

UNITED STATES TARIFF COMMISSION

WILTON, BRUSSELS, VELVET, AND
TAPESTRY CARPETS AND RUGS

Report to the President on
Investigation No. TEA-I-EX-2 Under
Section 351(d)(3) of the
Trade Expansion Act of 1962



TC Publication 213

Washington, D. C.
September 1967

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(TC 28827)

REPORT TO THE PRESIDENT

U.S. Tariff Commission
September 5, 1967.

To the President:

This report is made pursuant to section 351(d)(3) of the Trade Expansion Act of 1962 (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.

Introduction

Following an investigation by the Tariff Commission (hereinafter referred to as the Commission) and reports to the President on August 3, 1961, and on December 1, 1961, 1/ under section 7 of the Trade Agreements Extension Act of 1951, as amended, the President, by proclamation dated March 19, 1962, 2/ increased the rate of duty applicable to Wilton, Brussels, velvet, and tapestry carpets, rugs, and mats, and carpets, rugs, and mats of like character or description (hereinafter referred to as Wiltons and velvets), effective after the close of business on April 18, 1962. By proclamation dated

1/ U.S. Tariff Commission, Wilton, Brussels, Velvet, and Tapestry Carpets and Rugs: Report to the President on Escape-Clause Investigation No. 7-104 . . . , TC Publication 28, 1961 (processed); Wilton, Brussels, Velvet, and Tapestry Carpets and Rugs: Report in Response to the President's Request for Information Supplemental to the Report on Escape-Clause Investigation No. 7-104, TC Publication 41, 1961 (processed).

2/ Proclamation No. 3454; 3 CFR, 1959-1963 Comp., p. 164.

March 27, 1962, 1/ the President deferred the effective date of the increased rate to after the close of business on June 17, 1962.

On September 13, 1963, the Commission made its first report to the President pursuant to section 351(d)(1) of the Trade Expansion Act of 1962, which provides that--

So long as any increase in, or imposition of, any duty or other import restriction pursuant to this section or pursuant to section 7 of the Trade Agreements Extension Act of 1951 remains in effect, the Tariff Commission shall keep under review developments with respect to the industry concerned, and shall make annual reports to the President concerning such developments.

Four annual reports have been made pursuant to this section of the Act. 2/

The current investigation was instituted on January 18, 1967, upon a petition filed, on behalf of the domestic industry, by the American Carpet Institute, Inc., New York, New York. Public notice of the institution of the investigation and of a public hearing to be held in connection therewith was given by publication of the notice in the Federal Register (32 F.R. 833). The hearing was held April 18, 19, and 20, 1967, at which all interested persons were afforded opportunity to be present, to produce evidence, and to be heard.

1/ Proclamation No. 3458; 3 CFR, 1959-1963 Comp., p. 171.

2/ These four reports are as follows:

(1) Wilton, Brussels, Velvet, and Tapestry Carpets and Rugs: Report to the President (No. TEA-IR-5-63) Under Section 351(d)(1) of the Trade Expansion Act of 1962, TC Publication 107, 1963 (processed).

(2) TC Publication 137 (No. TEA-IR-5-64), 1964 (processed).

(3) TC Publication 160 (No. TEA-IR-5-65), 1965 (processed).

(4) TC Publication 187 (No. TEA-IR-5-66), 1966 (processed).

Probable Economic Effect of the Termination of the Increase
in the Duty

The industry under consideration is one which five years ago was experiencing import competition, technological changes and, as a result of the latter, shifting consumer demand. The advent of the machine-tufting process had created a lower priced soft-surface floor covering which increasingly has been substituted by consumers for Wilton and velvet carpets and rugs. Today by far the major portion (more than 85 percent) of soft-surface floor covering demand is being filled by machine-tufted carpets and rugs.

As a result of the escape-clause action competition from imports of Wiltons and velvets was curtailed. The limiting effect of the higher duties on competition has probably retarded somewhat the decline of weaving as opposed to tufting, but probably accelerated somewhat consumer purchases of tufted carpets. As is typical in situations where a lower priced substitute replaces a traditional product, a residual market for the latter persists but it is one where special characteristics (such as quality, style, and prestige) are more important than initial cost. Imports typically participate in such a market, catering to the idiosyncrasies of consumer demand.

The firms producing Wiltons and velvets have, on the whole, adjusted to the pervasive technological and market changes. About two-thirds of such producers today also produce machine-tufted carpets and rugs. Many of these Wilton and velvet producers have, since 1961, shifted their emphasis to tufting; the majority now produce more tufted than woven carpet.

Additional Statement by Commissioners Thunberg and Clubb

We agree that this industry will not be seriously affected by the restoration of the trade concession on Wiltons and velvets, and believe that the concession rate could be restored without creating serious dislocations in the industry. We are impressed, however, that a small number of marginal firms or operations, which are currently on the edge of profitability, may be forced out of business by even a small decline in revenue or a small increase in cost. If the President authorizes the concession rate to be re-established, these operations, which are marginal even under present circumstances, may suffer increased difficulties.

The unprecedented trade-adjustment provisions for firms and workers in the Trade Expansion Act were enacted to aid such marginal firms and operations. We do not here prejudge the facts of any case which may come before the Commission in the future; however, if imports increase as a result in major part of trade-agreement concessions, and if such increases are the major factor in causing serious injury to such domestic firms or workers, the marginal firms and workers involved, in our judgment, would be eligible for adjustment assistance.

