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Note.–Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report. Such deletions are indicated by asterisks.

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigations Nos. 731-TA-794-796 (Preliminary)

CERTAIN EMULSION STYRENE-BUTADIENE RUBBER
FROM BRAZIL, KOREA, AND MEXICO

DETERMINATIONS

On the basis of the record[1] developed in the subject investigations, the United States International Trade Commission determines, pursuant to section 733(a) of the Tariff Act of 1930 (19 U.S.C. § 1673b(a)), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports from Brazil, Korea, and Mexico of certain emulsion styrene-butadiene rubber,[2] provided for in subheading 4002.19.00 of the *Harmonized Tariff Schedule of the United States*, that are alleged to be sold in the United States at less than fair value (LTFV).

COMMENCEMENT OF FINAL PHASE INVESTIGATIONS

Pursuant to section 207.18 of the Commission's rules, the Commission also gives notice of the commencement of the final phase of its investigations. The Commission will issue a final phase notice of scheduling which will be published in the *Federal Register* as provided in section 207.21 of the Commission's rules upon notice from the Department of Commerce of affirmative preliminary determinations in the investigations under section 733(b) of the Act, or, if the preliminary determinations are negative, upon notice of affirmative final determinations in those investigations under section 735(a) of the Act. Parties that filed entries of appearance in the preliminary phase of the investigations need not enter a separate appearance for the final phase of the investigations. Industrial users, and, if the merchandise under investigation is sold at the retail level, representative consumer organizations have the right to appear as parties in Commission antidumping investigations. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to the investigations.

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[1] The record is defined in sec. 207.2(f) of the Commission's Rules of Practice and Procedure (19 CFR § 207.2(f)).

[2] For purposes of these investigations, emulsion styrene-butadiene rubber (ESBR) consists of a synthetic polymer made via free radical cold-emulsion copolymerization of styrene and butadiene monomers in reactors. The reaction process involves combining styrene and butadiene monomers in water, with an initiator system, an emulsifier system, and molecular weight modifiers. ESBR consists of cold non-pigmented rubbers and cold oil-extended non-pigmented rubbers that contain at least one percent of organic acids from the emulsion polymerization process.

ESBR is produced and sold, both inside the United States and internationally, in accordance with a generally accepted set of product specifications issued by the International Institute of Synthetic Rubber Producers (IISRP). The universe of products subject to these investigations consists of grades of ESBR included in the IISRP 1500 series and IISRP 1700 series of synthetic rubbers. The 1500 grades are light in color and are often described as "Clear" or "White Rubber." The 1700 grades are oil-extended and thus darker in color, and are often called "Brown Rubber." Products manufactured by blending ESBR with other polymers, high styrene resin masterbatch, carbon black masterbatch (i.e., IISRP 1600 series and 1800 series), and latex (an intermediate product) are not included within the scope of these investigations.

BACKGROUND

On April 1, 1998, a petition was filed with the Commission and the Department of Commerce by Ameripol Synpol Corp. of Akron, OH, and DSM Copolymer of Baton Rouge, LA, alleging that an industry in the United States is materially injured or threatened with material injury by reason of LTFV imports of certain emulsion styrene-butadiene rubber from Brazil, Korea, and Mexico. Accordingly, effective April 1, the Commission instituted antidumping investigations Nos. 731-TA-794-796 (Preliminary).

Notice of the institution of the Commission's investigations and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* of April 9, 1998 (63 FR 17443). The conference was held in Washington, DC, on April 22, and all persons who requested the opportunity were permitted to appear in person or by counsel.

VIEWS OF THE COMMISSION

Based on the record in these investigations, we find that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of certain emulsion styrene-butadiene rubber from Brazil, Korea and Mexico that are allegedly sold in the United States at less than fair value ("LTFV").

I. THE LEGAL STANDARD FOR PRELIMINARY DETERMINATIONS

The legal standard for preliminary antidumping duty determinations requires the Commission to determine, based upon the information available at the time of the preliminary determination, whether there is a reasonable indication that a domestic industry is materially injured, or threatened with material injury, by reason of the allegedly LTFV imports.[1] In applying this standard, the Commission weighs the evidence before it and determines whether "(1) the record as a whole contains clear and convincing evidence that there is no material injury or threat of such injury; and (2) no likelihood exists that contrary evidence will arise in a final investigation."[2]

II. DOMESTIC LIKE PRODUCT AND INDUSTRY

A. In General

To determine whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of the subject imports, the Commission first defines the "domestic like product" and the "industry."[3] Section 771(4)(A) of the Tariff Act of 1930 as amended ("the Act") defines the relevant industry as the "producers as a [w]hole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[4] In turn, the Act defines "domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation."[5]

Our decision regarding the appropriate domestic like product(s) in an investigation is a factual determination, and the Commission has applied the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis.[6] No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[7] The Commission

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[1] 19 U.S.C. § 1673b(a); *see also* American Lamb Co. v. United States, 785 F.2d 994 (Fed. Cir. 1986); Calabrian Corp. v. United States, 794 F. Supp. 377, 381 (Ct. Int'l Trade 1992).

[2] American Lamb, 785 F.2d at 1001; *see also* Texas Crushed Stone Co. v. United States, 35 F.3d 1535, 1543 (Fed. Cir. 1994).

[3] 19 U.S.C. § 1677(4)(A).

[4] *Id.*

[5] *Id.* at § 1677(10).

[6] *See, e.g.,* Nippon Steel Corp. v. United States, 19 CIT __, Slip Op. 95-57 at 11 (Apr. 3, 1995). The Commission generally considers a number of factors including: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes and production employees; and, where appropriate, (6) price. *See* Nippon Steel at 11, n.4; Timken Co. v. United States, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996).

[7] *See, e.g.,* S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

looks for clear dividing lines among possible like products, and disregards minor variations.[8] Although the Commission must accept the determination of Commerce as to the scope of the imported merchandise allegedly sold at LTFV, the Commission determines what domestic product is like the imported articles Commerce has identified.[9]

B. Product Description

In its notice of initiation, Commerce defined the imported merchandise within the scope of these investigations, as emulsion styrene-butadiene rubber ("ESBR"). Commerce defined ESBR as:

> [A] synthetic polymer made via free radical cold emulsion copolymerization of styrene and butadiene monomers in reactors. The reaction process involves combining styrene and butadiene monomers in water, with an initiator system, an emulsion system, and molecular weight modifiers. ESBR consists of cold non-pigmented rubbers and cold-oil extended non-pigmented rubbers that contain at least one percent of organic acids from the emulsion polymerization process.
>
> ESBR is produced and sold, both inside the United States and internationally, in accordance with a generally accepted set of product specifications issued by the International Institute of Synthetic Rubber Producers ("IISRP"). The universe of products subject to these investigations are grades of ESBR included in the IISRP 1500 series and IISRP 1700 series of synthetic rubbers. The 1500 grades are light in color and are often described as "Clear" or "White Rubber." The 1700 grades are oil-extended and thus darker in color, and are often called "Brown Rubber."[10]

Commerce further noted that several "[p]roducts manufactured by blending ESBR with other polymers" were not included within the scope of the investigation, including high styrene resin master batch, carbon black master batch (i.e., IISRP 1600 series and 1800 series) and latex (an intermediate product).[11]

The products covered by the scope definition are the 1500 and 1700 series of ESBR.[12] The two products are produced by a cold emulsion-polymerization process in which water is used as a diluent element.[13] The primary raw material ingredients for the products are styrene and butadiene. The primary physical difference between the two series is the addition of a significant amount of petroleum-based

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[8] Torrington Co. v. United States, 747 F. Supp. 744, 748-49 (Ct. Int'l Trade 1990), *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991).

[9] Hosiden Corp. v. Advanced Display Manufacturers, 85 F.3d 1561 (Fed. Cir. 1996) (Commission may find a single like product corresponding to several different classes or kinds defined by Commerce); Torrington, 747 F. Supp. at 748-752 (affirming Commission determination of six like products in investigations where Commerce found five classes or kinds).

[10] Initiation of Antidumping Investigations: Emulsion Styrene-Butadiene Rubber from Brazil, the Republic of Korea and Mexico, 63 Fed. Reg. 20575, 20576 (April 27, 1998). The products covered by the investigation are covered under statistical reporting number 4002.19.0010 of the HTS. Id.

[11] *Id*. Commerce noted, however, that it had discussed the scope definition with petitioners to ensure that it "accurately reflects the product for which they are seeking relief" and asked the parties in the investigations to submit comments on the product coverage of the scope by May 18, 1998.

[12] 63 Fed. Reg. at 20576; Confidential Staff Report, dated May 11, 1998 ("CR") at I-2, Public Version of the Staff Report ("PR") at I-2. For ease of reference, throughout the remainder of this opinion, the term "ESBR" will be used to refer exclusively to the products covered by the scope definition, i.e., the 1500 and 1700 series of products. The phrase "emulsion styrene-butadiene rubber" will be used when referring to all categories of emulsion styrene-butadiene products, including the 1000, 1600, 1800 and 1900 series of synthetic rubbers.

[13] CR at I-4; PR at I-3.

processing oil to the 1700 series of products. The addition of this oil makes the 1700 series darker than the 1500 series and helps in the processing of the products into compounds used to produce tires and other rubber goods.[14]

Approximately 70 percent of the ESBR sold in the United States is used in the production of new tires.[15] The remaining 30 percent is used to produce other rubber products, including engine mounts, bushings, weather stripping, mudflaps, car mats, conveyor belts, hoses, roller coverings, and adhesives.[16]

Several forms of emulsion styrene-butadiene rubber are not covered by the scope definition, including the 1600 and 1800 series of emulsion styrene-butadiene rubbers.[17] The 1600 and 1800 series of products are generally known as carbon black master batch products ("CBMB"). Like ESBR, CBMB is a form of emulsion styrene-butadiene rubber that is produced from a cold emulsion-polymerization process in which water is used as a diluent element.[18] Like ESBR, CBMB contains styrene and butadiene as its primary raw ingredients. Unlike the 1500 and 1700 series, however, CBMB contains significant amounts of carbon black.[19] Carbon black is used as a reinforcing agent in CBMB and adds significant abrasion resistance, tear strength and other properties to the rubber.[20] According to petitioners, CBMB is used primarily in the production of retreaded tires but is also used in the production of mechanical goods.[21]

Another form of styrene-butadiene rubber not covered by the scope definition is solution styrene-butadiene rubber ("SSBR"). Unlike the emulsion forms of styrene-butadiene rubber, SSBR is produced using a solvent polymerization process.[22] According to petitioners, SSBR is primarily used to produce original equipment tires for new automobiles, while the 1500 and 1700 series are primarily used to produce replacement tires.[23]

C. Domestic Like Product Issues in These Investigations

Cooper Rubber and Tire Company ("Cooper"), an importer of the subject merchandise and an end user of ESBR,[24] has argued that the Commission should expand the domestic like product to include CBMB and SSBR.[25] Accordingly, for purposes of these preliminary investigations, we have considered two domestic like product issues: (i) whether CBMB should be included in the same domestic like product as ESBR; and (ii) whether SSBR should be included in the same domestic like product as ESBR.

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[14] CR at I-3; PR at I-2; Transcript of Staff Conference, April 22, 1998, at 23 (hereinafter "Tr.").

[15] CR at II-1; PR at II-2. Petitioners' Postconference Brief ("PB"), dated April 27, 1998, at 41.

[16] CR at II-1; PR at II-1. PB at 41.

[17] CR at I-2; PR at I-2. The other categories of emulsion styrene-butadiene rubber not covered by the scope definition are the 1000 and 1900 series of synthetic rubbers, as specified under the IISRP numbering system. Unlike ESBR, the 1000 series is a "hot" polymerized series of emulsion styrene-butadiene rubber that is used in a variety of non-tire end uses, such as the production of chewing gum, solvent-based adhesives and caulking. Tr. at 50-51; PB at 41. The 1900 series of emulsion styrene-butadiene rubber is a high-styrene synthetic rubber that is also used in a variety of non-tire end uses, such as shoe soles and floor tiles. *Id*. According to petitioners, the 1200, 1300 and 1400 series of synthetic rubbers are not emulsion styrene-butadiene rubbers. Tr. at 50-51.

[18] CR at I-2-3; PR at I-2.

[19] CR at I-8; PR at I-5.

[20] Tr. at 32.

[21] CR at I-8; PR at I-5; PB at 41.

[22] CR at I-9; PR at I-6.

[23] CR at I-8; PR at I-6.

[24] Cooper is a tire manufacturer that purchases approximately 130 million pounds of ESBR per year. Tr. at 70.

[25] Cooper Brief ("CB"), dated April 27, 1998 at 2. Petitioners contend that the domestic like product should consist only of ESBR. PB at 3-4 & 32-46. The Korean and Mexican respondents agree with Cooper that petitioners' proposed domestic like product is too narrowly drawn but accept the definition for purposes of the Commission's preliminary determinations. Korea Kumho Petrochemical Co. Postconference Brief ("KB") at Att. E1, pp. 3-4; Industrias Negromex, S.A. de C.V. and GIRSA, Inc. Postconference Brief ("NB") at Att. §III.

On the whole, we believe that the issue is a close one with regard to the inclusion of both CBMB and SSBR within the domestic like product. However, for purposes of these preliminary investigations, we find a single domestic like product, consisting of all ESBR (i.e., only the 1500 and 1700 series of emulsion styrene-butadiene rubber products).

1. Whether CBMB Should Be Included In the Same Domestic Like Product as ESBR

For the following reasons, we do not include CBMB in the same domestic like product as ESBR for purposes of our preliminary determinations.

Physical Characteristics and End Uses. The record is mixed with respect to the similarity of physical characteristics and end uses between ESBR and CBMB. On the one hand, the available evidence indicates that, when viewed on a broad level, ESBR and CBMB share some physical characteristics and end uses. ESBR and CBMB are both forms of emulsion styrene-butadiene rubber and appear to share similar chemical and physical properties.[26] Further, both products provide similar physical characteristics to the products they are used to produce. For example, both products provide additional durability and traction characteristics to the tires in which they are used as raw materials.[27] Finally, ESBR and CBMB are both used primarily in the production of tire products but may also be used to produce mechanical goods.[28]

When viewed on a more narrow perspective, however, the available record evidence also suggests that there are significant physical and end use differences between CBMB and ESBR. First, unlike ESBR, CBMB contains significant amounts of carbon black.[29] The carbon black imparts a black coloring to the rubber and makes it unsuitable in end uses for which a non-black rubber product (like ESBR) is required.[30] Further, the addition of carbon black makes CBMB a harder, more solid and much bulkier product than ESBR and changes its handling characteristics.[31] Moreover, the addition of carbon black increases the abrasion resistance and tear strength of CBMB, which endows CBMB with superior tread wear performance when compared with ESBR.[32] As for end uses, although CBMB and ESBR are both used primarily to produce tire products, CBMB is primarily used for the purpose of retreading used truck tires, while ESBR is used primarily for the production of new tires.[33]

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[26] For example, both petitioners and respondents appear to agree that, in essence, CBMB is simply ESBR with carbon black mixed in. PB at 41, CB at App. 6. Moreover, the available record evidence indicates that the two products are somewhat similar in chemical terms in that they have low molecular branching characteristics and a low glass transition temperature. PB at 41.

[27] PB at 41.

[28] With regard to end use, Cooper asserts that CBMB and ESBR are used in tire bead, tire carcass and tire tread compounds by tire manufacturers. CB at App., p.7.

[29] PB at 41, CB at App., p.7; CR at I-8; PR at I-5.

