in 1955; the index for new construction of office buildings increased by 30 percent and that for apartment units by more than 100 percent. Ceramic mosaic tile is used primarily in private dwellings, office buildings, apartments, hospitals, hotels, schools, factories, and other commercial and institutional structures. Some of the expanded consumption of unglazed mosaic tile in recent years is, therefore, attributable to the increased construction of most of these types of buildings.

The increased use of ceramic mosaic tile (including the glazed type) for purposes other than surfacing floors has resulted from promotional activities by domestic producers and the development of a wider variety of colors and patterns by both domestic producers and importers. These efforts expanded the use of ceramic mosaic tile as an architectural medium, particularly on interior and exterior walls.

Contributing considerably less than the above, if at all, to the increased use of mosaic tile in recent years has been its substitution for competitive types of flooring, particularly linoleum, vinyl asbestos tile, and asphalt tile. The trend in U.S. consumption of resilient floor coverings in recent years has been markedly upward, and builders have frequently chosen them in competition with mosaic tile. Data are not available to measure the net displacement of one type by the other. The choice between ceramic and resilient floor covering is determined primarily by the cost bracket in which the structure falls (table 6), but the use of the different available materials varies considerably from

one section of the country to another. The preponderant share of ceramic tile installations in dwellings is in the higher priced homes, which have become increasingly important in recent years. The installed cost of ceramic mosaic tile is considerably greater than that of resilient floor coverings. An analysis of the installed cost of different types of coverings in major U.S. cities, ^{1/} where substantial quantities of imported ceramic mosaic tile are sold, indicate the following median costs per square foot:

Ceramic tile (domestic)-----	\$1.60
Ceramic tile (imported)-----	\$1.30- 1.35
Linoleum-----	.55
Vinyl asbestos tile-----	.50
Asphalt tile on wood-----	.43- .45
Asphalt tile on concrete-----	.22- .25

On the basis of installed cost the ceramic floor tile is so much more expensive than resilient covering that in the construction of low- and medium-cost homes resilient floor coverings have a marked cost advantage. Potential buyers of the less expensive flooring, therefore, are still supplied largely by producers of resilient floor coverings. Buyers of the more expensive flooring are supplied primarily by producers of ceramic mosaic tile, either domestic or imported.

^{1/} Derived from reports by local representatives of the Federal Housing Administration located in these cities.

STATISTICAL APPENDIX

Table 1.--Minimum export prices filed with the Ministry of International Trade and Industry by the Japan Pottery Exporters Association, on unglazed mosaic tiles destined for the United States effective Jan. 1, 1961

Sizes and shapes	Minimum export price : f.o.b. Japan ports : Per sq.ft.	Japanese code number	Patterns	Colors	
3/4" x 3/4"; 1" x 1"; 1" hexagonal.	\$0.13	UA-1a	Straight joint and hexagonal.	White only.	
		UA-1b	Jumble	More than 50% white.	
	.135	UA-1c	Checker	White and colors.	
		UA-2a	Straight joint and hexagonal.	Gray; red (earthen).	
		UA-2b	Jumble	White and more than 50% gray.	
	.14	UA-2c	Jumble	More than 50% white and gray with other colors.	
		UA-3a	Straight joint and hexagonal.	Any one color except white and gray.	
3/4" x 1 1/2" (1-9/16") only; and 3/4" x 1 1/2" (1-9/16") with 3/4" squares.	.13	UB-1a	Straight joint, basket, broken joint, and spiral.	White only.	
		UB-1b	Spiral	White oblongs and 3/4" square color dots.	
	.14	UB-2a	Double spiral	White and color oblongs with 3/4" color dots.	
		UB-2b	Spiral	Gray oblongs and 3/4" white and color dots.	
		UB-2c	Basket	50% white oblongs and 50% color oblongs.	
	.15	UB-2d	Jumble and basket	Oblongs in white or gray; oblongs in more than 50% white and gray with other colors.	
		UB-2e	4 stone plaid	Gray or white; gray and white.	
		UB-3a	All tiles	Other than those for UB-1 and UB-2.	
		.15	UC-1a	All tiles	White only.
			UC-1b	Block random; one stone plaid.	1 1/2" x 1 1/2" (1-9/16" x 1-9/16") white square and 3/4" x 1 1/2" (1-9/16") white oblongs with 3/4" square color dots.
UC-1c	Diagonal		White diagonals with 3/4" color dots.		
Patterns including 1 1/2" x 1 1/2" (1-9/16" x 1-9/16") and/or 1" x 2".	.16	UC-1d	Basket, straight joint, and jumble.	More than 50% white 1" x 2" oblongs.	
		UC-1e	Jumble	More than 50% white 1 1/2" (1-9/16") squares.	
	.165	UC-1f	Checker	50% white and 50% colors.	
		UC-2a	Basket and straight joint.	1" x 2" gray.	
		UC-2b	Straight joint	1 1/2" (1-9/16") gray squares.	
	.17	UC-2c	Jumble	1 1/2" (1-9/16") squares or 1" x 2" oblongs in more than 50% white and gray, with other colors.	
		UC-2d	Block random; one stone plaid.	1 1/2" (1-9/16") squares and 3/4" x 1 1/2" (1-9/16") oblongs in white and gray, with 3/4" square color dots.	
UC-2e		Diagonal	Gray diagonals and 3/4" square color dots.		
UC-3a		All tiles	Other than those for UC-1 and UC-2.		
Patterns including 2" x 2" (2-1/16" x 2-1/16"), 2" (2-1/16") x 1", and 1" x 1".	.18	UD-1a	Straight joint, block random, and other.	White and gray.	
		UD-2a	2" x 2" (2-1/16" x 2-1/16") straight joint.	Any colors except white and gray.	
	.18	UD-2b	2" x 2" (2-1/16" x 2-1/16"), 2" (2-1/16") x 1" and 1" x 1" block; random and other.	Any colors except white and gray.	