In gauging the probable economic effects on the industry of a restoration of the concession, the President may wish to take this factor into consideration.

U.S. Tariff Treatment

Wilton (including Brussels) and velvet (including tapestry) floor coverings and floor coverings of like character or description are currently dutiable at the escape-clause rate of 40 percent ad valorem provided for in item 922.50 of part 2 of the appendix to the Tariff Schedules of the United States (TSUS). ^{1/} Had there been no escape-clause action, these articles would be dutiable at 21 percent ad valorem under item 360.45 of the TSUS. Carpets and rugs imported from designated Communist-dominated or Communist-controlled countries are currently dutiable under that item at 60 percent ad valorem.

Under section 351(c)(1)(B) of the Trade Expansion Act of 1962, any increase in duty proclaimed pursuant to the escape-clause provisions of the Trade Agreements Extension Act of 1951 will terminate not later than October 11, 1967, unless extended by the President pursuant to section 351(c)(2). Under that section, the President is authorized to extend the increase in whole or in part for such periods (not in excess of 4 years at any one time) as he may designate if he determines, after taking into account the advice received from the Commission and after seeking advice of the Secretary of Commerce and the Secretary of Labor, that such extension is in the national interest.

^{1/} The Automotive Products Trade Act of 1965, P.L. 89-283, effective January 18, 1965, provides duty-free treatment for U.S. imports from Canada of original motor vehicle equipment, but imports of Wiltons and velvets eligible to receive such treatment are believed to have been negligible.

Pursuant to the Kennedy Round of trade-agreement negotiations, item 360.45 will be abolished and two new items, 360.46 and 360.48, will be established, probably effective January 1, 1968. Item 360.46, with a rate of duty of 21 percent, will apply to imports of Wiltons and velvets, should the President decide not to extend the 40-percent rate. Item 360.48 will apply to imports of floor coverings, other than Wiltons and velvets, currently dutiable under item 360.45 at a rate of duty of 21 percent. The rate will be reduced to 10.5 percent, staged over a four-year period; the first stage will probably become effective January 1, 1968.

Description and Uses

Wiltons and velvets constitute two of the major types of textile (soft-surface) floor coverings included in the category "machine-woven pile 1/ carpets and rugs." Fifteen years ago Wiltons and velvets accounted for about 40 percent of the machine-made 2/ soft-surface pile floor coverings marketed in the United States. Currently they account for about 5 percent. By far the major portion of the market for soft-surface floor coverings (more than 85 percent) is now supplied by machine-tufted carpets and rugs. Other machine-woven carpets, such as Axminsters, and machine-knitted types make up most of the remainder.

1/ Pile carpets are those having tufts that stand erect and form the surface of the carpet. The tuft ends may be cut or uncut (looped).

2/ Includes machine-woven, machine-tufted, and machine-knitted, as well as various miscellaneous types.

The U.S. output of Wiltons is less than 20 percent of the domestic production of machine-woven pile floor coverings, but less than 2 percent of the output of machine-made pile floor coverings. Velvets presently account for more than half of the domestic production of machine-woven pile floor coverings, but for less than 4 percent of the production of machine-made pile floor coverings.

Wilton (and Brussels) carpets and rugs

The technical literature of three or more decades ago described the Wilton carpet as being a cut-pile fabric and the Brussels carpet as being an uncut-pile (loop or round-wire) fabric. Current trade practices, however, do not distinguish between Wiltons and Brussels. The nomenclature identifying Brussels as a distinct product is no longer employed to any significant extent. Wiltons are currently being produced with cut pile, with uncut pile, and with both cut and uncut pile. Thus, "Wilton" has become a generic term to cover all three types.

The Wilton carpet is woven on a loom that utilizes a specialized attachment known as a jacquard. The jacquard mechanism 1/ is used to achieve a variety of effects in the carpet, especially to give it a pattern, either in color or in texture, or to give it depth. The jacquard mechanism assures control of the individual yarns by timing their appearance in the surface. Conversely, it determines which

1/ A pattern-making mechanism using cards in which holes have been punched to control the position of the yarns being used to form the pile surface of the carpet.

pile yarns are to be submerged in the body of the fabric until the design calls for their appearance at the surface. The yarns thus submerged give to the carpet what has been termed a cushion back, a buried surface cushion, or buried value. Even when a solid color or two-toned carpet is desired, the jacquard action can be utilized to obtain a textured or sculptured pattern in the surface. Occasionally, these effects are achieved by using the jacquard in conjunction with other mechanisms auxiliary to the weaving process, e.g., variations in the heights of wire used to control the pile height, and use of position-control devices.

Layers of pile yarns are fed into the loom from frames; the number of frames employed determines not only the number of basic colors or types of yarn appearing in the surface pattern but also the number of pile yarns submerged in the body of the carpet. As many as 6 frames ^{1/} may be utilized in weaving high-quality Wiltons; constructions requiring 3 frames or less, however, constitute the bulk of current domestic production.

Velvet (and tapestry) carpets and rugs

Three or four decades ago, when there was substantial trading in tapestry carpets and rugs, the velvets were characterized as being cut-pile fabrics, and the tapestries as uncut-pile fabrics. Velvet carpets are no longer distinguished in the trade from tapestry carpets, i.e., as being of cut rather than of uncut pile. In other words,

^{1/} More than six colors can be introduced into the surface pattern by "planting" extra color yarns in one or more of the several frames in order to supplement the basic colors employed therein.

plain-woven carpets and rugs of both cut and uncut pile are regularly marketed as velvets.