[30] PB at 41.

[31] Tr. at 26.

[32] Tr. at 32 & 41.

[33] CR at I-8; PR at I-6.

Interchangeability. The record is also mixed with respect to the interchangeability of CBMB and ESBR. On the one hand, there is at least some level of interchangeability between the two products. For example, witnesses for Cooper[34] testified that there is a very significant level of interchangeability between CBMB and ESBR in the production process for new tires.[35] According to these witnesses, Cooper substituted significant amounts of CBMB for ESBR in its new tire production process during periods of short ESBR supply. In fact, according to Cooper's Manager of Research and Technology, CBMB can be substituted almost completely for ESBR in Cooper's tire tread, tire carcass and tire ply compounds.[36] At least one importer agrees with Cooper that the two products are interchangeable[37] while witnesses for the petitioners concede that there is at least a small amount of interchangeability between ESBR and CBMB.[38]

Although the record evidence indicates that there is some interchangeability between the two products, the available data also indicate there is a practical limitation on the level of interchangeability for the two products. At the staff conference, witnesses for petitioners testified that there is, at best, only a marginal amount of practical interchangeability between ESBR and CBMB.[39] According to these witnesses, the process of switching between the two products in tire production is too costly and time-intensive to make the two products practical substitutes for one another.[40] These witnesses also asserted that, at best, purchasers would only be able to substitute CBMB for ESBR in five percent of their end uses.[41]

Moreover, although Cooper's witnesses stated that CBMB and ESBR are fully interchangeable with each other, they also noted that Cooper prefers to use ESBR, when available, and that Cooper needed a significant amount of time and testing to develop the proper chemical compounding formulation so that CBMB could be substituted for ESBR.[42] The petitioner's position is also supported by the majority of end users of ESBR who have provided data to the Commission in these investigations. Of the nine importers/end users who responded to the staff's question concerning substitutes for ESBR, only two (including ***) responded that CBMB is substitutable for ESBR.[43]

Channels of Distribution. The record evidence suggests that CBMB and ESBR are sold through similar channels of distribution in the merchant market.[44] The available evidence indicates that the large

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[34] Cooper appears to be one of the largest purchasers of ESBR on the merchant market. According to its Vice President of Purchasing, Keith Joliff, Cooper purchases approximately 130 million pounds of ESBR per year, Tr. at 70, which represents approximately *** of all ESBR purchases in the merchant market. *Compare* Tr. at 70 *with* CR and PR at table IV-2.

[35] Tr. at 78-79.

[36] CB at Ex. 4.

[37] CR at I-9; PR at I-6.

[38] For example, witnesses for petitioner concede that there is at least a five-percent overlap between end uses for CBMB and ESBR. Tr. at 36. Moreover, petitioner has submitted data showing that it sells both CBMB and ESBR to *** of *** tire producers located in the United States. PB at Part Two, p. 5.

[39] Tr. at 34-37.

[40] Tr. at 37; PB at 41-42.

[41] Tr. at 35.

[42] Tr. at 77-78.

[43] CR at I-9; PR at I-6. In any final phase investigations, the Commission intends to seek information on whether other users have the ability to effectively interchange these products. For those that do not, we intend to examine the ease and length of time in which they can develop the capability to do so. We will also examine in more detail the additional cost to users of using higher ratios of substitutes for ESBR in downstream products.

[44] CR at I-7 & I-10; PR at I-6.

majority of CBMB and ESBR sales are made directly to end users, while a small amount is sold through distributors.[45]

Common Manufacturing Facilities, Production Processes and Production Employees. CBMB is produced at the same general facilities as ESBR but is produced on different manufacturing lines and by different employees than ESBR.[46] Moreover, while there are some similarities in terms of the production process for CBMB and ESBR, CBMB is produced from a different latex than ESBR and undergoes a different drying and packing process than ESBR.[47]

Producer and Customer Perceptions. There is a limited amount of data available with respect to producer and customer perceptions concerning the similarity of ESBR and CBMB. However, the data available suggests that the U.S. producers and end users of ESBR believe that there is a limited amount of interchangeability between CBMB and ESBR.[48]

Price. Again, there is a limited amount of data available with respect to the relative prices of CBMB and ESBR. Although petitioners contend that the price of CBMB is higher than the price of ESBR, the available data suggest that CBMB prices were within the same range of prices as the price for certain ESBR series during the period of investigation.[49]

Conclusion. On the whole, the available record evidence in these preliminary investigations indicates that there are significant physical and end use differences between CBMB and ESBR and that the level of interchangeability of the two products is limited as a practical matter. Moreover, the products are produced on different production lines and by different employees and undergo somewhat different manufacturing processes. Given these distinctions, we have not included CBMB within the domestic like product for purposes of these preliminary investigations. Despite our preliminary finding on this issue, we note that some record evidence would support inclusion of CBMB in the same domestic like product as ESBR. For example, CBMB has the same general physical characteristics and end uses as ESBR, is somewhat interchangeable with ESBR and appears to be sold in similar channels of distribution and within the same general price range as ESBR. Because of these considerations, we intend to seek full data on CBMB in any final phase investigations.

2. Whether SSBR Should be Included in the Same Like Product as ESBR

Again, although the issue is somewhat close, we do not include SSBR in the same domestic like product as ESBR for purposes of these preliminary investigations.

Physical Characteristics and End Uses. In general, although ESBR and SSBR share some physical characteristics and end uses,[50] the record evidence in these preliminary investigations indicates that SSBR and ESBR have significantly different physical characteristics and somewhat different end uses. Unlike ESBR, which is produced using an emulsion polymerization process, SSBR is produced using a

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[45] *Id*. The only distinction between the two products in terms of channels of distribution is the fact that, unlike CBMB, a *** percentage of ESBR shipments in the United States are captively consumed. CR at III-5; PR at I-2. During the period of investigation, approximately *** percent of U.S. producers' shipments were captively consumed. *Id*.

[46] CR at I-8; PR at I-6; Tr. at 29 & 45.

[47] CR at I-8; PR at I-6; Tr. at 47.

[48] CR at I-9; PR at I-6.

[49] At the request of staff, petitioners submitted pricing data for the largest CBMB grade in their postconference brief. PB at Part Two, pp.12-14. The data indicate similar price ranges for these products and series 1502 ESBR during the POI. *Compare* PB at Part Two, pp.12-14 *with* CR and PR at table V-3.

[50] In this regard, we note that SSBR and ESBR are both forms of styrene-butadiene rubber and both are used primarily in the production of tires. CR at I-8; PR at I-5-6.

solvent polymerization process.[51] The solvent production process results in a synthetic rubber that contains no organic acid and has longer molecular chains than ESBR.[52] The resulting rubber is significantly more efficient in terms of energy consumption than ESBR but has less beneficial traction and durability characteristics than ESBR. Because of its ability to reduce energy loss, SSBR is primarily used to produce original equipment tires for new cars, unlike ESBR, which is primarily used in replacement tires.[53]

Interchangeability. Although we have a limited amount of data available on the issue, the available data suggest that there is some level of interchangeability between SSBR and ESBR in some replacement tire applications.[54] However, for purposes of the preliminary phase of these investigations, we find that the available data suggests that ESBR is not substantially interchangeable with SSBR in the original equipment tire market because ESBR does not have similar energy loss characteristics as SSBR.[55] We intend to seek further data on the level of interchangeability in any final investigations.[56]

Channels of Distribution. The available data on channels of distribution suggest that the bulk of SSBR is captively consumed in dedicated facilities and relatively small amounts are sold on the open market.[57] In contrast, substantial amounts of ESBR are sold on the open market to end users and distributors.[58]

Common Manufacturing Facilities, Production Processes and Production Employees. SSBR is produced using a completely different manufacturing process from ESBR and is not produced in the same facilities as ESBR.[59] Only one of the three domestic producers of ESBR manufactures SSBR and does so in a facility distinct from its ESBR facilities.[60]

Producer and Customer Perceptions. While there is limited data available with respect to producer and customer perceptions, four of nine importers/end users indicated that SSBR is a substitute for ESBR.[61] The petitioners contend that the two products are not substitutes for one another.[62]

Price. The available data suggests that there is a significant price differential between SSBR and ESBR. According to witnesses for petitioners, the price differential is normally 10 cents per pound,[63] which appears to be relatively significant when compared with an average unit value for ESBR that ranged from $*** to $*** per pound during the period.[64]

On the whole, given the differences in physical characteristics and end uses, production processes and facilities and prices between ESBR and SSBR, as well as their somewhat limited degree of interchangeability, we decline to expand the domestic like product to include SSBR for purposes of these

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[51] CR at I-9; PR at I-6.

[52] Tr. at 52 & CB at App., p.7.

[53] CR at I-8-9; PR at I-6; Tr. at 52-54; PB at 41. The use of SSBR in new car tires is necessary to maximize the gas mileage rating of U.S. car manufacturers' new fleets. *Id*.

[54] CB at App., p. 7-8 & Ex. 4. According to information submitted by Cooper, SSBR may be substituted for ESBR to a limited extent in tire ply and carcass compounds, but is fully interchangeable with ESBR in tire tread compounds. *Id*.

[55] CR at I-8-9; PR at I-6; Tr. at 52-54.

[56] In any final phase investigations, the Commission intends to seek information on whether other users have the ability to effectively interchange these products as well as on the ease and length of time in which they can develop the capability to do so. We will also examine in more detail the additional cost to users of using higher ratios of substitutes for ESBR in downstream products.

[57] Tr. at 58.

[58] CR at I-8-9; PR at I-5-6.

[59] CR at I-8-9; PR at I-6; Tr. at 56-57.

[60] Tr. at 56-57; PB at Part Two, p 22.

[61] CR at I-9; PR at I-6.

[62] PB at 42.

[63] Tr. at 55.

[64] CR at I-7; PR at I-5.

preliminary investigations. We note, however, that the record is not clear in certain respects, particularly regarding the issue of interchangeability. Accordingly, we intend to seek full data on SSBR in any final phase investigations.

D. Domestic Industry

The domestic industry is defined as "the producers as a [w]hole of a domestic like product."[65] In defining the domestic industry, the Commission's general practice has been to include in the industry all of the domestic production of the like product, whether toll produced, captively consumed, or sold in the domestic merchant market.[66] Because we have found that the domestic like product consists of all ESBR, for purposes of these preliminary investigations we also find that the domestic industry consists of the three U.S. producers of ESBR: Ameripol Synpol Corp. (Ameripol Synpol") ; DSM Copolymer, and The Goodyear Tire and Rubber Co. ("Goodyear").

III. CUMULATION

A. In General

Section 771(7)(G)(i) requires the Commission to cumulate imports from all countries as to which petitions were filed and/or investigations self-initiated by Commerce on the same day, if such imports compete with each other and with domestic like products in the United States market.[67] In assessing whether imports compete with each other and with the domestic like product,[68] the Commission has generally considered four factors, including:

(1) the degree of fungibility between the imports from different countries and between imports and the domestic like product, including consideration of specific customer requirements and other quality related questions;[69]

(2) the presence of sales or offers to sell in the same geographical markets of imports from different countries and the domestic like product;

(3) the existence of common or similar channels of distribution for imports from different countries and the domestic like product; and

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[65] 19 U.S.C. § 1677(4)(A).

[66] *See*, United States Steel Group v. United States, 873 F. Supp. 673, 682-83 (Ct. Int'l Trade 1994), *aff'd*, 96 F.3d 1352 (Fed. Cir. 1996).

[67] 19 U.S.C. § 1677(7)(G)(i). There are four exceptions to the cumulation provision, none of which applies to these investigations. *See id*. at 1677(7)(G)(ii).

[68] The Statement of Administrative Action submitted to Congress in connection with the Uruguay Round Agreements Act (P.L. 103-465, approved Dec. 8, 1994) expressly states that "the new section will not affect current Commission practice under which the statutory requirement is satisfied if there is a reasonable overlap of competition." Uruguay Round Agreements Act, Statement of Administrative Action, H.R. Doc. 316, Vol. 1, 103d Cong., 2d Sess. (1994)("SAA") at 848 *citing* Fundicao Tupy, S.A. v. United States, 678 F. Supp. 898, 902 (Ct. Int'l Trade 1988), *aff'd* 859 F.2d 915 (Fed. Cir. 1988).

[69] Commissioner Crawford finds that substitutability, not fungibility, is a more accurate reflection of the statute. In these investigations, she finds there is sufficient substitutability to conclude there is a reasonable overlap of competition among the subject imports and between the subject imports and the domestic like product. Therefore, she concurs with her colleagues that subject imports from Brazil, Korea and Mexico should be cumulatively assessed. See Dissenting Views of Commissioner Carol T. Crawford in Stainless Steel Bar from Brazil, India, Japan and Spain, Invs. Nos. 731-TA-678, 679, 681, and 682 (Final), for a description of her views on cumulation.

(4) whether the imports are simultaneously present in the market.[70]

While no single factor is necessarily determinative, and the list of factors is not exclusive, these factors are intended to provide the Commission with a framework for determining whether the imports compete with each other and with the domestic like product.[71] Only a "reasonable overlap" of competition is required.[72]

Petitioners contend that imports from the subject countries should be cumulated for purposes of the Commission's material injury analysis because imports from the three subject countries compete with each other and domestic production.[73] Industrias Negromex, S.A. ("Negromex"), a Mexican producer of the subject merchandise, and GIRSA, Inc., an importer of Mexican merchandise, contend that the Commission should not cumulate imports of the subject merchandise from Mexico with the other subject imports.[74] They contend that imports from Mexico were not sold in similar or common channels of trade as the other subject imports because they are sold exclusively on a contractual basis.[75]

We have determined to cumulate the subject imports from Brazil, Korea and Mexico for purposes of our material injury analysis. There are relatively few physical or quality differences among the subject imports and the domestic merchandise.[76] Although at least two importers reported Korean products were of higher quality than the subject imports and several importers reported that certain circumstances of sale might vary among the subject imports, all of the domestic producers and the large majority of responding importers reported that imports from the subject countries are interchangeable with one another and the domestic product.[77] Indeed, none of the parties contend that the domestic and the subject imports are not fungible with and among each other.

Second, the ESBR market appears to be a nationwide market[78] and the record indicates that the subject imports and the domestic merchandise were offered for sale throughout that market during the period of investigation. Moreover, the record shows that substantial amounts of imports from each of the three subject countries were sold during each year of the period of investigation.[79] Accordingly, the record data indicates that the subject imports were sold in the same geographic regions and were simultaneously present in the market during the period of investigation.

Finally, while Negromex and GIRSA contend that imports from Mexico are distinguished from the other subject imports because they are sold exclusively on a contractual basis and are not sold in the spot market, the record indicates at least some imports from all three subject countries were sold on a contractual basis during the period of investigation.[80] Moreover, we note that the available data suggest that subject imports and the domestic product are sold in two channels of distribution: directly to end users

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[70] *See* Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan, Invs. Nos. 731-TA-278-280 (Final), USITC Pub. 1845 (May 1986), *aff'd*, Fundicao Tupy, S.A. v. United States, 678 F. Supp. 898 (Ct. Int'l Trade), *aff'd*, 859 F.2d 915 (Fed. Cir. 1988).

[71] *See, e.g.*, Wieland Werke, AG v. United States, 718 F. Supp. 50 (Ct. Int'l Trade 1989).

[72] *See* Wieland Werke, 718 F. Supp. at 52 ("Completely overlapping markets are not required."); United States Steel Group v. United States, 873 F. Supp. 673, 685-86 (Ct. Int'l Trade 1994), *aff'd*, 96 F.3d 1352 (Fed. Cir. 1996).