Note.--(1) The above list shows minimum export prices on porcelain tile. The prices of earthenware tile are as follows: Black earthenware tile, the same as for colored tile other than gray; earthenware tile except black, the same as for gray-colored tile. (2) The prices of any materials, sizes, and patterns other than those listed will be decided by the Board of Directors.

Source: Japan Pottery Exporters Association.

Table 2.--Investment in productive facilities employed in the production of ceramic mosaic tile, reported by 11 U.S. producers, 1955-60

(In thousands of dollars)

Year and item	Assets (cost basis)				Depreciation and amortization					Net book value at end of year
	Balance at beginning of year	Additions and improvements	Retirements and disposals	Balance at end of year	Accumulated depreciation and amortization at beginning of year	Provision for depreciation and amortization for the year	Deductions for retirements and disposals	Accumulated depreciation and amortization at end of year		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
1955										
Land and land improvements-----	110	13	-	123	3	2	-	5	118	
Buildings and leasehold improvements--	2,466	592	81	2,977	836	103	43	896	2,081	
Machinery, small tools, and other equipment-----	2,722	599	84	3,237	1,237	226	66	1,397	1,810	
Total-----	5,298	1,204	165	6,337	2,076	331	109	2,298	4,039	
1956										
Land and land improvements-----	123	18	-	141	5	1	-	6	135	
Buildings and leasehold improvements--	2,976	146	-	3,122	896	130	-	1,026	2,096	
Machinery, small tools, and other equipment-----	3,238	546	67	3,711	1,397	292	60	1,629	2,088	
Total-----	6,337	710	67	6,980	2,298	423	60	2,681	4,319	
1957										
Land and land improvements-----	144	-	3	138	6	1	-	7	131	
Buildings and leasehold improvements--	3,122	164	8	3,278	1,026	131	3	1,154	2,124	
Machinery, small tools, and other equipment-----	3,794	391	52	4,133	1,631	337	49	1,919	2,214	
Total-----	7,057	555	63	7,549	2,663	469	52	3,080	4,469	
1958										
Land and land improvements-----	138	2	1	139	7	-	1	6	133	
Buildings and leasehold improvements--	3,278	26	1	3,303	1,154	136	1	1,289	2,014	
Machinery, small tools, and other equipment-----	4,133	342	137	4,338	1,917	372	112	2,177	2,161	
Total-----	7,549	370	139	7,780	3,078	508	114	3,472	4,308	
1959										
Land and land improvements-----	139	62	23	178	6	1	4	3	175	
Buildings and leasehold improvements--	3,303	275	5	3,573	1,289	135	64	1,360	2,213	
Machinery, small tools, and other equipment-----	4,338	851	75	5,114	2,177	392	247	2,322	2,792	
Total-----	7,780	1,188	103	8,665	3,472	528	315	3,685	5,180	
1960										
Land and land improvements-----	178	19	12	185	3	-	-	3	182	
Buildings and leasehold improvements--	3,573	730	90	4,213	1,360	179	25	1,514	2,699	
Machinery, small tools, and other equipment-----	5,114	146	118	5,442	2,322	454	99	2,677	2,465	
Total-----	8,865	895	220	9,540	3,685	633	124	4,194	5,346	

1/1 of the 11 producers commenced operations during 1956 and furnished data on its investment in productive facilities for 1957-60; the data shown in this table, therefore, are for 10 producers for 1955-56 and for 11 producers for 1957-60.