The manufacture of velvet carpet utilizes one of the simplest of carpet weaves. It is usually less expensive to make than the Wilton, because the method of weaving is less complicated and generally requires less pile yarn per square yard of finished product. Nevertheless, when closely woven, velvets are long wearing and are rich in appearance. In recent years, velvets have been produced largely in solid colors. Numerous textured effects are achieved by a variety of methods. The ordinary plush surface is attained when the pile is cut and the tufts are uniform in height. The pile may be woven at different heights to form a sculptured or textured surface. Tightly twisted pile yarns finished in cut pile provide a frieze surface. Uncut looped pile supplies a pebbly texture. Other effects are obtained by combining cut and uncut pile in the surface.

Machine-tufted carpets and rugs

Two decades ago tufted carpets and rugs were relatively unimportant in the market for floor coverings; they consisted mostly of scatter rugs, bath mats, and other rugs and mats 4' by 6' and smaller. Currently, more than 70 percent of the total domestic production of tufted carpets and rugs is in sizes larger than 4' by 6'. At present tufted carpets account for more than 85 percent of the domestic output of soft-surface pile floor coverings.

Machine-tufted carpets differ from machine-woven carpets principally in the manner by which the surface yarns are anchored to

the base of the fabric. In Wiltons and velvets, the pile tufts (pile warp) are anchored into the backing during the weaving process by the weft yarns, which run the width of the fabric. The weft yarns, in turn, are bound into the fabric by the chain warp. In the tufted carpet, the tufts are inserted mechanically into a previously prepared fabric backing. This backing, which is generally made of jute or of man-made fibers, is coated with latex after the tufts have been inserted, in order to anchor the tufts more firmly and inhibit the carpet's sliding. In recent years most of the tufted carpets produced have been provided with an additional backing of jute or other fabric, bonded to the original or primary backing, to give more body and wearability to the carpet.

The tufting machine (which probably should be thought of as a tuft-inserting machine) employs a multi-needle operation to sew the pile yarns (tufts) into the backing. It operates at many times the speed of an ordinary Wilton or velvet loom, thereby contributing to the lower cost of the tufted carpet.

In December 1961, in its supplemental report to the President on Escape-Clause Investigation No. 7-104, 1/ the Tariff Commission reported:

Most of the tufted carpeting has been made in solid colors, largely because of the prevailing consumer choice, but partly because the processes of production had not developed to a point where they would permit flexibility of design and the use of multiple colors such as is possible in weaving Axminster and Wilton carpets. Technology in the

tufting process has been developing rapidly, however, and new types of tufted carpeting are being introduced that offer many of the texture and decorative effects now popular in woven carpets.

Tufting technology has continued to progress, perhaps more rapidly than anticipated. Finer gauge tufting machines, new types of carpet backing, piece dyeing, and the printing of tufted carpets with color and design are among the major advancements in tufting techniques that have been achieved in recent years. As a result, there are very few attributes of woven carpets that cannot be incorporated in tufted carpets, and at a lower cost of production. The expanding output of tufted carpeting has not yet reached a point where it will cease to make further inroads into the market for woven floor coverings. Most of the increase in consumption of pile carpets and rugs, which has been engendered in recent years by the increase in the national population and by the generally high level of national income, has been supplied from the production of tufted floor coverings.

U.S. Consumption

After 1962, the great bulk of the U.S. consumption of Wilton and velvet carpets and rugs has been supplied by domestic production; imports, although larger than exports, have been relatively small. For this reason, the generalizations below respecting changes in U.S. production apply about equally to trends in consumption as well.

U.S. Producers

On the basis of information developed in its 1961 escape-clause investigation, the Commission found "that the domestic industry producing products that are 'like' the imported products under investigation is coextensive with the domestic production of Wilton and velvet floor coverings as they are now known in the trade." 1/ In 1960, Wiltons and velvets were produced in 35 plants by 27 individual concerns, and such carpets, in the aggregate, were the principal item of manufacture by those concerns. As regards the major types of carpeting, 24 of the 27 concerns produced velvets; 22 made Wiltons; 9 made Axminsters; 14 made machine-tufted; and 8 made machine-knitted.

Currently Wiltons and velvets are produced in 25 plants by 22 concerns. Velvets are produced by 17 of these concerns; Wiltons, by 14; Axminsters, by 7; tufted, by 15; and knitted, by 4. Seven of the 25 plants are located in Pennsylvania; 4 in Massachusetts; 2 each in New Jersey, South Carolina, New Hampshire, New York, and North Carolina; and 1 each in Connecticut, Georgia, Maine, and Virginia. In 1966, 7 concerns produced approximately 85 percent of the total output of Wiltons and velvets; they manufactured about 80 percent of the Wiltons and about 88 percent of the velvets. Wiltons and velvets accounted for 20 percent and tufted for 72 percent of the total output of machine-made pile floor coverings by these 7 concerns.

1/ TC Publication 28, 1961.