[73] PB at Part Two, p. 3. For purposes of these preliminary phase investigations, the Korean respondents and Cooper have stated that they agree with petitioner that the subject imports should be cumulated for the Commission's injury analysis. Tr. at 120; CB at App., p.4.

[74] NB at 3-7.

[75] NB at 4.

[76] CR at II-6; PR at II-4-5.

[77] CR at II-6-7; PR at II-4-5.

[78] Tr. at 31.

[79] CR and PR at Table IV-1.

[80] CR at II-1; PR at II-1.

and to distributors.[81] Since the available data indicate that the Mexican producer sells its merchandise through its related sales subsidiary, which acts as an importer/distributor for the product,[82] it would appear that imports from Mexico are being sold in the same channel of trade as other import sales made through a distributor.[83] Moreover, prior to 1997, the Mexican producer appears to have sold its merchandise both directly to end users and through distributors.[84]

On the whole, we believe that the record evidence indicates that the subject imports have a significant degree of fungibility with each other and the domestic merchandise, were sold in the same geographic regions as each other and the domestic merchandise, were simultaneously present in the market and were generally sold in similar channels of distribution. Accordingly, we have cumulated imports from the three subject countries for our material injury analysis.

IV. REASONABLE INDICATION OF MATERIAL INJURY BY REASON OF ALLEGEDLY LTFV IMPORTS

In preliminary antidumping investigations, the Commission determines whether there is a reasonable indication that an industry in the United States is materially injured by reason of the allegedly LTFV imports under investigation.[85] [86] In making this determination, the Commission must consider the volume of subject imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations.[87]

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[81] CR at II-1; PR at II-1.

[82] CR at II-1; PR at II-1.

[83] CR at II-1; PR at II-1.

[84] CR at II-1; PR at II-1.

[85] 19 U.S.C. §§ 1671b(a), 1673b(a).

[86] Commissioner Crawford notes that the statute requires that the Commission determine whether a domestic industry is "materially injured by reason of" the LTFV imports. She finds that the clear meaning of the statute is to require a determination of whether the domestic industry is materially injured by reason of LTFV imports, not by reason of the LTFV imports among other things. Many, if not most, domestic industries are subject to injury from more than one economic factor. Of these factors, there may be more than one that independently are causing material injury to the domestic industry. It is assumed in the legislative history that the "ITC will consider information which indicates that harm is caused by factors other than less-than-fair-value imports." S. Rep. No. 249, 96th Cong., 1st Sess. 75 (1979). However, the legislative history makes it clear that the Commission is not to weigh or prioritize the factors that are independently causing material injury. Id. at 74; H.R. Rep. No. 317, 96th Cong., 1st Sess. 46-47 (1979). The Commission is not to determine if the LTFV imports are "the principal, a substantial or a significant cause of material injury." S. Rep. No. 96-249 at 74 (1979). Rather, it is to determine whether any injury "by reason of" the LTFV imports is material. That is, the Commission must determine if the subject imports are causing material injury to the domestic industry. "When determining the effect of imports on the domestic industry, the Commission must consider all relevant factors that can demonstrate if unfairly traded imports are materially injuring the domestic industry." S. Rep. No. 71, 100th Cong., 1st Sess. 116 (1987) (emphasis added); Gerald Metals v. United States, 132 F.3d 716 (Fed. Cir. 1997) (rehearing denied).

For a detailed description and application of Commissioner Crawford's analytical framework, *see* Certain Steel Wire Rod from Canada, Germany, Trinidad & Tobago, and Venezuela, Inv. Nos. 731-TA-763-766 (Final), USITC Pub. 3087 at 29 (March 1998) and Steel Concrete Reinforcing Bars from Turkey, Inv. No. 731-TA-745 (Final) USITC Pub. 3034 at 35 (April 1997). Both the Court of International Trade and the United States Court of Appeals for the Federal Circuit have held that the "statutory language fits very well" with Commissioner Crawford's mode of analysis, expressly holding that her mode of analysis comports with the statutory requirements for reaching a determination of material injury by reason of the subject imports. United States Steel Group v. United States, 96 F.3d 1352, 1361 (Fed. Cir. 1996), *aff'g* 873 F. Supp. 673, 694-95 (Ct. Int'l Trade 1994).

[87] 19 U.S.C. § 1677(7)(B)(i). The Commission "may consider such other economic factors as are relevant to the determination," but shall "identify each [such] factor . . . and explain in full its relevance to the determination." 19

(continued...)

The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[88]

In assessing whether there is a reasonable indication that the domestic industry is materially injured by reason of allegedly LTFV imports, we consider all relevant economic factors that bear on the state of the industry in the United States.[89] These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, profits, cash flow, return on investment, ability to raise capital, and research and development. No single factor is dispositive and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[90]

For the reasons discussed below, we determine that there is a reasonable indication that the domestic industry producing certain emulsion styrene-butadiene rubber is materially injured by reason of allegedly LTFV imports from Brazil, Korea and Mexico.

A. Conditions of Competition[91]

Several conditions of competition are pertinent to our analysis in these investigations. First, the domestic industry captively consumed between *** percent of their aggregate U.S. shipments of ESBR during the period of investigation.[92] Accordingly, we have considered whether the captive production provision is applicable in these preliminary investigations.[93] The record clearly indicates that the ESBR sold in the merchant market is generally used in the production of the same downstream products (i.e., tires and other rubber products) as that which is captively consumed[94] and that ESBR is not the "predominant

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[87] (...continued)
U.S.C. § 1677(7)(B).

[88] 19 U.S.C. §1677(7)(A).

[89] 19 U.S.C. § 1677(7)(C)(iii).

[90] *Id.*

[91] Based on dated obtained from the Commission's questionnaire responses, imports of the subject merchandise from Brazil, Korea and Mexico were *** percent, respectively, of the total quantity of U.S. imports of ESBR during 1997. CR and PR at Table IV-1. Consequently, we find that imports from none of the subject countries is negligible, as defined at 19 U.S.C. §1677(24).

[92] CR at III-5, PR at III-2. Goodyear is the only domestic producer that captively consumes ESBR. *Id*.

[93] The captive production provision, 19 U.S.C. § 1677(7)(C)(iv), provides:

> (iv) CAPTIVE PRODUCTION -- If domestic producers internally transfer significant production of the domestic like product for the production of a downstream article and sell significant production of the domestic like product in the merchant market, and the Commission finds that --
>
> > (I) the domestic like product produced that is internally transferred for processing into that downstream article does not enter the merchant market for the domestic like product,
> >
> > (II) the domestic like product is the predominant material input in the production of that downstream article, and
> >
> > (III) the production of the domestic like product sold in the merchant market is not generally used in the production of that downstream article,
>
> then the Commission, in determining market share and the factors affecting financial performance set forth in clause (iii), shall focus primarily on the merchant market for the domestic like product.

[94] The record shows that Goodyear (the sole captive producer of ESBR) uses *** of its internally transferred ESBR to produce tires for passenger vehicles and trucks, as do the merchant market purchasers of ESBR. CR at III-5; PR

(continued...)

material input" for the downstream products.[95] Accordingly, we find that the second and third criteria of the captive production provision are not satisfied in this case and that the captive production provision is not applicable. However, we note that, even in circumstances in which the captive production provision does not apply, the Commission has the discretion under the statute to consider the significant volume of captive production as a condition of competition.[96] Accordingly, we have examined data both for the domestic industry as a whole and for merchant market operations for purposes of these preliminary determinations.[97]

Second, approximately seventy percent of ESBR production is consumed in the production of tires and tire products.[98] Accordingly, aggregate demand in the ESBR market depends primarily on the downstream demand for tires.[99] Demand for ESBR in the United States has grown slightly during the period of investigation, in response to an increase in the number of automobiles sold and increasing consumer preference for larger vehicles using high-traction tires.[100]

Third, 1995, the first year of the Commission's period of investigation, was characterized by unusually high ESBR prices.[101] These price levels may have been spurred in part by shortages of ESBR in the European market.[102] Prices during the period of investigation may also have been influenced at least in part by movements in the price of natural and synthetic rubbers, movements in the global price of ESBR and movements in the cost of raw material inputs for ESBR.[103]

Fourth, most ESBR sales are made on a long-term contract basis.[104] The term of these contracts varies between *** to *** for the domestic product and *** for the subject merchandise.[105] Generally, these contracts contain formula price mechanisms, which provide for adjustments to the contractual price of ESBR based on changes in the market prices of styrene and butadiene (the major raw materials for ESBR).[106]

Finally, during the period of investigation, the majority of ESBR shipments consisted of ESBR

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[94] (...continued)
at III-2.

[95] Goodyear has reported that the ESBR it transfers for internal consumption accounts for only *** percent of the raw material costs of its tires and only *** percent of the raw materials cost of its engineered rubber products. CR at III-5; PR at III-2. The SAA explains that a domestic like product will be considered "predominant" only where it is the primary material used in the production of a downstream article. SAA at 853.

[96] *E.g.*, Open-End Spun Rayon Singles Yarn from Austria, Inv. No. 731-TA-751 (Final), USITC Pub. No. 3059 at 6 (Sept. 1997).

[97] Commissioner Crawford recognizes captive consumption as a condition of the market that may affect competition. However, as she has found that the captive consumption provision does not apply, she examines the industry as a whole in these investigations. Accordingly, she does not join the discussion below regarding the merchant market alone.

[98] CR at II-1; PR at II-1.

[99] *See* CR at II-3; PR at II-1. Aggregate demand is also affected by demand for other rubber products, but to a lesser degree, given that other products reflect only *** percent of ESBR consumption. Id.

[100] CR at II-3-4; PR at II-3. Apparent demand grew approximately *** percent during the period of investigation. CR and PR at table IV-4.

[101] *See, e.g.*, PB at 17; CB at 6; KB at 9.

[102] *Id*. We intend to collect data on this issue in any final phase investigations.

[103] CB at 7-11, NB at 8-12; KB at 14-16.

[104] *See* CR at II-2; PR at II-1.

[105] CR at V-4; PR at V-3.

[106] CR at V-3; PR at V-1.

grades 1502 and 1712.[107] [108]

B. Volume of Subject Imports

The quantity and value of the subject imports increased during the period of investigation. On a quantity basis, the volume of the cumulated subject imports increased from *** million pounds in 1995 to *** million pounds in 1997.[109] On a value basis, the cumulated subject imports rose from *** million in 1994 to *** million in 1997.[110] The quantity of the subject imports increased by *** percent while the value of the subject imports increased *** percent during the period of investigation. Most of the increase took place between 1996 and 1997, a period in which subject import volumes rose *** percent by quantity and *** percent by value.[111]

The market share held by subject imports also increased during the period of investigation. When measured on a quantity basis, the share of the overall ESBR market held by the subject imports increased from *** percent in 1994 to *** percent in 1996.[112] Similarly, when measured on a quantity basis, the subject imports' share of the merchant market for ESBR increased from *** percent in 1995 to *** percent in 1997.[113] When measured on a value basis, the subject imports' showed similar market share increases in the overall and merchant markets.[114]

Based on the foregoing, we find that the volume of subject imports and the increase in that volume during the period of investigation was significant for purposes of these preliminary determinations.[115]

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[107] CR at V-5; PR at V-4.

[108] Commissioner Crawford also finds that the available evidence indicates that ESBR is a commodity product that usually accounts for a minor portion of the overall cost of the downstream products in which it is incorporated. CR at II-6; PR at II-4. Accordingly, price changes for ESBR will likely have only a small impact on overall demand for ESBR. *Id*. Moreover, she finds that the record indicates that the domestic industry is a capital-intensive industry that must operate at high capacity utilization rates on a consistent basis to be profitable. PB at 6.

[109] CR & PR at Table IV-1.

[110] *Id*.

[111] *Id*.

[112] CR and PR at table IV-3.

[113] CR and PR at table IV-3.

[114] CR and PR at tables IV-3 & IV-4.

[115] Commissioner Crawford joins only in the factual discussion of the volume of imports. She does not rely on any analysis of trends in the market share of subject imports and other factors in her determination of material injury by reason of allegedly dumped imports. She makes her finding of the significance of volume in the context of the price effects and impact of these imports, given the conditions of competition. For the reasons discussed below, she finds that the volume of subject imports is significant in these investigations.

C. Price Effects of Subject Imports

The evidence gathered in these preliminary phase investigations indicates that there is a moderate to high level of substitutability between the subject merchandise and the domestic like product.[116] [117] The pricing data reveal a mixed pattern of over- and underselling by the subject imports, with underselling occurring in close to half of all possible comparisons.[118] Moreover, the number of instances in which the subject imports undersold the domestic merchandise increased significantly during the last year of the period of investigation, with the subject imports underselling the domestic merchandise in two-thirds of the possible price comparisons in that year. The record also establishes that there has been a significant decline in the prices of domestic and subject merchandise during the latter two years of the period of investigation.[119] In light of the relatively high levels of substitutability of the domestic and subject merchandise, the increasing patterns of underselling by the subject merchandise and the significant declines in domestic prices during the period, we find that, for purposes of these preliminary phase determinations, the subject imports have depressed domestic prices to a significant degree during the period of investigation.

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[116] CR at II-6 & II-7; PR at II-4. We note, however, that price movements of the domestic merchandise during the period of investigation may have been influenced by movements in the price of natural and synthetic rubbers, movements in the global price of ESBR and movements in the cost of raw material inputs for ESBR. CB at 7-11, NB at 8-12; KB at 14-16. We intend to seek additional data on this issue in any final phase investigations and will examine closely the relationship between prices of the domestic and subject merchandise in those final phase investigations. In particular, we will seek information relating to the nature of the substitutability between ESBR and natural and other synthetic rubbers to assess the degree of any relationship between the price of those products and ESBR, as respondents contend. *Id*.

[117] To evaluate the effects of the alleged dumping on domestic prices, Commissioner Crawford compares domestic prices that existed when the imports were dumped with what domestic prices would have been if the subject imports had been fairly traded. In most cases, if the subject imports had not been traded unfairly, their prices in the U.S. market would have increased. In these investigations, the alleged dumping margins for subject imports vary widely but on the whole are relatively high. Thus subject imports likely would have been priced significantly higher had they been fairly traded. Subject imports and domestic ESBR appear to be fairly good substitutes. Substitutability between nonsubject imports and domestic and subject imports also appears to be fairly good, although there is very little information on nonsubject imports at the preliminary phase of these investigations. In any final phase of these investigations, she intends to closely examine the ability of nonsubject producers to increase their shipments of 1500 and 1700 series ESBR to the U.S. market and the substitutability of non-subject imports with subject imports and the domestic like product. She also intends to closely examine the availability and substitutability of domestic and foreign 1600 and 1800 series ESBR and SSBR. Finally, she will closely examine the global nature of this market and the relationship between world prices of ESBR and natural rubber to domestic prices of ESBR. Given the record in the preliminary phase of these investigations, she finds that the shift in demand away from subject imports and towards the domestic like product would have been significant, had subject imports been fairly traded. Although the domestic industry is experiencing relatively high effective capacity utilization rates and therefore could only increase production somewhat, it could supply additional ESBR by diverting current exports or from inventories. Because the domestic industry has a only moderate ability to increase supply in response to higher demand, and the ability of nonsubject imports to supply the market is not clear, she finds that the domestic industry would have been able to increase its prices somewhat, had subject imports been fairly traded. Consequently, Commissioner Crawford finds that in the preliminary phase of these investigations, there is a reasonable indication that subject imports are having significant effects on prices for domestic ESBR.