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

Table 3.--Investment in productive facilities, net operating profit, and ratio of net operating profit to investment in productive facilities, reported by 11 U.S. producers ^{1/} with respect to their operations relating to ceramic mosaic tile, 1955-60

Year	Investment in productive facilities at end of year		Net operating profit before income taxes	Ratio of net operating profit to investment in productive facilities	
	Actual cost	Net book value		Actual cost	Net book value
	<u>1,000</u> <u>dollars</u>	<u>1,000</u> <u>dollars</u>	<u>1,000</u> <u>dollars</u>	Percent	Percent
1955-----	6,337	4,039	2,431	38	60
1956-----	6,980	4,319	2,322	33	54
1957-----	7,549	4,469	690	9	15
1958-----	7,780	4,308	1,458	19	34
1959-----	8,865	5,180	1,605	18	31
1960-----	9,540	5,346	1,014	11	19

^{1/} 1 of the 11 producers produced ceramic mosaic tile in 3 plants, 2 of which were operated by subsidiary corporations. Another producer commenced operations during 1956 and provided information covering the years 1957-60; the data shown in this table, therefore, are for 10 producers for 1955-56 and for 11 producers for 1957-60.

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

Table 4.--Ceramic mosaic tile: U.S. productive capacity, production, ratio of production to capacity, sales, and profit as a percent of sales, by expanding companies and nonexpanding companies, 1956-60

Item	1956	1957	1958	1959	1960
4 expanding plants:					
Capacity----million sq. ft--:	20.2	23.5	24.5	26.4	27.1
Production-----do-----:	18.2	16.9	17.4	18.3	16.3
Percent of capacity-----:	90	72	71	69	60
Net sales----1,000 dollars--:	9,959	9,327	9,897	11,055	10,553
Profit as a percent of sales:	13.1	6.2	9.2	7.7	4.1
10 nonexpanding plants: ^{1/}					
Capacity----million sq. ft--:	27.7	28.0	29.1	29.9	29.9
Production-----do-----:	20.1	18.3	18.9	21.6	19.2
Percent of capacity-----:	73	65	65	72	64
Net sales----1,000 dollars--:	9,739	8,958	9,837	10,949	10,488
Profit as a percent of sales:	10.5	1.2	5.6	6.9	5.5

^{1/} Sales and profits on sales are for 9 plants; the 10th plant accounts for a very small part of the total. The increase in capacity of this group of producers resulted from the opening of 2 new plants, 1 in 1956 and 1 in 1958.

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

Table 5.--Unglazed ceramic mosaic tile: U.S. consumption, sales by U.S. producers, and sales by U.S. importers, 1955-60

(In millions of square feet)

Year	U.S. consumption	U.S. producers' sales	U.S. importers' sales (estimated ^{1/})	Increase over or decrease from 1955, in--		
				Consumption	Producers' sales	Importers' sales
1955	37.5	33.4	4.1	-	-	-
1956	40.9	33.8	7.1	3.4	0.4	3.0
1957	36.7	31.5	5.2	-.8	-1.9	1.1
1958	40.6	32.6	8.0	3.1	-.8	3.9
1959	50.6	35.7	14.9	13.1	2.3	10.8
1960	46.8	31.0	15.8	9.3	-2.4	11.7

^{1/} Sales of unglazed tile during 1957-60, as reported to the Commission by U.S. importers, have been adjusted for coverage of total imports in accordance with the data in table 10 of the Commission's report of May 1961. Importers' sales of such tile have been assumed to be a somewhat larger proportion of the total imports of all ceramic mosaic tile in 1955 and 1956 than in 1957.

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

Table 6.--Percentage distribution of FHA-financed new, nonfarm, 1-family houses in the United States, by type of bathroom floor covering, 1940 and 1950, and by selling-price class, 1956

Type of floor covering	1940	1950	1956, dwellings selling at--									
			All prices	Less than \$7,000	\$7,000 to \$9,999	\$10,000 to \$11,999	\$12,000 to \$14,999	\$15,000 to \$19,999	\$20,000 and over			
Ceramic tile	58	29	38	3	23	18	36	45	63			
Asphalt tile	1/2	28	14	12	18	27	18	10	3			
Rubber tile	2	2	5	5	3	4	3	6	8			
Linoleum	42	40	28	44	33	35	31	27	13			
Other	1/2	3	13	29	23	14	11	11	12			
Unknown	2	2	2	7	1/2	2	1	1	1			
Total, all types of floor covering	100	100	100	100	100	100	100	100	100			

1/ None or less than 0.5 percent reported.

2/ Data unavailable.

3/ Apparently includes vinyl asbestos and pure vinyl.

Source: U.S. Department of Labor, New Housing and Its Materials, 1940-56, Bulletin No. 1231, 1958.

Note.--The sample was based on 63 areas (39 metropolitan and 24 nonmetropolitan) covering 28,500 dwelling units, or 12 percent of FHA-financed new private dwelling units built in 1956.