In 1960, the ratio of tufted carpet production to the total floor covering output of the concerns producing Wiltons and velvets was 36 percent; in 1966, the ratio was 73 percent. Machine-tufted carpets and rugs have thus become the principal item of output, in the aggregate, of the 22 concerns now producing Wiltons and velvets. Between 1960 and 1966, the annual output of Wiltons and velvets by the concerns producing such articles decreased by 26 percent while their output of tufted carpets increased by 233 percent; their total floor covering yardage increased by 63 percent. The share of tufted carpets in the total output will probably continue to increase, because several large producers of Wiltons and velvets have announced plans for substantial increases in their facilities for producing tufted floor coverings. The Commission has no knowledge of plans for expanding the capacity for producing Wiltons and velvets.

Production

The U.S. annual production of Wiltons and velvets has declined significantly since 1959; the rate of decrease, however, slowed in 1965-66. Production in 1966, 23 million square yards, was only slightly smaller than in 1965, but 17 million square yards less than in 1959 (table 1). The output in the first half of 1967 was about 18 percent smaller than in the corresponding period of 1966 (table 2) and

about 6 percent smaller than in the last half of 1966. Generally adverse economic conditions over the past several months, including a slackening of housing starts, contributed to the slowdown in production in the first half of 1967.

The annual production of Wiltons has declined more sharply than that of velvets in recent years. The index of production of Wiltons in 1966 is 37 percent of the 1957-59 base, while that of velvets is 83 percent (table 3). In the first half of 1967, the production of Wiltons was about 13 percent below the output of such carpets in the first half of 1966 and that of velvets nearly 20 percent below.

The great bulk of the Wiltons currently produced consists of multi-colored, specially designed and patterned carpets for the commercial market (hotels, restaurants, theaters, schools, etc.). The principal velvet type apparently is the tightly-woven one-level round-wire (loop pile) carpet designed primarily for use in commercial installations. Other important velvet types are the plush (cut pile); the twist, composed of tightly twisted pile yarns finished in cut pile; the serrated-wire, a multi-level loop-pile; and variations of the cut-and-loop and multi-level types. The available data indicate that currently more Wiltons and velvets are used in commercial installations than in residential installations.

Sales and inventories

Indexes of the sales and inventories of concerns that supplied data for the years 1957-66 (which in the aggregate accounted for more than 90 percent of the output of Wiltons and velvets during the

period) are shown in table 4. The downward trend of sales approximated that of production, although between 1963 and 1966 the index of the value of sales declined by 7 points whereas the index of the quantity of sales declined by 14 points. On a quantity basis, sales of both Wiltons and velvets were slightly lower in 1966 than in 1965, but on a value basis they were almost equal.

Annual year-end inventories of Wiltons and velvets have declined for a number of years. They were only slightly lower, however, in 1966 than in 1965. During the 5-year period 1962-66, average year-end stocks of Wiltons and velvets held by manufacturers were equivalent to about 20 percent of sales.

Employment and earnings of workers

Approximately 9,000 production and related workers are currently employed by U.S. concerns in plants producing Wilton and velvet carpets and rugs. Only part of these workers, however, are engaged in producing Wiltons and velvets. Slightly less than half of the total man-hours worked in these plants in 1966 was spent in the production of Wiltons and velvets.

Several difficulties are encountered in measuring employment in the production of Wilton and velvet floor coverings in any given period. In the 1960-66 period, for example, some concerns that had manufactured these products ceased production or had made substantial changes in manufacturing operations. Others were unable to supply segregated employment data on the products under consideration. In a few instances, data submitted for earlier periods were revised sub-

stantially from those previously reported. The reports submitted by 17 concerns were sufficiently complete for the years 1960-66, however, to be used for the computation of indexes of employment (table 5). In 1966, the output of the concerns whose data were used accounted for more than 90 percent of the domestic production of Wiltons and velvets.

The number of workers and the man-hours worked in the Wilton and velvet plants of the 17 concerns has declined each year since 1960. The index (1960-62=100) of the average number of production and related workers employed on all products for 1966 is 75 and the index of man-hours worked on all products is 78, both lower than in 1965. The index of man-hours worked on Wiltons and velvets alone for 1966 is 68; it has declined by 42 points since 1960, while that for man-hours worked on all products has declined by 31 points. Reported data indicate that the aggregate productivity per man-hour on Wilton and velvet operations has increased slightly since 1960.

The man-hours of employment and aggregate annual earnings of workers on Wiltons and velvets in the 17 concerns are shown in table 6. Earnings of workers declined from \$19.4 million in 1963 to \$17.4 million in 1966, or by 10 percent, while man-hours declined from 10.1 million to 7.8 million, or by 22 percent. Although the available data do not provide a precise measure of change, they indicate a general increase in labor cost per man-hour, reflecting increases in wage rates over the period. The output of Wilton and velvet floor coverings by these concerns declined by about 20 percent from 1963 to 1966.

Prices by U.S. producers

Data were obtained from most domestic manufacturers respecting the prices received in recent years for Wilton and velvet carpets and rugs. Index numbers were computed from these data (table 7). Available also were price indexes for Wiltons, velvets, and all soft-surface floor coverings, published by the U.S. Bureau of Labor Statistics (BLS), which relate to a longer period than do the data computed by the Commission (table 8).