[118] CR at V-15-V-17, PR at V-10. The subject imports undersold the domestic merchandise in 33 of 69 possible price comparisons during the period of investigation. Id.

[119] CR and PR at Table IV-2; CR at V-5-V-13, PR at V-4-10.

D. Impact of Subject Imports[120] [121]

During a period in which aggregate apparent consumption was increasing, the condition of the domestic industry declined in several respects. First, the subject imports gained market share while the domestic industry lost market share during the period of investigation.[122] In particular, the domestic industry's share of the overall market declined from *** percent in 1995 to *** percent in 1997, while its share of the merchant market declined from *** percent in 1995 to *** percent in 1997.[123] The industry's production, sales revenues, and employment levels also fell during the period of investigation.[124]

Moreover, while the volume and market share of the subject imports was increasing and the price of subject imports falling, the domestic industry experienced a decline in its average unit sales values that was more significant than an accompanying decline in its average unit costs.[125] [126] The result has been a decrease in net sales value for domestic ESBR and falling profitability for the domestic industry during the period.[127] Indeed, in 1997, the domestic industry suffered a particularly significant decline in profitability

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[120] As part of its consideration of the impact of imports, the statute specifies that the Commission is to consider "the magnitude of the margin of dumping." 19 U.S.C. § 1677(7)(C)(iii)(V). Section 771(35)(C), 19 U.S.C. § 1677(35)(C), defines the "margin of dumping" to be used by the Commission in a preliminary determination as the margin or margins published by Commerce in its notice of initiation. In its notice of initiation, Commerce found estimated dumping margins for Brazil ranging from 17.77 percent to 71.08 percent, estimated dumping margins for Korea ranging from 14.92 percent to 118.88 percent, and estimated dumping margins for Mexico ranging from 6.06 percent to 25.16 percent. 63 Fed. Reg. 20575 (April 27, 1998).

[121] Vice Chairman Bragg notes that she does not ordinarily consider the margin of dumping to be of particular significance in evaluating the effects of subject imports on domestic producers. *See* Separate and Dissenting views of Commissioner Lynn M. Bragg in Bicycles from China, Inv. No. 731-TA-731(Final), USITC Pub. 2968 (June 1996).

[122] CR and PR at tables IV-3 & IV-4.

[123] CR and PR at tables IV-3 & IV-4.

[124] The domestic industry's production volumes dropped slightly during the period of investigation, from a total of *** billion pounds in 1995 to *** billion pounds in 1997. CR and PR at table III-3. The industry's total net sales dropped from $*** million in 1995 to $*** million in 1997, while its net sales in the merchant market dropped from $*** million in 1995 to $*** million in 1997. CR and PR at tables VI-1 and VI-2. The average number of production and related workers employed by the industry dropped from *** in 1995 to *** in 1997, while the number of hours worked declined from *** million in 1995 to *** million in 1997. CR and PR at table III-3.

[125] The average unit value for the domestic industry's overall operations declined from $*** per pound in 1995 to $*** per pound in 1997 while its average unit cost of goods sold decreased from $*** per pound in 1995 to $*** per pound in 1997. CR and PR at table IV-2. The average unit value for the industry's merchant market operations dropped from $*** in 1995 to $*** in 1997 while its average unit cost of goods sold decreased from $*** per pound in 1995 to $*** per pound in 1997. CR and PR at table VI-1.

[126] In any final phase investigations, we intend to examine the impact of substitute product prices and world market prices on domestic average unit sales values.

[127] Industry profitability declined in the overall and merchant markets from 1995 to 1997. CR and PR at table VI-1 & VI-2. The industry's gross profits on their overall operations fell from $*** million in 1995 to $*** million in 1997, while the industry's gross profits on their merchant market operations fell from $*** million in 1995 to $*** million in 1997. The ratio of the industry's gross profits on their overall operations to net sales fell from *** percent in 1995 to *** percent in 1997, while the ratio of their gross profits on their merchant market sales to net sales fell from *** percent in 1997 to *** percent in 1997. Similarly, operating income on the industry's overall operations fell from $*** million in 1995 to $*** million in 1997, while operating income on their merchant market operations fell from $*** million in 1995 to $*** million in 1997. CR and PR at tables VI-1 & VI-2. The ratio of the industry's operating income on their overall operations to net sales fell from *** percent in 1995 to *** percent in 1997, while the ratio of their operating income on merchant market sales to net sales fell from *** percent in 1997 to *** percent in 1997. CR and PR at table VI-1 & VI-2.

from the prior year, as unit sales values declined and average unit costs increased.[128] Moreover, as the industry has experienced declines in market share and sales revenues, its overall inventory levels have increased[129] and its capital expenditures have dropped.[130] [131]

Given the significant declines in the industry's profitability levels and the accompanying declines in a number of other indicators of the condition of the industry, we find for purposes of these preliminary determinations that the subject imports are having an adverse impact on the domestic industry producing certain emulsion styrene-butadiene rubber.

CONCLUSION

For the foregoing reasons, we determine that there is a reasonable indication that the domestic industry producing certain emulsion styrene-butadiene rubber is materially injured by reason of allegedly LTFV imports from Brazil, Korea and Mexico.

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[128] CR and PR at table VI-1 & VI-2.

[129] The industry's inventory levels increased from *** million pounds in 1995 to *** million pounds in 1997. CR and PR at table III-2.

[130] The industry's capital expenditures decreased from $*** million in 1995 to $*** million in 1997. CR and PR at table VI-5.

[131] As previously stated, Commissioner Crawford does not make her determinations based on trends in statutory impact factors. In her analysis of material injury by reason of alleged dumped imports, Commissioner Crawford evaluates the impact of subject imports on the domestic industry by comparing the state of the industry when the imports were dumped with what the state of the industry would have been had the imports been fairly traded. In assessing the impact of the subject imports on the domestic industry, she considers, among other relevant factors, output, sales, inventories, capacity utilization, market share, employment, wages, productivity, profits, cash flow, return on investment, ability to raise capital, research and development and other relevant factors as required by 19 U.S.C. § 1677(7)(C)(iii). These factors together either encompass or reflect the volume and price effects of the allegedly dumped imports, and so she gauges the impact of the dumping through those effects. In this regard, the impact on the domestic industry's prices, sales and overall revenues is critical, because the impact on the other industry indicators (e.g., employment, wages, etc.) is derived from this impact. As noted above, there is a reasonable indication that the domestic industry would have been able to increase its prices significantly if subject imports had been sold at fairly traded prices. Had subject imports been fairly priced, the domestic industry would have been able to increase its supply somewhat in response to a shift in demand away from subject imports to the domestic product. Accordingly, although her determinations in the preliminary phase of these investigations were a close call, she finds that the combination of the domestic industry's price and output increases, and therefore its revenues would have been significant, had subject imports been fairly priced. Consequently, the domestic industry likely would have been materially better off if subject imports had been fairly traded. Therefore, Commissioner Crawford determines that there is a reasonable indication that the domestic industry producing ESBR is materially injured by reason of allegedly LTFV imports of subject merchandise from Brazil, Korea, and Mexico.

PART I: INTRODUCTION

BACKGROUND

These investigations result from a petition filed by Ameripol Synpol Corp. of Akron, OH, and DSM Copolymer of Baton Rouge, LA, on April 1, 1998, alleging that an industry in the United States is materially injured and threatened with material injury by reason of less-than-fair-value (LTFV) imports of certain emulsion styrene-butadiene rubber (ESBR)[1] from Brazil, Korea, and Mexico. Information relating to the background of these investigations is provided below.[2]

Date	*Action*
April 1, 1998	Petition filed with Commerce and the Commission;[3] institution of Commission investigations (63 FR 17443, April 9)
April 22, 1998	Commission's conference[4]
April 27, 1998	Commerce's notice of initiation (63 FR 20575, April 27)
May 18, 1998	Date of the Commission's vote
May 18, 1998	Commission determinations sent to Commerce

SUMMARY DATA

A summary of data collected in these investigations is presented in appendix C, tables C-1 (for the subject ESBR) and C-2 (for all series of ESBR). Except as noted, U.S. industry data are based on questionnaire responses of 3 firms that accounted for 100 percent of U.S. production of ESBR during 1997. U.S. imports are based on responses to the Commission's questionnaires.

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[1] For purposes of these investigations, emulsion styrene-butadiene rubber (ESBR) consists of a synthetic polymer made via free radical cold-emulsion copolymerization of styrene and butadiene monomers in reactors. The reaction process involves combining styrene and butadiene monomers in water, with an initiator system, an emulsifier system, and molecular weight modifiers. ESBR consists of cold non-pigmented rubbers and cold oil-extended non-pigmented rubbers that contain at least one percent of organic acids from the emulsion-polymerization process. ESBR falls in statistical reporting number 4002.19.0010 of the *Harmonized Tariff Schedule of the United States* (HTS). Subject imports enter the United States duty-free.

ESBR is produced and sold, both inside the United States and internationally, in accordance with a generally accepted set of product specifications issued by the International Institute of Synthetic Rubber Producers (IISRP). The universe of products subject to these investigations consists of grades of ESBR included in the IISRP 1500 series and IISRP 1700 series of synthetic rubbers. The 1500 grades are light in color and are often described as "Clear" or "White Rubber." The 1700 grades are oil-extended and thus darker in color, and are often called "Brown Rubber." Products manufactured by blending ESBR with other polymers, high styrene resin masterbatch, carbon black masterbatch (i.e., IISRP 1600 series and 1800 series), and latex (an intermediate product) are not included within the scope of these investigations.

In the remainder of this report, the term "ESBR" refers to the 1500 and 1700 series of synthetic rubber under the IISRP numbering system, except for certain instances, especially in part I of the report in the section entitled "The Product," where ESBR clearly refers, in context, to <u>all</u> series of emulsion styrene-butadiene rubber. The terms "certain ESBR" and "subject ESBR" always refer to the 1500 and 1700 series.

[2] *Federal Register* notices cited in the tabulation are presented in app. A.

[3] The petition alleged LTFV margins to be as follows: Brazilian dumping margins that range from 17.77 percent to 71.08 percent; Korean dumping margins that range from 14.92 percent to 118.88 percent; and Mexican dumping margins that range from 6.06 percent to 25.16 percent.

[4] A list of witnesses appearing at the conference is presented in app. B.

THE PRODUCT

The imported product that is the subject of these investigations consists of certain types of cold emulsion-polymerized styrene-butadiene rubber, namely the 1500 and 1700 series of ESBR under the IISRP numbering system.[5] Both the 1500 and 1700 series of ESBR are used to formulate custom "masterbatches" and compounds, which are in turn used to produce mainly tires, but also hoses, belting, and miscellaneous rubber products.

There are three domestic producers of the 1500 and 1700 series of ESBR, consisting of the two petitioners plus The Goodyear Tire & Rubber Co., Akron, OH. As with imported ESBR, the most common types of domestic product are classified under IISRP grades 1502 and 1712, which are subsets of the 1500 and 1700 series, respectively.

There are a number of nonsubject types of ESBR available, i.e., series other than the 1500 and 1700 series of ESBR. ESBR, as defined by the IISRP, includes hot- and cold-polymerized types,[6] oil-extended product (1700 series), cold oil black masterbatch (1600 series), and regular black masterbatch (1800 series). IISRP series other than the 1500 and 1700 series are discussed in the section of this report entitled "Other Series of ESBR, and SSBR" at the end of Part I. In addition, advances in technology have resulted in both domestic and foreign production of newer types of styrene-butadiene rubber based on a solution-polymerized latex, known as "solution SBR," or SSBR.[7]

The Subject Product (1500 and 1700 Series of ESBR)

Physical Characteristics and Uses

The subject product is produced as a dry, crumb-like material, usually sold pressed into bales.[8] It is distinguished from the other major types of ESBR (which are nonsubject) by its relative purity and the fact that it does not contain carbon black. The 1500 series product is considered a "neat" or pure form of ESBR, while the 1700 series ESBR contains some added petroleum-based processing oil. The addition of oil aids in the eventual processing of the subject product into custom masterbatches and compounds that are extruded, mixed, and rolled into rubber goods.

End users of the subject ESBR formulate custom masterbatches and other compounds prior to the production of rubber goods. Processing begins by breaking down the bales through heating, mixing, and rolling in order to plasticize the rubber. Many ingredients such as carbon black, oils, antioxidants, processing aids, vulcanizing agents, silica, and zinc oxide are often added to make the masterbatch. In addition to the subject ESBR, end users may formulate masterbatches with the 1600, 1800, or 1900 series ESBR, or with SSBR, depending upon the final product. Rubber tires, the largest end use for subject ESBR, may require a number of differently formulated masterbatches, depending upon the characteristics desired in each tire component. Tire components such as tire tread, sidewall, or core generally use a specialized masterbatch formulation. According to information presented by petitioners, over 70 percent

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[5] *The Synthetic Rubber Manual*, 13th edition, published by the International Institute of Synthetic Rubber Producers, Houston, TX.

[6] All types of ESBR are "cold" types except for IISRP type 1000, which is considered a "hot" type of ESBR. Its physical characteristics and uses render it a completely different product than the subject ESBR. It is unsuitable for use in end uses in which the subject ESBR is used.

[7] The Commission's determination regarding the appropriate domestic products that are "like" the subject imported products is based on a number of factors including (1) physical characteristics and uses; (2) common manufacturing facilities and production employees; (3) interchangeability; (4) customer and producer perceptions; (5) channels of distribution; and, where appropriate, (6) price. Prices are more completely covered in Part V of this report.

[8] Ameripol Synpol stated that ***. (Ameripol Synpol's questionnaire, p. 9).

of the subject ESBR is formulated into masterbatches for new rubber tires.[9]

Manufacturing Facilities and Production Employees

The production of ESBR has a relatively short history, arising from demand for synthetic rubber as a replacement for natural rubber during World War II.[10] The subject ESBR is coagulated from a cold emulsion-polymerized SBR latex. The latex itself ***.[11] The latex used to produce the 1500 series of ESBR is also used to produce the 1700 series of ESBR.

SBR latex is produced by either a "hot" (50 degrees C.) or "cold" (5-10 degrees C.) polymerization process from a controlled reaction of an emulsion of styrene, butadiene, water, and various chemicals used as emulsifiers, stabilizers, and modifiers (see figure I-1). Five main ingredients (water, monomers, soap, modifier, and an initiator system) flow through a series of reactors. Water is used as a diluent to reduce the viscosity of the material in process and promote good heat transfer; the soap keeps polymers and reacting material suspended in the emulsion; the modifier is used to control the length of the copolymer chains; and the initiator is used to begin the polymerization process.

The reaction is stopped at a predetermined point through use of a chemical known as a "short stop." At this point, the emulsion resembles natural rubber latex. The latex can be stored at this point, or as mentioned earlier, it may be ***.[12]

As needed, the latex may then be blended with oils, antioxidants, and other materials. This mixture is coagulated in coagulation tanks using an acid. Large crumbs of rubber form and are filtered, neutralized and washed, and dried. Prior to shipping they are usually pressed into bales, covered with plastic shrink wrap, and palleted.

Production and related workers of Ameripol Synpol producing the 1500 and 1700 series of ESBR ***. Workers at DSM Copolymer *** the 1500 and 1700 series, and workers at Goodyear ***.[13]

Interchangeability

The 1500 series of ESBR contains little or no processing oil, compared with the 1700 series, which is 37.5 percent by weight petroleum processing oil. Because of the physical characteristics and the relative difficulty of processing the subject ESBR into custom masterbatches or compounds by end users, additional processing oil is usually required.[14] Petitioners' postconference brief mentions "some degree of interchangeability" of 1500 with 1700 series of ESBR.[15] *** stated that the 1500 and 1700 series of ESBR are interchangeable,[16] and tire makers can interchange the 1500 and 1700 series without making major adjustments to formulations, processes, or processing equipment.

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[9] Petitioners' postconference brief, p. 41.

[10] *Rubber Technology*, 2nd ed., edited by Maurice Morton, c. 1973, by Van Nostrand Reinhold Co., New York, pp. 178-198.

[11] Telephone notes, ***, Apr. 2, 1998.

[12] Ibid.

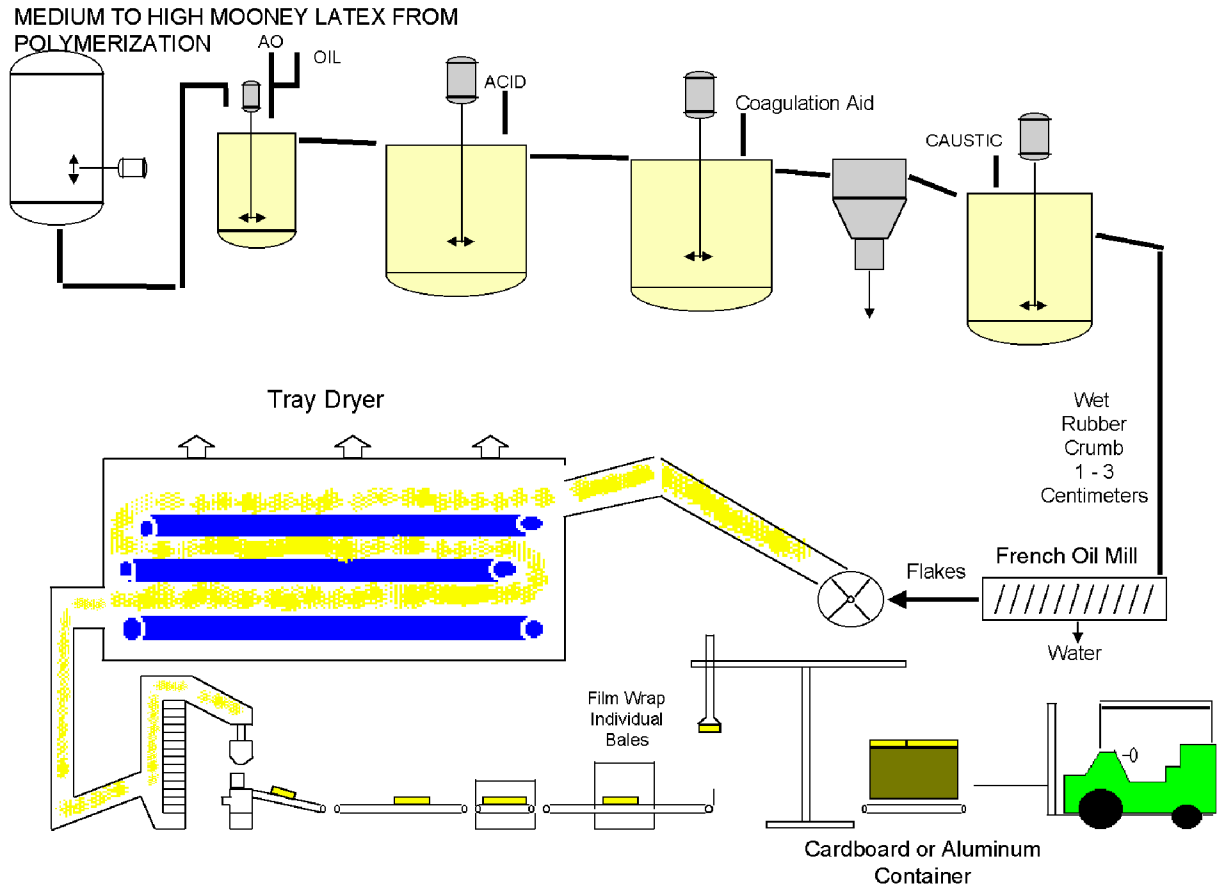
[13] Based on questionnaire responses of the respective firms, p. 4.

[14] Telephone conversation with ***, Apr. 2, 1998, and *Rubber Technology and Manufacture*, edited by C.M. Blow c. 1971, CRC Press, Cleveland, OH, p. 88.

[15] Petitioners' postconference brief, p. 41.

[16] ***.

Figure I-1
Certain ESBR: Manufacturing flowchart



Source: DSM Copolymer.

Customer and Producer Perceptions

Petitioners indicate that the 1500 and 1700 series of ESBR are perceived to be industrial commodity products.[17] *** stated that tire producers (the major end users of ESBR) use ESBR from different producers interchangeably and usually strive to have ESBR from all available quality manufacturers approved for use in their formulations;[18] a similar statement was made on behalf of Cooper Tire & Rubber Co., Inc. (Cooper), a tire producer and a respondent in these investigations.[19]

[17] Petitioners' postconference brief, p. 41.

[18] ***.

[19] Conference transcript, p. 132.

Channels of Distribution

U.S. producers and importers of subject ESBR usually sell product directly to end users. Relatively small amounts are sold through distributors.[20]

Price

According to responses received from Commission questionnaires, prices for ESBR are set based on competition in the open market. In 1995, the average annual price (unit value) for the subject ESBR was about $*** per pound. Prices decreased in 1996 and 1997, reaching an annual average of about $*** per pound in 1997. Actual transaction prices in each of the years tended to be within a range of prices above or below the averages cited above, depending on the grade and type of transaction (spot or formula sales contract). More detailed information on prices is presented in Part V of this report.

Other Series of ESBR, and SSBR[21]

This section presents information related to the Commission's "domestic like product" determination. Petitioners contend that the domestic like product should consist of the 1500 and 1700 series of ESBR, the same as the imported product. Respondent Cooper Tire & Rubber Co., a user of the imported subject product for tire production, contends that "the domestic like product advanced by the petitioners is unduly restrictive," and that it should consist of not only the 1500 and 1700 series of ESBR but also of the 1600 and 1800 series (carbon black masterbatch) of ESBR as well as SSBR.[22] Other respondents appear to agree that the petitioners' proposed domestic like product is defined too narrowly, but have not formally argued that the domestic like product should be expanded to include these products.[23] Discussed in this section of the report are the major nonsubject types of ESBR (i.e., the IISRP 1600, 1800, and 1900 series), as well as SSBR.[24]

The 1600, 1800 and 1900 series of ESBR are similar in terms of physical characteristics to the subject ESBR, with the exception that the 1600 and 1800 series contain carbon black.[25] Carbon black is used as a reinforcing agent. According to petitioners, the majority of the 1600 and 1800 series of ESBR is used to produce truck tire retreads.[26] SSBR usage in tires is desired because of its ability to reduce tire rolling resistance, helping tire makers to meet stringent government corporate average fuel economy (CAFE) standards.[27] SSBR is typically used to produce original equipment tires, whereas the 1500 and 1700 series of ESBR are typically used to produce replacement tires. Cooper Tire & Rubber contends that

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[20] ***.

[21] Summary data on the U.S. market for all series of ESBR are presented in appendix table C-2. The Commission did not collect data on SSBR in these investigations.

[22] Counsel for Cooper, conference transcript, p. 87, and Cooper's postconference brief, app. pp. 6-10.

[23] Conference transcript, pp. 103, 104, 118, and 119.

[24] While not produced from an emulsion, SSBR represents technological advances in synthetic rubber processing and the production of modern tires. In the 1980s SSBR began to be used increasingly in tires because it imparted different performance characteristics, thereby somewhat replacing subject ESBR as a component. William D. Spence, Chief Operating Officer of Ameripol Synpol (conference transcript, pp. 9, 10).

[25] Petitioners have stated that the 1600 and 1800 series of ESBR are useful, "value-added" products for end users because they contain highly-dispersed carbon black that normally requires an energy-consuming process of mixing, rolling, and blending. For example, ***.

[26] Petitioners' postconference brief, pp. 40-41.

[27] Conference transcript, p. 9.

the uses of the 1500, 1600, 1700, and 1800 series of ESBR and SSBR "are so closely related in tire production applications as to be virtually indistinguishable."[28]

The 1600 and 1800 series of ESBR are not produced on the same equipment that is used to produce the subject ESBR, although they can be produced at the same location using separate, physically separated production lines. The principal reason for separate production lines is the possible contamination of the subject ESBR with carbon black. The 1900 series uses a different latex with a high-percentage styrene content.[29] Ameripol Synpol stated that the 1900 series ***.[30]

In the United States SSBR is produced at completely different facilities from those of the subject ESBR, although manufacturing equipment is similar. SSBR is produced by Firestone Synthetic Rubber in Lake Charles, LA, American Synthetic Rubber in Louisville, KY, and Goodyear in Beaumont, TX.[31] Neither Ameripol nor DSM *** produce SSBR.[32] The production of SSBR latex is carried out in a solvent such as hexane, and the process results in a product with different characteristics from ESBR. The major advantage of SSBR use in tires is reduced rolling resistance of the tire tread, resulting in lower fuel consumption.[33]

Petitioners have stated that the 1900 series is not interchangeable with the subject ESBR and the 1600 and 1800 series ESBR are not interchangeable with the subject ESBR.[34] Cooper indicated that there is "ample substitution" of the 1600 and 1800 series ESBR for the subject ESBR (both 1500 and 1700 series) in tire compounds and that SSBR has been used extensively in tire production. Nine end users of ESBR (***) responded to questions in the importers' questionnaire concerning substitutes for the subject ESBR. Of these, five listed substitutes for the subject ESBR. Of the five, four reported that SSBR was a substitute,[35] two reported that 1600 and 1800 series were substitutes,[36] two reported that natural rubber was a substitute, and one each reported that polybutadiene, polyisoprene, and alpha-methylstyrene-butadiene rubber were substitutes. (Some of the importers reported more than one substitute.) Four end users reported no substitutes for the subject ESBR.[37]

As for other domestic like product factors, the channels of distribution for the 1600 and 1800 series ESBR are quite similar to those of the subject ESBR; Cooper Tire & Rubber Co. contends that the channels of distribution of the 1500, 1600, 1700, and 1800 series of ESBR, and to a large extent SSBR, are identical.[38] Petitioners contend that the 1600 and 1800 series of ESBR and SSBR are products distinct from the 1500 and 1700 series of ESBR, whereas Cooper Tire & Rubber Co. contends that "there are no practical distinctions with respect to perceptions of quality or use, provided the equivalent specifications are met" between the 1600 and 1800 series of ESBR and the 1502 and 1712 grades, and that although SSBR may have a higher perceived value than ESBR, "in reality there is price comparability between the

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[28] Cooper's postconference brief, app. p. 7 and exhibit 4.

[29] Only small amounts of the 1900 series product are produced compared with the subject ESBR.

[30] Ameripol Synpol's questionnaire, p. 10.

[31] *World Rubber Statistics 1997*, IISRP, as presented in petitioners' postconference brief, exhibit 17.

[32] Ibid, p. 56.

[33] William D. Spence, conference transcript, p. 9.

[34] For example, ***.

[35] *** reported that in the past it has used ***.

[36] In addition to the two, *** reported that in its applications there is no interchangeability between series without significant adaptation of the final compound, but that the 1600 series can be made in specialty combinations to meet requirements, and *** reported that in masterbatches and compounds, different series of SBRs are not interchangeable per se, but the percentage of use of an individual product can be adjusted as required.

[37] Counsel for Cooper, conference transcript, p. 87, Cooper's postconference brief, app. p. 7, and ***.

[38] Cooper's postconference brief, app. p. 8.

equivalent grades of relevance to Cooper."[39] Prices for the 1600 and 1800 series of ESBR are higher than those of the subject ESBR, because end users are willing to pay a higher price for the convenience of reduced processing time and energy.[40] Prices for the 1900 series are also higher than those of the subject ESBR. The 1900 series ESBR is considered by petitioners to be a "niche" product, ***.

[39] Cooper's postconference brief, app. pp. 8 and 9.

[40] ***.

PART II: CONDITIONS OF COMPETITION IN THE U.S. MARKET

MARKET SEGMENTS AND CHANNELS OF DISTRIBUTION

ESBR is sold by U.S. producers either by formula sales contract or on the spot market directly to industrial users, or indirectly through distributors. Distributors sell ESBR to firms which use smaller quantities of ESBR. Each of the subject countries' ESBR is sold differently. Mexican product is sold only using formula sales contracts. Until 1997, the Mexican producer sold ESBR directly as well as through an importer; after 1997 it sold only through an importer. The Brazilian producer sells ***. Importers of Brazilian product sell only in the spot market. Korea's major producer and all responding importers sell either ***. Korean ESBR is ***. Of the 12 responding importers, two reported that during the period of investigation they both used and sold ESBR, four reported that they imported only for sale, and five reported that they imported only for their own use.[1] ESBR is mainly sold in compressed bales weighing from 75 to 85 pounds.[2] A small amount of non-compressed ESBR is sold in bags and it is used in different products than ESBR in bales.

Replacement tire producers[3] and firms that produce masterbatch for sale are the main users of ESBR. Tire producers use ESBR to make masterbatch that in turn is used to produce tires.[4] Tires are estimated to consume 70 percent of all ESBR sold in the United States. Other products that contain ESBR include engine mounts, bushings, weather stripping, mudflaps, car mats, conveyor belts, hoses, roller coverings, and adhesives. None of these use a majority of the ESBR not used in tires.

ESBR comes in a variety of chemical variations which are distinguished by IISBR numbers. The most common of these, 1502 and 1712 grades, are used in tires and account for most of the overall consumption of the 1500 and 1700 series of ESBR. Within each IISBR number there may be small variations in the water content and in residual styrene and butadiene that affects the recipe used to make the masterbatch and the amount of waste product. For this reason, some producers prefer not to change suppliers from sale to sale. Two purchasers reported using "off specification" material that is occasionally available at low prices.[5]

Importers from Brazil and Korea sell a similar range of ESBR as domestic producers. The Mexican producer, however, reports that it now exports only grades 1502 and 1712 to the United States. Imports from the subject countries comprised *** percent of the value of U.S. consumption in 1997, domestic producers' shipments comprised *** percent, and imports from nonsubject countries comprised *** percent. The overall market grew by *** percent in volume between 1995 and 1997.

Domestic producers sell the majority of their ESBR on a cost-plus contract basis. These prices are determined by negotiations which usually occur annually; at this time, the buyer and seller determine ESBR's markup above the cost of styrene and butadiene. All three U.S. producers have price lists and one reported that it tried to sell at list price but also attempts to meet competition. ***. Importers of product from Brazil and Korea typically sold on a spot basis, although two importers from Korea reported selling

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[1] In addition, one importer, ***, reported that it neither sold nor used subject ESBR. It reported that it imported ESBR from ***.

[2] Conference transcript, p. 22.

[3] Tires for new cars are typically made with SSBR, which is more expensive than ESBR but provides better gas mileage to meet the CAFE standards.

[4] Different parts of the tire need different characteristics and therefore different types of masterbatch may be used to produce the different parts.

[5] ***. Discussions with Commission staff, Apr. 14, 1998.

on both a spot and a contract basis. In contrast, the only importer from Mexico that sold ESBR in 1997 sold it only on a contract basis.[6]

Demand for ESBR is determined by the demand for tires and other rubber products and the amount of ESBR used to produce these products.[7] During the period of investigation, demand for ESBR grew as the number of automobiles increased and as consumers moved to larger and more high-performance vehicles and tires. ESBR and other rubber products may be substituted in some uses, and the price of other types of rubber will affect the overall amount of ESBR used in various products.