The price index (January 1963 = 100) for Wiltons (as computed by the Commission) for January 1964 is 106 percent of the January 1963 base. Thereafter, it declined to 102 in January and June 1965, and increased to 103 in January and June 1966. The prices of velvets fluctuated more widely than did those of Wiltons. The index for velvets increased in January 1964 to 110 percent of the January 1963 base; it decreased to 104 in January and June 1965. Thereafter, it increased to 106 in January and June 1966. Price fluctuations of Wiltons and velvets in recent years have been largely in response to changes in the prices of raw materials. The price indexes for Wiltons and velvets published by the BLS generally move in the same direction as the indexes computed by the Commission, but with somewhat different rates of change from year to year.

BLS indexes for Wiltons, velvets, and all soft-surface floor coverings declined by 1, 3, and 4 percent, respectively, between June 1966 and January 1967. These declines reflect price reductions instituted by several mills, following compliance with a Federal

Trade Commission ban on volume rebates. Thereafter, between January and June 1967, the BLS indexes for Wiltons, velvets, and all soft-surface floor coverings declined by 3, 1, and 1 percent, respectively, reflecting decreases in raw material costs.

In contrast to the fluctuation in the price indexes for Wiltons and velvets, the price index for all soft-surface floor coverings declined each year after 1964. The index declined from 99 percent of the 1957-59 base in January 1964 to 89 percent in June 1967. The annual decline largely reflects decreasing costs of the man-made fibers, which are used in greater proportions in other soft-surface floor coverings (mainly tufted) than in Wiltons and velvets.

U.S. Imports

Annual U.S. imports of Wiltons and velvets have declined markedly since 1961, when they reached a record high of 8.2 million square yards (table 2). They declined each year 1962-65, but increased slightly in 1966, when they were equal to only 7 percent of such imports in 1961. The 574 thousand square yards imported in 1966 were equivalent to about 2 percent of domestic production in that year. Imports in the first six months of 1967, 240 thousand square yards, indicate little change in the quantity of imports

in the full year 1967 from that in 1966. Primary factors contributing to the decline in imports since 1961 have been the continuing price competition from domestic tufted carpets, the declining popularity of figured carpets, and the duty increase in 1962.

Principal sources

For many years, Belgium has been the major source of U.S. imports of Wiltons and velvets, usually supplying well over 50 percent of the total; in 1966, it supplied 66 percent of the total imports (table 9). Both Wiltons and velvets are imported from Belgium. Velvets are the principal item at present, but imports of Wiltons of oriental design are increasing somewhat. The unit value of imports from Belgium was \$5.80 per square yard in 1966 and \$6.18 in January-June 1967, as compared with \$3.55 in 1961. According to information supplied by importers' representatives, Belgium's production of Wiltons and velvets has increased by nearly 50 percent since 1961; such increased production has been accompanied by a substantial increase in exports, particularly to EEC countries. In 1966 the EEC took more than 70 percent of Belgian production (based on weight) of Wiltons and velvets, compared with 28 percent in 1961. During the same period, Belgium's exports to the United States declined by more than 85 percent.

Italy displaced Japan as the second largest source of U.S. imports in 1965 and retained this position in 1966, providing 18

percent of the total imports in that year. Wilton rugs of oriental design accounted for the largest quantity of imports from Italy in 1966, but velvets, because of their higher unit value, accounted for the major part of the value. Imports from Italy declined after 1961 to a low of 32 thousand square yards in 1964, after which they increased in 1965 and 1966, to 106 thousand square yards in the latter year. The unit value of imports from Italy was \$5.12 per square yard in 1961, \$4.38 per square yard in 1966, and \$6.25 per square yard in January-June 1967.

Japan, for a number of years the second leading supplier, became the fourth in 1965, following a substantial decline in imports from that country each year after 1961. Imports from Japan in 1966 were only about 6 thousand square yards. Representatives of Japanese importers submitted data indicating that in 1965-66 more than 90 percent of Japan's total production of Wiltons and velvets was consumed in the home market. The unit value of Japanese imports increased from \$2.73 per square yard in 1961 to \$5.88 per square yard in 1966, and then decreased to \$4.55 per square yard in January-June 1967. In 1961, about 90 percent of the imports from Japan consisted of low-priced Wiltons, which accounted for a considerable part of U.S. total imports of Wiltons in that year.

The United Kingdom was the third largest supplier in 1966, accounting for about 8 percent of the total. For many years, this source has supplied fairly small quantities of higher-priced specialty floor coverings. Such imports in most recent years have been relatively stable.

Major types

In 1966, Wiltons accounted for nearly 50 percent of the total quantity of imports, while velvets accounted for a little more than 50 percent. The unit value of the velvets, however, was somewhat higher than that of the Wiltons. In 1960, however, Wiltons had comprised slightly over 70 percent of the total quantity imported and velvets somewhat less than 30 percent. The average unit value of total imports, which increased from a low of \$3.29 per square yard in 1962 to \$6.28 in 1965, was \$5.63 in 1966, and \$6.28 in January-June 1967.

Currently, most imported Wiltons consist of cut-pile rugs of oriental design, whereas in 1961 they consisted largely of loop-pile (round-wire) roll goods (rather than finished rugs). The unit value of Wilton imports in 1966 averaged \$5.00 per square yard, and ranged from \$3.00 to \$7.00 per square yard. Most of the oriental-design imports consist of finished rugs retailing from about \$100 to \$300 each in the 9 x 12 foot size; the greatest quantity is sold at prices under \$200 each. Rugs of oriental design constitute only a small proportion of domestic carpet production.