SUPPLY AND DEMAND CONSIDERATIONS

U.S. Supply

Domestic Production

Based on the available information, staff believes that U.S. ESBR producers are likely to respond to changes in demand with relatively small changes in shipments of U.S.-produced ESBR to the U.S. market, and larger changes in prices. Factors contributing to the low responsiveness of supply are discussed below.

Capacity in the U.S. industry

DSM reported that it prefers to change the price of ESBR rather than reduce the quantity the firm sells.[8] This is because plants are most efficient when run continually. The low levels of reported excess capacity in production facilities imply that the industry cannot increase production significantly. Domestic producers reported high capacity utilization rates throughout the period of investigation; they ranged from a high of *** percent in 1995 to a low of *** percent in 1997 (table III-2).

Production alternatives

Most of the equipment used to produce ESBR cannot readily be converted to produce other rubber products. Synthetic rubbers other than ESBR are produced on different production lines which could not be used to produce ESBR without major modifications. Similarly, the equipment used to produce ESBR cannot be used for other synthetic rubber production without major modifications.

Inventory levels

The moderate level of inventories during the period for which data were collected indicate that U.S. producers are able to respond to changes in demand with some shipments from inventories. Inventories grew from *** pounds in 1995 to *** pounds in 1997. The inventories rose steadily from *** percent of annualized shipments in 1995 to *** percent of annual shipments in 1997.

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[6] Before 1997, one additional importer, ***, imported Mexican product for its own use.

[7] Larger cars require larger tires using more rubber and high-performance tires may use more ESBR. Radial tires use less ESBR per tire and last longer than bias tires. Conference transcript, p. 69.

[8] Didier Begat, Vice President, SBR, DSM Copolymer, conference transcript, p. 66.

Export markets

Domestic producers' exports fell from *** percent of production in 1995 to *** percent in 1997. The moderate level of exports indicates that domestic producers could shift shipments from other markets to the U.S. to replace some subject imports.

U.S. Demand

Demand for ESBR grew relatively slowly over the period of investigation. The main factors influencing overall demand for ESBR are the number and types of vehicles in use and the types of tires they use, and the cost of other types of synthetic and natural rubber that can substitute for ESBR.

Substitute Products

One of the three responding U.S. producers,***, and five of the nine responding importers reported substitutes for ESBR. The substitutes for ESBR that these firms reported include black masterbatch in the 1600 and 1800 series, SSBR, natural rubber, polyisoprene, and alpha-metylstyrene-butadiene rubber.

ESBR, other rubber, and other products, are mixed to make a masterbatch; the ingredients used are determined by the performance characteristic desired. Tire manufactures, however, have some flexibility in the types of rubber and other ingredients they can use without reducing performance. For example, Cooper Tire reported that during 1994 it was unable to get enough ESBR so it replaced some ESBR with black masterbatch.[9] Cooper also reported a number of methods it had developed to substitute between rubber products.[10]

Economists for the Mexican respondent and for Cooper contend that the prices of natural rubber drive the prices of ESBR, and that the very high price of natural rubber in 1995 and early 1996 was the reason ESBR prices were abnormally high during that period.[11] Natural rubber users, where possible, replaced natural rubber with ESBR and other synthetic rubbers, bidding up the price of these. For example, in 1994, when natural rubber prices were at a historic high, Bridgestone-Firestone reported that it had "substituted synthetic rubber for NR (natural rubber) wherever possible without compromising product specifications."[12] The respondents' economists also report that they found the more recent fall in the price of natural rubber caused the world price of ESBR and other synthetic rubbers to fall.

The respondents modeled the price of ESBR using changes in the price of natural rubber to predict changes in the price of ESBR.[13] They claim that the price hypothesis that natural rubber prices influence the price of ESBR cannot be rejected, and that there is no evidence that changes in ESBR prices lead to changes in the price of natural rubber.[14] In addition, it was argued that the reduction in the price of ESBR that occurred in the United States between 1995 and 1997 is similar to the reduction in the price of ESBR in Europe.[15]

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[9] Keith Jolliff, Vice President of Purchasing, Cooper Tire, conference transcript, p. 73.

[10] Cooper Tire's postconference brief, exhibit 4.

[11] Conference transcript, pp. 79-84 and 93-95.

[12] *High demand, bad weather boost NR prices* by Miles Moore, *Rubber and Plastics News II*, Aug. 8, 1994, p. 5.

[13] Prices for both 1502 and 1712 grades were predicted using *** purchase prices and published prices of natural rubber.

[14] Cooper Tire's postconference brief, exhibit 3.

[15] Postconference brief of Korea Kumho Petrochemical Co., apps. 2 and 3.

Cost Share

Price changes in ESBR will likely have a small impact on its consumption in spite of ESBR being a relatively large share of the cost of masterbatch. Three importers reported the cost share of ESBR in producing masterbatch and in ***, with costs ranging from 35 to 60 percent of the total cost of the masterbatch blend. In addition,*** reported that *** ESBR could account for from 0 to 50 percent of the cost of masterbatch depending on the formula used and the availability of alternatives, including "off specification" material, natural rubber, and SSBR. The high cost of ESBR in masterbatch will lead users to consider substitutes; however, different combinations not only may have different end-use characteristics, they may also have different workability. Changes that reduce workability will reduce the willingness of firms to buy substitutes.

ESBR was reported to be from 4 to 16 percent of the cost of tire production. ESBR is mainly used in replacement tires; the cost of replacement tires is a necessary part of the cost of maintaining a vehicle, and using worn-out tires would create serious safety concerns as well as possibly being illegal. Thus it is probable that relatively small changes in the price of tires will have little impact on demand.

Goodyear estimated that ESBR accounted for ***.[16] The raw material cost of ESBR in other products is not available.

SUBSTITUTABILITY ISSUES

Producers and importers were requested to provide information regarding the interchangeability of domestic ESBR and subject imports and to describe differences between ESBR coming from these countries. All responding domestic producers and 10 of the 11 responding importers reported that domestic and subject ESBR were interchangeable. The remaining importer reported that Korean and other ESBR were not interchangeable because only Korean product could be used in some applications requiring very high quality ESBR.[17] Two domestic producers reported no differences between subject imports and U.S.-produced ESBR, and one, ***, reported differences including the U.S. product's better technical service, returnable containers, and shorter supply lines. Only two of the eight responding importers reported no differences between subject imports and U.S. product. Three of the remaining six reported that subject imports were of better quality, two reported different sales terms, and one reported that the domestic product had advantages including "Buy American," lead times, captive transfers, and better distribution.

Producers and importers were requested to provide information regarding the interchangeability of subject product among the three subject countries and nonsubject ESBR[18] and to describe differences between ESBR coming from these countries. All domestic producers and eight of the nine responding importers reported that product from all subject countries was interchangeable. The importer that reported these were not interchangeable reported that only Korean ESBR could be used in certain very high quality uses. In addition, two others reported that the Korean product was of superior quality. When asked to report differences between product from these countries, all U.S. producers and six of the nine responding firms reported that there was no difference. One of the remaining three firms reported that the Korean product was of superior quality, one reported that sales conditions may differ, and one reported that Mexican product was different from other imports because it had no spot sales, shorter lead times, and

[16] Goodyear's producer questionnaire, p. 7.

[17] Two importers that reported U.S., Brazilian, Korean, and Mexican ESBR were interchangeable also reported that Korean product was superior.

[18] Importers reported purchasing nonsubject imports from Argentina, Belgium, France, Germany, the Netherlands, and Russia.

better customer service; in addition, all of Mexico's sales were through a subsidiary, it sold only grades 1502 and 1712, and Mexican imports to the United States were declining.

The Mexican importers reported that one of the important differences between their imports and those from other subject countries was that they had developed a new strategy under which they sold only on formula sales contracts. Of the seven importers reporting on whether they sold on contract, the major Mexican importer was the only one using formula sale contracts, and the only one selling only on contracts ***. Two of the four importers of Korean product reported that they sold part of their imports on contract; however, the Korean contracts were for ***. The importers of Brazilian ESBR all sold only at spot prices.

The lead time between a customer's order and delivery for U.S.-produced ESBR varied between 10 and 14 days. Importers' average lead times ranged from 1 to 60 days. Lead times of 10 days or less were reported by 3 of the 7 responding importers;[19] the remainder reported lead times from 30 to 60 days.

[19] In addition, 1 of the 7 importers reported lead times from 1 day to 6 weeks.

PART III: CONDITION OF THE U.S. INDUSTRY

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the alleged margins of dumping was presented earlier in this report and information on the volume and pricing of imports of the subject merchandise is presented in parts IV and V. Information on the other factors specified is presented in this section and/or part VI and (except as noted) is based on the questionnaire responses of 3 firms that together accounted for 100 percent of U.S. production of ESBR during 1997.

U.S. PRODUCERS

In addition to the two petitioners, two other firms (Goodyear Tire and Rubber Co. and Dynagen, Inc.) produced ESBR in the United States during the investigative period; however, Dynagen's sole plant (Odessa, TX) was sold to petitioner Ameripol Synpol in 1997. U.S. producers' identities, plant locations, and shares of U.S. production are shown in table III-1. The lone non-petitioner *** the petition. In terms of shares of total production and shipments, each of the three firms in 1997 was a significant producer. In 1997, Goodyear captively consumed *** percent of the ESBR it produced.

Table III-1
Certain ESBR: U.S. producers, plant locations, share of production in 1997, and position on the petition

Firm	Location of production facilities	Share (percent) of reported total production of ESBR in 1997	Position on the petition
Ameripol Synpol Corp.	Port Neches, TX Odessa, TX	*** ***	Petitioner
DSM Copolymer, Inc.	Baton Rouge, LA	***	Petitioner
Goodyear Tire and Rubber Co.	Houston, TX	***	***

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

U.S. PRODUCTION, CAPACITY, CAPACITY UTILIZATION, SHIPMENTS, INVENTORIES, AND EMPLOYMENT

Aggregate data for the U.S. producers of ESBR are shown in table III-2. Production increased slightly in 1996 and then decreased by *** percent in 1997. Petitioners accounted for *** percent of total U.S. production in 1997, *** from *** percent in 1995. Goodyear *** its share from *** percent in 1995 to *** percent in 1997. Goodyear captively consumed *** of ESBR, or *** percent of its production in 1997, *** percent in 1995. Ameripol Synpol's production *** to *** in 1997. DSM *** its production from *** in 1995 to *** in 1997. DSM *** in 1997 a result of ***.[1] Ameripol Synpol's capacity *** during the period of investigation, except for its purchase of the Dynagen plant in 1997, and Goodyear ***. Aggregate capacity utilization was high, but decreased in both 1996 and 1997.

[1] Telephone conversation with Donald Morgan, petitioners' counsel, Apr. 28, 1998.

Aggregate trends in U.S. shipments paralleled those for U.S. production, although the unit value of the U.S. shipments declined in both 1996 and 1997 (table III-3). The quantity, value, and unit value of exports also declined in 1996 and 1997, as did the number of production and related workers and hours worked. Inventories, hourly wages, and total wages paid all increased in both 1996 and 1997.

Table III-2
Certain ESBR: U.S. production, average practical capacity, capacity utilization, shipments, end-of-period inventories, and employment-related indicators, 1995-97

* * * * * * *

Table III-3
Certain ESBR: U.S. producers' shipments, by types, 1995-97

* * * * * * *

U.S. PRODUCERS' IMPORTS AND PURCHASES

No U.S. producer reported imports of subject or nonsubject ESBR. ***.

CAPTIVE CONSUMPTION OF ESBR BY U.S. PRODUCERS

Captive consumption of ESBR for the production of downstream products by the three U.S. producers of ESBR amounted to *** percent of the volume of U.S. producers' aggregate U.S. shipments of ESBR in 1995, *** percent in 1996, and *** percent in 1997. Of the three U.S. producers, *** Goodyear consumed ESBR captively during 1995-97.

Goodyear captively consumed *** percent of the volume of its U.S. shipments of ESBR in 1995, *** percent in 1996, and *** percent in 1997. The ESBR that Goodyear captively consumes *** from the ESBR it sells commercially; the *** of ESBR that Goodyear only produces for captive consumption but for which there is also a commercial market ***. The downstream products in which Goodyear uses its ESBR are tires ***. Goodyear estimated that ESBR accounts for *** percent of the raw material cost of producing tires ***.[2] The principal use of the ESBR sold by all three U.S. producers is in the production of tires, which is also the principal use of the ESBR that Goodyear captively consumes.[3]

[2] Information concerning Goodyear reported in this section of the report is from Goodyear's response to the Commission's questionnaire to producers, pp. 5, 7, and 8.

[3] Petitioners contend that although the ESBR produced by Goodyear and the ESBR produced by the petitioners are used primarily for tire production, the tires produced by each manufacturer are different and thus the captively-produced ESBR and the commercial-market ESBR are not used in the production of the same downstream articles (petitioners' postconference brief, p. 29).

PART IV: U.S. IMPORTS, APPARENT CONSUMPTION, AND MARKET SHARES

The largest known U.S. importers by far during 1995-97 were : (1) from Brazil, ***; (2) from Korea, ***; and (3) from Mexico, ***. Five of the importers imported ESBR from more than one of the subject countries; no firm reported imports from all three countries.

Questionnaires were sent to 27 firms believed to be importers of ESBR, based on information provided by the U.S. Customs Service and on information in the petition. Questionnaire responses were received from 21 of the 27 firms, including from all importers believed to be large importers of ESBR; 10 firms responded that they did not import the subject products. Based on questionnaire responses, it appears that the overwhelming bulk of ESBR imported into the United States is produced in Brazil, Korea, and Mexico. ESBR from other countries has entered the United States, but to date only in small quantities and on a limited basis.[4] ***.

U.S. imports, by sources, are presented in table IV-1, and U.S. import shares, by sources, are presented in table IV-2. The import data presented in the tables are based on questionnaire responses received and were checked against the responses from foreign exporters.[5]

Table IV-1
Certain ESBR: U.S. imports, by sources, 1995-97

* * * * * * *

Table IV-2
Certain ESBR: U.S. producers' shipments by types, U.S. importers' shipments by sources, and U.S. commercial and total consumption, 1995-97

* * * * * * *

U.S. commercial consumption and commercial market shares, based on U.S. producers' shipments plus import shipments, are shown in table IV-3, and U.S. total consumption and total market shares are shown in table IV-4.[6]

Table IV-3
Certain ESBR: U.S. commercial consumption and commercial market shares, 1995-97

* * * * * * *

Table IV-4
Certain ESBR: U.S. total consumption and market shares, 1995-97

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[4] Responses to Commission questionnaires and conference transcript, p. 65.

[5] There are 4 known foreign producers of subject imports and the Commission received useable responses from all. The amount of product importers reported and foreign exporters reported is similar. Differences can be attributed to timing of shipments and the *** known importers that did not provide any response. However, these ***.

[6] During the period of investigation ***. ***. There were ***. The unit values were ***.

* * * * * * *

PART V: PRICING AND RELATED DATA

FACTORS AFFECTING PRICING

Raw Material Costs

The average cost of all raw materials of the U.S. producers is presented in part VI of the report. These costs amounted to *** per pound in 1995, *** per pound in 1996, and *** per pound in 1997.[1] The prices of both styrene and butadiene fell substantially during the period of investigation.