The velvet carpets presently imported are of high quality and price. Nearly all consist of dense cut-pile plush types retailing in the United States for about \$17 to \$23 per square yard. In 1961, twist types predominated, although imports of plush types were also important. Currently most of the imported velvets, as well as the

Wiltons, are designed for residential use; they compete with only a relatively small segment of the domestic velvet production.

Profit-and-Loss Experience of Domestic Producers

Seventeen concerns furnished adequate profit-and-loss data for both Wilton and velvet operations and operations on all products of the plants in which Wiltons and velvets were made. Twelve of the 17 produced other types of carpets, such as machine-tufted and machine-knitted, as well as machine-woven carpets and rugs. In 1966, these 17 concerns accounted for more than 90 percent of the value of U.S. sales of Wiltons and velvets. In that year Wiltons and velvets accounted for nearly 40 percent of the net sales of all products of the plants in which such floor coverings were produced.

All products

The net sales of all products made in the plants in which Wiltons and velvets were produced by the 17 concerns amounted to \$333 million in 1963, \$353 million in 1964, \$375 million in 1965, and \$383 million in 1966 (table 10). Net operating profits of these plants were nearly 27 percent higher in 1964 than in 1963--\$15 million in 1963 and about \$19 million in 1964. Such profits then increased to about \$22 million in each of the years 1965 and 1966.

The ratio of net operating profits on all products of the plants to net sales was 4.5 percent in 1963, 5.4 percent in 1964, 5.9 percent in 1965, and 5.8 percent in 1966. For those plants in which Wiltons and velvets were made, two of the 17 concerns reported

net operating losses in 1963, three reported losses in 1964, five in 1965, and five in 1966. The five concerns that reported losses in 1966 accounted for about 6 percent of the aggregate sales of the plants in which Wiltons and velvets were made.

Wilton and velvet carpets and rugs

The net sales of Wilton and velvet carpets and rugs by the 17 concerns amounted to \$157 million in 1963, \$151 million in 1964, \$148 million in 1965, and \$150 million in 1966 (table 10).

Net profits earned by the 17 concerns on their Wilton and velvet carpet and rug operations were 20 percent higher in 1964 than in 1963--\$6.3 million in 1963 and \$7.6 million in 1964. In 1965, their net profits amounted to \$6.8 million, and in 1966, \$7.6 million. The ratio of the net profits to net sales of the 17 concerns on their Wilton and velvet operations was 4.0 percent in 1963, 5.0 percent in 1964, 4.6 percent in 1965, and 5.1 percent in 1966. Although the Wilton and velvet operations of the 17 concerns in all four years 1963-66 were profitable in the aggregate, net operating losses were reported by six of them in 1963, by six in 1964, by seven in 1965, and by seven in 1966. The seven concerns that reported losses in 1966 accounted for about a fifth of the total sales of Wilton and velvet carpets and rugs by the reporting firms. Included among the seven concerns that showed losses on Wilton and velvet operations are the five previously referred to that reported net operating losses on all products in 1966.

Marginal companies

Among the producers of Wiltons and velvets there are about a half dozen which, from the standpoint of their financial experience, could be considered marginal. Most of them are small and in the aggregate account for a minor portion of the total sales of Wiltons and velvets. These producers appear to be more subject to the effects of economic fluctuations than do larger producers whose output is more diversified. Several of these marginal producers, for example, operated in the red during the depressed construction market of 1966.

These companies, on the average, made a profit of 1.2 percent on total net sales in 1963, lost 3.3 percent in 1964, 4.4 percent in 1965, and 1.2 percent in 1966. Some of the companies operated in the black in some of these years; the profit-sales ratio in one year reached 6 percent for one company and 5.5 percent for another. Except for these two experiences, the highest profit ratio on total net sales for any of these companies in any year during 1963-66 was 3.3 percent.

These marginal producers are the concerns that are most likely to be adversely affected by any increased import competition which might follow a duty reduction.

Statistical Appendix

Table 1.--Machine-woven and machine-tufted pile carpets and rugs: U.S. production, by types, 1958-66

Year	(In thousands of square yards)										Grand total
	Machine-woven		4' x 6' and smaller		Automobile and aircraft:		Machine-tufted 2/		Total		
	Wilton and velvet	All other 1/	Total	4' x 6' and smaller	Automobile and aircraft:	Over 4' x 6'	Total	Over 4' x 6'	Total	Total	
1958-----	34,258	16,802	51,060	34,057	6,508	73,083	113,648	73,083	113,648	164,708	
1959-----	40,570	19,484	60,054	36,416	3/	96,107	132,523	96,107	132,523	192,577	
1960-----	31,530	16,781	48,311	38,220	3/	113,764	151,984	113,764	151,984	200,295	
1961-----	28,663	15,614	44,277	44,530	3/	134,095	178,625	134,095	178,625	222,902	
1962-----	29,473	14,614	44,087	48,569	30,437	145,816	224,822	145,816	224,822	268,909	
1963-----	28,290	13,983	42,273	52,432	34,191	176,362	262,985	176,362	262,985	305,258	
1964-----	24,248	13,507	37,755	60,674	38,539	219,703	318,916	219,703	318,916	356,671	
1965 4/-----	23,546	12,275	35,821	67,389	48,474	259,885	375,748	259,885	375,748	411,569	
1966-----	23,359	10,492	33,851	75,705	43,298	288,710	407,713	288,710	407,713	441,564	

1/ Includes sheen, chenille, Axminster, and others.

2/ Shipments. Data for 1958 and 1959 are not strictly comparable with those for later years.

3/ Not separately reported. Believed to be included with floor coverings over 4' x 6'.

4/ Revised on the basis of data obtained in the current investigation.

Source: Production of machine-woven pile carpets and rugs estimated by the U.S. Tariff Commission staff from data supplied by domestic producers; shipments of machine-tufted as reported by the Bureau of the Census, Facts for Industry and Current Industrial Reports.

Table 2.--Wilton and velvet carpets and rugs: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, calendar years 1958-66, fiscal years ending June 30, 1962-67, and January-June of 1962-67

Period	Production	Imports	Exports ^{1/}	Apparent consumption ^{2/}	Ratio of imports to--	
					Production	Consumption
	<u>1,000</u> <u>sq. yds.</u>	<u>1,000</u> <u>sq. yds.</u>	<u>1,000</u> <u>sq. yds.</u>	<u>1,000</u> <u>sq. yds.</u>	Percent	Percent
1958-----	34,258	4,632	266	38,624	13.5	12.0
1959-----	40,570	6,982	196	47,356	17.2	14.7
1960-----	31,530	8,165	186	39,509	25.9	20.7
1961-----	28,663	8,234	221	36,676	28.7	22.5
1962-----	29,473	5,919	230	35,162	20.1	16.8
1963-----	28,290	^{3/} 1,853	188	29,955	6.6	6.2
1964-----	24,248	^{3/} 949	149	25,048	3.9	3.8
1965-----	^{4/} 23,546	^{4/} 519	245	^{4/} 23,820	^{4/} 2.2	^{4/} 2.2
1966-----	23,359	574	235	23,698	2.5	2.4
Fiscal year ending						
June 30--						
1962-----	29,423	9,070	248	38,245	30.8	23.7
1963-----	29,419	^{3/} 2,407	175	31,651	8.2	7.6
1964-----	25,566	^{3/} 1,472	187	26,851	5.8	5.5
1965-----	^{4/} 23,563	^{4/} 594	192	^{4/} 24,009	2.7	^{4/} 2.7
1966-----	^{4/} 24,266	^{4/} 494	^{4/} 233	^{4/} 24,527	^{4/} 2.0	^{4/} 2.0
1967-----	21,143	581	246	21,478	2.7	2.7
January-June--						
1962-----	15,157	4,508	135	19,530	29.7	23.1
1963-----	15,103	995	80	16,018	6.6	6.2
1964-----	^{4/} 12,409	^{3/} 614	75	^{4/} 12,948	^{4/} 4.9	^{4/} 4.7
1965-----	^{4/} 11,724	^{4/} 259	115	^{4/} 11,868	^{4/} 2.2	^{4/} 2.2
1966-----	^{4/} 12,444	234	^{4/} 103	^{4/} 12,575	^{4/} 1.9	^{4/} 1.9
1967-----	10,228	240	113	10,355	2.3	2.3

^{1/} Exports of wool floor coverings.

^{2/} Production plus imports minus exports.

^{3/} Contains a relatively small amount of pile floor coverings other than Wiltons and velvets, estimated to be less than 10 percent.

^{4/} Revised on the basis of data obtained in the current investigation.

Source: Production estimated by U.S. Tariff Commission from data supplied by domestic producers; imports and exports compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table 3.--Wilton and velvet carpets and rugs: Indexes of U.S. production, 1957-66

(1957-59=100)

Year	Wilton	Velvet	Total
1957-----	98	100	99
1958-----	90	94	92
1959-----	112	106	109
1960-----	86	83	85
1961-----	70	82	77
1962-----	70	86	79
1963-----	60	89	76
1964-----	42	83	65
1965-----	36	85	63
1966-----	37	83	63

Source: Computed from data supplied the U.S. Tariff Commission by domestic producers.

Table 4.--Wilton and velvet carpets and rugs: Indexes
of U.S. net sales and inventories, 1957-66

(1957-60=100)			
Year	Net sales		Inventories as of Dec. 31 (quantity)
	Quantity	Value	
1957-----	100	105	104
1958-----	97	95	95
1959-----	111	109	106
1960-----	91	91	95
1961-----	81	82	94
1962-----	87	86	90
1963-----	82	82	89
1964-----	71	77	79
1965-----	70	75	71
1966-----	68	75	71

Source: Computed from data submitted to the U.S. Tariff Commission by U.S. firms whose output is estimated to have accounted for more than 90 percent of the total production of Wilton and velvet carpets and rugs during the period 1957-66.

Table 5.--Indexes of the average number of production and related workers employed and man-hours worked in Wilton and velvet plants of 17 U.S. firms, 1960-66

(1960-62=100)

Year	Average number employed on all products	Man-hours worked on--	
		All products	Wiltons and velvets
1960-----	112	109	110
1961-----	97	97	96
1962-----	91	94	94
1963-----	83	89	87
1964-----	78	82	74
1965-----	77	81	72
1966-----	75	78	68

Source: Computed from data supplied the U.S. Tariff Commission by domestic producers.

Table 6.--Man-hours of employment and aggregate annual earnings of workers engaged in producing Wilton and velvet floor coverings in 17 U.S. firms, 1963-66

Year	Man-hours <u>Thousands</u>	Aggregate earnings <u>1,000 dollars</u>
1963-----	10,057	19,360
1964-----	8,558	17,435
1965-----	8,167	17,510
1966-----	7,800	17,394

Source: Computed from data supplied the U.S. Tariff Commission by domestic producers.