U.S. Inland Transportation Costs

*** reported that U.S. inland transportation costs account for between *** and *** percent of the total delivered price of ESBR. Three importers reported transportation costs; these costs accounted for between 1 and 15 percent of the delivered price of ESBR.[2]

Tariff Rates

ESBR is covered by subheading 4002.19.00 of the HTS. The most-favored-nation (MFN) tariff rate for these products is free.

Exchange Rates

Quarterly exchange rates reported by the International Monetary Fund for Brazil, Korea, and Mexico during the period January 1995-December 1997 are shown in figures V-1 to V-3.

PRICING PRACTICES

ESBR is sold in a variety of grades with different characteristics and uses, the most important of which are 1502 and 1712, which are mainly used in tires. The 1700 series contains oil while the 1500 series does not; as a result, the 1700 series tends to be less expensive since the oil used costs less than styrene or butadiene. ESBR is sold in formula sales contracts, in the spot market, and to distributors. In formula sales contracts, the price is agreed to by buyer and seller with an adjustment factor for changes in the cost of styrene and butadiene. In addition, the major Korean producer reported that it sold using ***. Of the three domestic producers,*** reported having meet-or-release provisions in its contracts.

ESBR is sold mainly in bales weighing from 75 to 85 pounds, which are wrapped in plastic film. These bales are usually sold by the truck or container load.

All domestic producers reported that they normally offer ***. Three of the seven responding importers offered no discounts, two reported some quantity discounts, one reported that volume was a consideration, and one reported that some customers had been granted prompt-payment discounts.

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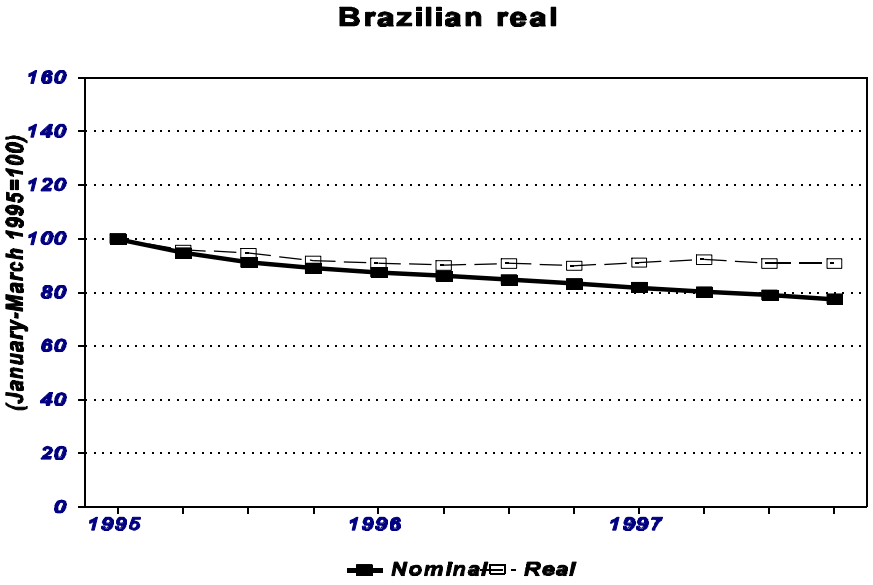
[1] Styrene and butadiene made up from *** percent of the cost of production of 1500 series ESBR and *** percent of the cost of production of 1700 series ESBR. Percentages reported by ***. Data reported by *** do not separate the costs of styrene and butadiene between the 1500 series and the 1700 series. Overall,*** reports that styrene and butadiene made up between *** percent of the cost of goods sold.

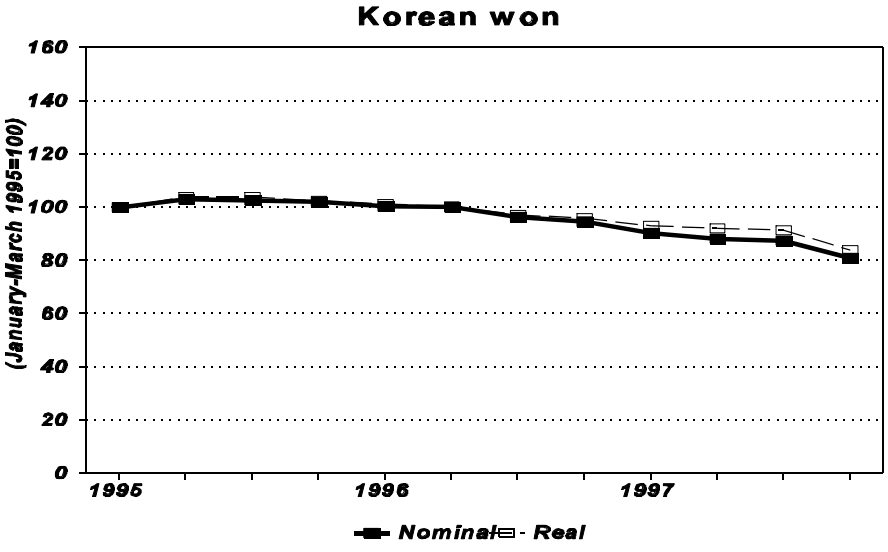
[2] In addition, one firm reported that transportation accounted for 0 percent of the delivered cost of ESBR; however, this firm also reported that the purchaser paid for transportation.

Figure V-1
Exchange rates: Indexes of the nominal and real exchange rates of the Brazilian real relative to the U.S. dollar, by quarters, Jan. 1995-Dec. 1997



Source: International Monetary Fund, *International Financial Statistics*, March 1998.

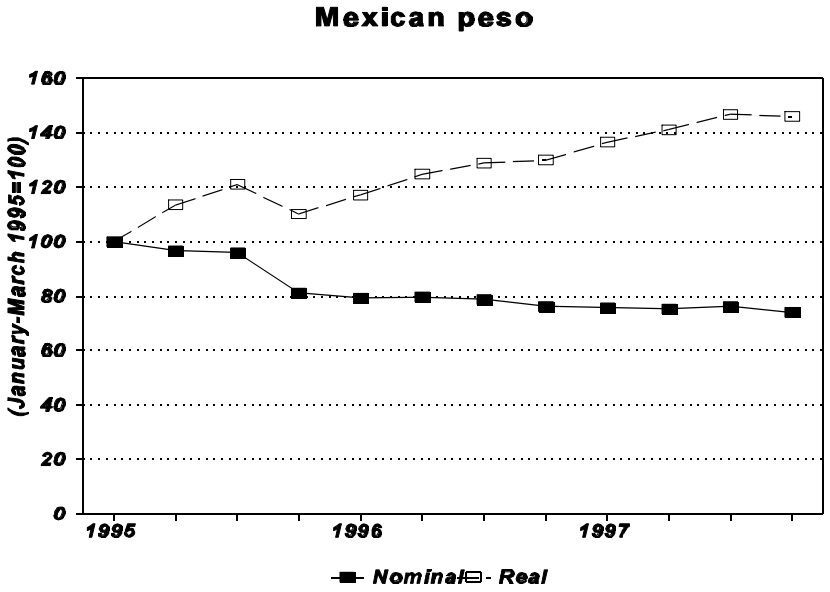
Figure V-2
Exchange rates: Indexes of the nominal and real exchange rates of the Korean won relative to the U.S. dollar, by quarters, Jan. 1995-Dec. 1997



Source: International Monetary Fund, *International Financial Statistics*, March 1998.

Figure V-3

Exchange rates: Indexes of the nominal and real exchange rates of the Mexican peso relative to the U.S. dollar, by quarters, Jan. 1995-Dec. 1997



Source: International Monetary Fund, *International Financial Statistics*, March 1998.

All of the domestic producers and one importer had price lists. All the domestic producers and two of the seven responding importers sold both on a spot basis and contract basis. One importer,***, sold only on a contract basis, four importers, selling Korean or Brazilian ESBR, sold only on a spot basis; and two sold on both a contract and a spot basis (both of these sold Korean ESBR).

Both responding domestic producers reported selling on an f.o.b. basis.[3] Five of the six responding importers sold on an f.o.b. basis, and the remaining one sold on both f.o.b. and delivered bases.

Domestic producers reported longer-term contracts than importers. One domestic producer reported contracts from ***, and the other two reported *** contracts. In contrast, one of the three responding importers reported 1-year contracts, one reported quarterly contracts, and the other had contracts that lasted for 1 to 2 months.

In 1997 the number of domestic producers of ESBR fell from four to three with the purchase of Dynagen, Inc. by Ameripol Synpol. ***.

PRICE DATA

The Commission requested the U.S. producers and importers to provide quarterly quantity and value data both for sales on the spot market and for formula sales contracts between January 1995 and December 1997 for the following products:

Product 1.--IISRP 1502 grade of ESBR
Product 2.--IISRP 1712 grade of ESBR

[3] *** did not answer this question.

U.S. producers and importers who sold ESBR were asked to provide values for the product f.o.b. at their U.S. point of shipment. In addition, importers which processed ESBR were asked to provide the value of the products delivered to their U.S. establishments.

Three U.S. producers[4] and 13 importers provided usable price data for sales of the requested products in the U.S. market, although not necessarily for both products, all types of sales, all quarters, or all countries. Weighted-average pricing data and margins of under/overselling are presented in tables V-1 to V-6 and figures V-4 and V-5. Usable pricing data accounted for about 66 percent of U.S. commercial shipments of domestic ESBR and about 50 percent of shipments of ESBR from Brazil, Korea, and Mexico combined for product that was sold by the importers. When the imports processed by the importers are included, prices for products 1 and 2 cover 90 percent of all subject imports.

U.S. Producers' and Importers' Prices

U.S. Product

U.S. producers' spot prices for product 1 ranged from a high of *** per pound to a low of *** per pound; product 1 prices on a formula contract basis ranged from a high of *** per pound to a low of *** per pound. Spot prices for product 2 ranged from *** to *** per pound, while formula contract product 2 prices ranged from *** to *** per pound. Prices for product sold in formula sales contracts tended to be below those sold at spot prices. Prices for products 1 and 2 followed similar trends. Product 1's prices, both spot and formula, peaked in the third quarter of 1995, after which they fell rapidly, with the lowest prices reached in the second quarter of 1996 and the third quarter of 1997 for formula prices and in the fourth quarter of 1996 and the fourth quarter of 1997 for spot prices. Product 2's spot price peaked in the second and third quarters of 1995, after which it fell, reaching its minimums in the second and final quarters of 1997. Product 2 formula prices peaked in the final quarter of 1996 and showed no consistent price trend over the period, although the price was at its lowest in the final quarter of 1997. Over the entire period of investigation, the spot price of product 1 fell by *** percent and the formula price fell by *** percent. The spot price of product 2 fell by *** percent and the formula price fell by *** percent.

Brazilian Product

No price data were available for formula contract sales of Brazilian products 1 and 2. Spot prices for Brazilian product 1 ranged from *** per pound at their peak in the fourth quarter of 1995 to *** per pound in the third quarter of 1997. The spot price for product 2 ranged from a high of *** per pound in the third quarter of 1995 to a low of *** per pound in the last quarter of 1997. Over the period of investigation, the spot price of product 1 was unchanged and the spot price of product 2 fell by *** percent.

Importers processing Brazilian product 1[5] reported prices for the first and second quarters of 1996 and all quarters of 1997. The price peaked in the first quarter of 1996 at *** per pound and reached its minimum in the final quarter of 1997 at *** per pound, falling by *** percent over that time span. Prices for Brazilian product 2[6] for importers who process ESBR were available for all quarters except the first quarter of 1995. The price peaked in the third quarter of 1995 at *** per pound, after which it fell to $0.34 per pound in the final quarter of 1997; over the period for which prices were available it fell by *** percent.

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[4] ***.

[5] ***.

[6] ***.

Table V-1
Certain ESBR: Weighted-average net f.o.b. spot prices (per pound) and quantities for sales to unrelated U.S. customers for product 1[1] reported by U.S. producers and importers, and margins of underselling/(overselling), by quarters, Jan. 1995-Dec. 1997

Period	U.S. Product			Brazilian Product				Korean Product			
	Net f.o.b. price	Quantity	Co.	Net f.o.b. price[2]	Quantity	Co.	Margin	Net f.o.b. price[3]	Quantity[2]	Co.	Margin[2]
	Per pound	*1,000 pounds*		*Per pound*	*1,000 pounds*		*Percent*	*Per pound*	*1,000 pounds*		*Percent*
1995:											
January-March.....	***	***	2	***	***	1	***	***	***	1	***
April-June.....	***	***	2	***	***	1	***	***	***	1	***
July-September.....	***	***	2	***	***	2	***	***	***	1	***
October-December...	***	***	2	***	***	1	***	***	***	1	***
1996:											
January-March.....	***	***	3	***	***	2	***	***	***	1	***
April-June.....	***	***	3	***	***	2	***	***	***	1	***
July-September.....	***	***	3	***	***	1	***	***	***	1	***
October-December...	***	***	3	***	***	1	***	***	***	2	***
1997:											
January-March.....	***	***	3	***	***	1	***	***	***	2	***
April-June.....	***	***	2	***	***	1	***	$0.48	1,099	3	***
July-September.....	***	***	3	***	***	1	***	0.47	1,274	3	***
October-December...	***	***	3	***	***	1	***	0.45	1,180	3	***

[1] IISRP 1502 grade of ESBR.
[2] Number of companies reporting data.
[3] ***.

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

Table V-2
Certain ESBR: Weighted-average net f.o.b. spot prices (per pound) and quantities for sales to unrelated U.S. customers for product 2 reported by U.S. producers and importers, and margins of underselling/(overselling), by quarters, Jan. 1995-Dec. 1997

* * * * * * *

Table V-3
Certain ESBR: Weighted-average net f.o.b. formula sales contract prices (per pound) and quantities for sales to unrelated U.S. customers for product 1 reported by U.S. producers and importers, and margins of underselling/(overselling), by quarters, Jan. 1995-Dec. 1997

* * * * * * *

Table V-4
Certain ESBR: Weighted-average net f.o.b. formula sales contract prices (per pound) and quantities for sales to unrelated U.S. customers for product 2 reported by U.S. producers and importers, and margins of underselling/(overselling), by quarters, Jan. 1995-Dec. 1997

* * * * * * *

Figure V-4
Weighted-average net f.o.b. prices (per pound) of product 1, by quarters, Jan. 1995-Dec. 1997

* * * * * * *

Figure V-5
Weighted-average net f.o.b. prices (per pound) of product 2, by quarters, Jan. 1995-Dec. 1997

* * * * * * *

Table V-5
Certain ESBR: Weighted-average net delivered import prices (per pound) and quantities for importers' own use, product 1,[1] by quarters, Jan. 1995-Dec. 1997

Period	Brazilian Product			Korean Product			Mexican Product		
	Net delivered price[2]	Quantity	Co.	Net delivered price[2]	Quantity	Co.	Net delivered price[2]	Quantity	Co.[3]
	Per pound	*1,000 pounds*		*Per pound*	*1,000 pounds*		*Per pound*	*1,000 pounds*	
1995:									
January-March	(4)	(4)	-	$0.45	3,285	3	***	***	1
April-June	(4)	(4)	-	0.55	2,593	3	***	***	1
July-September	(4)	(4)	-	***	***	2	***	***	1
October-December			-	0.74	1,556	3	***	***	1
1996:									
January-March	***	***	1	***	***	2	***	***	1
April-June	***	***	1	***	***	2	***	***	1
July-September	(4)	(4)	-	0.49	3,869	3	***	***	1
October-December	(4)	(4)	-	0.48	3,383	3	(4)	(4)	-
1997:									
January-March	***	***	1	0.44	3,429	4	(4)	(4)	-
April-June	***	***	2	0.48	3,723	4	(4)	(4)	-
July-September	***	***	2	0.41	3,733	4	(4)	(4)	-
October-December	***	***	2	0.36	5,116	4	(4)	(4)	-

[1] IISRP 1502 grade of ESBR.
[2] ***.
[3] Number of companies reporting data.
[4] Data not reported.