Table 7.--Wilton and velvet carpets and rugs: Indexes of prices received by U.S. producers, January and June 1963-66

(January 1963 = 100)

Year and month	Wilton	Velvet	Adjusted for changes in the wholesale price index	
			Wilton	Velvet
1963:				
January-----	100	100	100	100
June-----	101	102	101	102
1964:				
January-----	106	110	105	109
June-----	105	109	105	109
1965:				
January-----	102	104	101	103
June-----	102	104	99	101
1966:				
January-----	103	106	98	101
June-----	103	106	97	100

Source: The indexes shown are computed from prices received by most domestic manufacturers for their leading products, as reported to the Commission.

Table 8.--Indexes of wholesale ^{1/} prices in the United States of Wilton and velvet carpets and rugs, and all soft-surface floor coverings, January and June 1957-66

(1957-59=100)

Year and month	Wiltons	Velvets	Soft-surface floor coverings
1957:			
January-----	104	102	105
June-----	104	102	104
1958:			
January-----	100	102	102
June-----	97	97	98
1959:			
January-----	95	98	97
June-----	99	101	98
1960:			
January-----	100	101	99
June-----	102	103	100
1961:			
January-----	99	99	98
June-----	99	98	98
1962:			
January-----	99	95	96
June-----	97	95	96
1963:			
January-----	97	92	94
June-----	97	91	94
1964:			
January-----	108	98	99
June-----	108	98	97
1965:			
January-----	105	96	95
June-----	105	96	95
1966:			
January-----	106	98	94
June-----	106	98	94
1967:			
January-----	105	95	90
June-----	102	94	89

^{1/} The term "wholesale," as used in the index, refers to sales in large lots at the first (primary market) level of commercial transaction; later transactions at other stages in the distribution cycle are not included.

Source: U.S. Bureau of Labor Statistics.

Table 9.--Wilton and velvet floor coverings: U.S. imports for consumption, by specified sources, 1961, 1963-66, and January-June 1967

Source	1961	1963	1964	1965 ^{1/}	1966 ^{1/}	Jan.-June 1967
Quantity (1,000 square yards)						
Belgium and Luxembourg----	4,357	1,285	611	266	379	176
Italy-----	445	78	32	95	106	32
United Kingdom-----	114	48	61	50	45	17
France-----	208	72	57	20	17	9
West Germany-----	36	8	14	13	17	4
Japan-----	3,063	356	145	49	6	1
All other-----	11	6	29	26	4	1
Total-----	8,234	2/ 1,853	2/ 949	519	574	240
Value (1,000 dollars)						
Belgium and Luxembourg----	15,458	4,442	2,302	1,826	2,197	1,088
Italy-----	2,275	425	236	495	466	199
United Kingdom-----	744	305	393	333	288	112
France-----	879	338	262	130	104	68
West Germany-----	199	42	86	88	104	26
Japan-----	8,358	1,262	598	270	37	5
All other-----	73	42	144	118	40	11
Total-----	27,986	2/ 6,856	2/ 4,021	3,260	3,236	1,509
Unit value (per square yard) ^{3/}						
Belgium and Luxembourg----	\$3.55	\$3.46	\$3.77	\$6.87	\$5.80	\$6.18
Italy-----	5.12	5.43	7.37	5.22	4.38	6.25
United Kingdom-----	6.53	6.35	6.42	6.61	6.43	6.72
France-----	4.23	4.68	4.57	6.61	6.22	7.26
West Germany-----	5.52	5.64	6.14	6.52	6.01	6.28
Japan-----	2.73	3.55	4.13	5.55	5.88	4.55
All other-----	6.64	6.62	4.90	4.54	8.64	10.82
Average-----	3.40	3.70	4.24	6.28	5.63	6.28

^{1/} Country breakdown partly estimated.

^{2/} Contains a relatively small amount of pile floor coverings other than Wiltons and velvets, estimated to be less than 10 percent.

^{3/} Calculated from the unrounded figures.

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

Table 10.---Carpets and rugs: Financial operations of 17 ^{1/} U.S. producers, 1963-66

Item	(Money figures in thousands of dollars)			
	1963	1964	1965	1966
Net sales	333,140	352,594	375,215	383,034
Cost of goods sold	275,987	290,982	307,408	314,736
Gross profit	57,153	61,612	67,807	68,298
Administrative and selling expense	42,000	42,441	45,538	45,949
Net operating profit	15,153	19,171	22,269	22,349
Ratio, net operating profit to net sales--percent	4.5	5.4	5.9	5.8
	All products ^{2/}			
	Wilton and velvet carpet and rugs			
Net sales	157,064	151,494	148,270	149,971
Cost of goods sold	129,910	124,960	121,842	122,841
Gross profit	27,154	26,534	26,428	27,130
Administrative and selling expense	20,877	18,973	19,604	19,489
Net operating profit	6,277	7,561	6,824	7,641
Ratio, net operating profit to net sales--percent	4.0	5.0	4.6	5.1
Ratio of Wilton and velvet sales to sales of all products	47.1	43.0	39.5	39.1

^{1/} 1963 includes only 16 producers. Only one-half year of operations were available on one company.

^{2/} All products made in the plants in which Wilton and velvet carpets and rugs were produced.

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