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

Table V-6
Certain ESBR: Weighted-average net delivered import prices (per pound) and quantities for importers' own use, product 2,[1] by quarters, Jan. 1995-Dec. 1997

Period	Brazilian Product			Korean Product			Mexican Product		
	Net delivered price[2]	Quantity	Co.	Net delivered price[2]	Quantity	Co.	Net delivered price[2]	Quantity	Co.[3]
	Per pound	*1,000 pounds*		*Per pound*	*1,000 pounds*		*Per pound*	*1,000 pounds*	
1995:									
January-March.....	(4)	(4)	-	***	***	2	***	***	1
April-June	***	***	1	***	***	2	***	***	1
July-September.....	***	***	1	$0.54	927	3	***	***	1
October-December ...	***	***	1	0.53	889	3	***	***	1
1996:									
January-March.....	***	***	2	***	***	2	***	***	1
April-June.....	$0.42	916	3	***	***	2	***	***	1
July-September.....	***	***	2	0.40	1,712	3	***	***	1
October-December ...	***	***	2	0.40	251	3	***	***	1
1997:									
January-March.....	0.39	5,203	3	0.39	2,433	4	(4)	(4)	-
April-June.....	***	***	2	0.38	4,955	5	(4)	(4)	-
July-September.....	0.37	3,131	3	0.36	4,029	4	(4)	(4)	-
October-December ...	0.34	6,019	3	0.36	2,306	3	(4)	(4)	-

[1] IISRP 1712 grade of ESBR.
[2] ***.
[3] Number of companies reporting data.
[4] Data not reported.

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

Korean Product

No price data were available for formula contract sales of Korean products 1 and 2. The spot price for Korean product 1 ranged from *** at its peak in the second quarter of 1995 to $0.45 per pound in the final quarter of 1997. The price steadily declined between these periods. Spot prices for Korean product 2 were not available for first and fourth quarters of 1995 and the first quarter of 1996. The spot price for product 2 ranged from a high of *** per pound in the second and third quarter of 1995 to a low of *** per pound in the fourth quarter of 1997. The price of product 2 fell steadily between these periods. Over the period of investigation, the price of product 1 fell by *** percent and the price of product 2 fell by *** percent.

The price importers/processors paid for Korean product 1 peaked in the fourth quarter of 1995 at $0.74 per pound; it reached its minimum in the final quarter of 1997 at $0.36 per pound. Korean product 1's price fell by 20 percent over the period of investigation. Importers' product 2 prices peaked at $0.54 per pound in the third quarter of 1995 and reached their minimum in the third and fourth quarters of 1997 at $0.36 per pound. The Korean product 2 prices fell *** percent over the period of investigation.

Mexican Product

Spot prices for Mexican product 1 and 2 were not available. The formula sales contract price of Mexican product 1 ranged from *** to *** per pound. The price for product 1 peaked in the third quarter of 1995, after which it fell to its lowest price the third quarter of 1997. The final price was *** percent below the initial price. Reported prices for product 2 ranged from *** in the third quarter of 1995 to *** per pound in the final quarter of 1997. The final price was *** percent below the initial price.

Importers/processors' Mexican products 1 and 2 prices were reported only for 1995 and 1996. The price of product 1 peaked in the fourth quarter of 1995 at *** per pound, and its lowest price was in the first quarter of 1995 at *** per pound. The price rose by *** percent over the period for which prices were available. Importers/processors' Mexican product 2's price peaked in the third quarter of 1995 at *** per pound, after which it fell to *** per pound in the final quarter of 1996; over the period for which prices were available, they fell by *** percent.

Price Comparisons

Tables V-1 to V-4 shows the margins of underselling/(overselling) for ESBR from January-March 1995 through October-December 1997 for the subject countries. Brazilian product 1 (spot) undersold U.S. product 1 in 9 quarters, with margins of underselling ranging from *** percent to *** percent. In the remaining 3 quarters, margins of overselling ranged from *** percent to *** percent. All instances of overselling occurred in the final quarter of 1996 through the end of 1997. Product 2 (spot) from Brazil undersold the U.S. product in 8 quarters and oversold in 4 quarters, with margins of underselling ranging from *** percent to *** percent and margins of overselling ranging from *** percent to *** percent; underselling occurred sporadically throughout the period.

For Korean product 1 (spot) there were 6 instances of underselling and 6 of overselling. Margins of underselling for product 1 ranged from *** percent to *** percent, and margins of overselling ranged from *** percent to *** percent; underselling and overselling followed no pattern. Korean product 2 (spot) undersold the U.S. product in one quarter of the period of investigation; in the remaining 8 quarters for which prices were available, it oversold the U.S. product. The margin of underselling was *** percent; margins of overselling ranged from *** percent to ***.

Product 1 (formula sales contract) from Mexico had 6 instances of overselling and 6 instances of underselling. The margins of overselling ranged from *** percent to *** percent, and underselling margins ranged from *** percent to *** percent. Underselling occurred in the first quarter of 1995 and all quarters of 1997. Mexican product 2 (formula sales contract) undersold U.S. product only in the final 3

quarters of 1997; in the remaining 9 quarters, it oversold U.S. product 2. Underselling margins ranged from *** percent to *** percent, and margins of overselling ranged from *** percent to *** percent.

LOST SALES AND LOST REVENUES

Two domestic producers (***) reported 12 allegations of lost sales with a total value of *** (table V-7) and 16 allegations of lost revenues with a total value of *** (table V-8).[7] Staff obtained comments from 13 of the 15 purchasers named, as detailed below. Information was obtained on all 12 specific lost sales allegations; of these, 4 were confirmed or partially confirmed by the purchasers and 8 were denied by the purchasers. Of 16 lost revenue allegations, information was obtained in 12 instances; 3 instances were confirmed or partially confirmed, 4 were denied, and in 5 cases the purchaser did not have information available to confirm or deny the allegations.

Table V-7
Lost sales allegations reported by petitioners

* * * * * * *

Table V-8
Lost revenues allegations reported by petitioners

* * * * * * *

*** was named in *** lost sales allegations, with a value of ***.[8] *** reported that he could not recall the exact details about this order. He reported that in *** had bought the *** grade from a domestic producer at *** a pound and in *** it bought imports at a lower price from Brazil and Korea. Regarding the *** grade, he reported that the amount reported in the lost sales allegation was not correct. His firm typically purchases about *** pounds of *** per year. He reported that the rest of the information regarding the *** grade was reasonable.

*** was named in one lost sales allegation, with a value of ***.[9] *** reported the he now buys only from ***. He did report that he had once purchased *** of *** grade from ***. He did not recall the date. He reports that the price of the product from *** was slightly lower than the price of the domestic product, not the *** reported in the lost sales allegation.

*** was named in *** lost sales allegations, with a value of ***.[10] *** reported that no firm was offering *** grades at prices of *** cents per pound. He had never seen rubber prices that high while he has been in the business. The highest price he ever faced was *** cents per pound. *** now uses about *** pounds per year of *** grade. In the most recent period, their orders were split between ***.

*** was named in *** lost sales allegations, with a value of ***.[11] *** agreed that *** had purchased imports in the last 4 years. His firm had imported *** directly from *** and buys other product produced by *** through a local distributor. He reported that he purchased imports because of the lower price and that the amounts reported in the allegation are reasonable. He reported that his purchasing price between *** for *** grade was from *** cents per pound to *** cents per pound for prime grade material.

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[7] *** domestic producers reported a number of additional lost sales and lost revenue allegations in their questionnaires; however, they did not provide enough data on these to follow up on these allegations.

[8] Discussions with Commission staff, Apr. 17, 1998.

[9] Discussions with Commission staff, Apr. 15, 1998.

[10] Discussions with Commission staff, Apr. 14, 1998.

[11] Discussions with Commission staff, Apr. 14, 1998.

They purchased no *** grade during the period covered. He reported that *** purchases *** of *** grade per quarter ***, thus the amount reported in the lost sales allegation is higher than their normal purchases.

*** was named in one lost sales allegation, with a value of ***.[12] *** reported that North American producers are their largest supplier of *** grade, providing almost *** of *** consumption of this product. She reported that the firm purchases from one to three suppliers for products, usually with two major players and one minor. She reported that quality of the specific grade was the most important factor in purchases. The next most important factor was consistency within grade. Inconsistency can create a high scrap rate which is costly. The third most important factor she reported was technical compatibility with the suppliers. If there were a large number of suppliers it was difficult to form technical partnerships with the suppliers and this reduces the ability to use their technical expertise effectively. *** is interested in the lowest total cost and price is not the most important part of this. Finally, she reported that they have plants *** and want *** so they can use the same technical expertise ***. Therefore she reported that she did not agree with the allegation that the lower price of imports led *** to purchase imports instead of domestic product.

*** was named in one lost sales allegation, with a value of ***.[13] *** denied the allegation. He reported that *** only purchases domestic *** grade and did not purchase any imports.

*** was named in *** lost sales allegations, with a value of ***.[14] *** reported that his firm does ***, which is mainly used by the ***. His firm purchases domestic *** grade, not imports. He reported that in January 1997 the price of both domestic and imported *** was the same. At that time *** was buying only imports because the quality of imports, particularly those from ***, was superior to domestic product. Only in *** did the price of imports fall; however, this did not cause *** to buy imports because it was already buying imports because of their quality.

*** was named in *** lost revenue allegations, with claimed losses of ***.[15] *** reported that *** increased its purchase of imports to take advantage of their lower prices. He maintained a domestic supplier but there was competition between domestic producers for these sales. This year *** was more competitive and got the order for ***. However, he purchased only imported *** because this was less expensive. The price of domestic *** was *** cents per pound, not *** cents as reported in the lost revenue allegation. He reported that the amount reported in the lost revenue allegation is about the amount his firm purchases from domestic sources.

*** was named in *** lost revenue allegations, with claimed losses of ***.[16] *** reported that he purchased mainly from *** and had since 1989. He reported that he did not know if he had told *** about the price of imports when he was trying to get a price reduction around ***. He reported that the price did fall dramatically around that time but he did not know if it fell because of excess domestic capacity on the part of one U.S. producer or for other reasons. In any case, he reported that *** was a follower, not a leader, in the price reduction. He reported that the quantities reported in the lost revenue allegation were correct.

*** was named in *** lost revenue allegations, with claimed losses of ***.[17] *** reported that at the time of the allegation his firm ***. The person who had purchased ESBR up to that time ***. Therefore,*** did not know the details of the sales. The lower price, *** cents, was established when he began purchasing. He reported that the allegation was nonetheless probably correct, and that the amount reported was the amount they purchase.

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[12] Discussions with Commission staff, Apr. 13, 1998.

[13] Discussions with Commission staff, Apr. 13, 1998.

[14] Discussions with Commission staff, Apr. 24, 1998.

[15] Discussions with Commission staff, Apr. 14, 1998.

[16] Discussions with Commission staff, Apr. 13, 1998.

[17] Discussions with Commission staff, Apr. 13, 1998.

*** was named in *** lost revenue allegations, with claimed losses of ***.[18] *** reported that the domestic producers had reduced the price of *** because of competition from ***; however, he reported that the difference in price alone was not what was driving this market. He reported that transportation costs were important and estimated that the transportation costs from *** are from *** cents per pound while transport from the U.S. producers costs *** cents per pound. He reported that he mainly buys from importers and has bought imports from the start. He reported that the falling price of natural rubber was hurting domestic producers, and that natural rubber's price has fallen from about *** cents per pound to *** cents, causing his firm to use more natural rubber. The products they produce used to have on average *** percent synthetic rubber; now products have from *** percent synthetic rubber.

*** was named in *** allegation of lost revenue, with claimed losses of ***.[19] *** reported that he was a *** for both *** and for ***. He agreed with the allegation that *** had to reduce its price because of competition from *** product; however, he does not purchase *** product, he is a ***. He reported that Korean prices were very low, *** cents per pound; he was buying domestic at *** cents a pound and was ***.

*** was named in *** allegations of lost revenue, with claimed losses of ***.[20] *** reported that he purchases exclusively from *** because 2 to 3 years ago, when there was a worldwide shortage of rubber and the price ranged from *** per pound, he was sold a load by *** at *** per pound. He reported that he does not get quotes from foreign producers but talks with other purchasers to find out what the market price is and gets this price from ***. Prices were falling during the interval covered by the lost revenue allegations and his current price is *** per pound. He reported that imports could be purchased for less than this. He reported that he purchases about *** pounds of *** grade per year.

[18] Discussions with Commission staff, Apr. 10, 1998.

[19] Discussions with Commission staff, Apr. 10, 1998.

[20] Discussions with Commission staff, Apr. 15, 1998.

PART VI: FINANCIAL EXPERIENCE OF THE U.S. PRODUCERS

BACKGROUND

Three producers (Ameripol Synpol, DSM Copolymer, and Goodyear), accounting for all U.S. production of ESBR, provided financial data on their ESBR operations.

Ameripol Synpol *** is owned by GBC Holdings, Inc., a holding company, which in turn is owned by Citicorp Venture Capital and a number of individuals. The company has two plants in Texas (Port Neches and Odessa). The ESBR business of Dynagen, Inc. was sold to Ameripol Synpol in 1997.[1] [2] ***.

DSM Copolymer (the other petitioner) is a wholly-owned subsidiary of DSM, a Dutch company. It has one plant in Baton Rouge, LA which produces ESBR as well as ***.

Goodyear is the largest U.S. tire manufacturer and the third largest in the world. It produces ESBR at a plant in Houston, TX as well as ***.

The tire industry has consolidated over the past several years and has become more global. Goodyear and Cooper[3] are the only major tire manufacturers with headquarters in the United States.

OPERATIONS ON CERTAIN ESBR

The aggregate results of trade operations for the three producers of ESBR are presented in table VI-1.[4] Aggregate sales volume, sales values, and operating income declined *** between 1995 and 1997. The effect of *** on industry profitability will be discussed later in this section.

Table VI-1
Results of operations of U.S. producers on their trade operations producing certain ESBR, fiscal years 1995-97

* * * * * * *

Approximately *** percent of Goodyear's shipments were captive in 1997. In order to present the estimated profitability for trade and transfers combined, staff has adjusted Goodyear's transfer shipments to a fair market value.[5] The purpose is to present the estimated profitability based on the total actual shipments and the total related costs. The aggregate results of operations for trade and transfers are shown in table VI-2. ***.[6]

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[1] Dynagen's data prior to the acquisition were combined with Ameripol Synpol's data for these investigations.

[2] Ameripol Synpol's acquisition of Dynagen's ESBR business at Odessa reduced the number of U.S. producers to three. At the beginning of the 1980s, there were seven U.S. producers of ESBR. Petition, pp. 31-32.

[3] Cooper does not produce ESBR and thus must purchase it from outside sources. It accounted for approximately ***.

[4] ***. In this section, transfers refer to captive shipments.

[5] ***. Staff has provided the same data in a table format, as shown in app. D. The difference between the appendix data and the data in section VI is the staff's captive production adjustment.

[6] ***.

The results of trade operations, by firm, are presented in table VI-3.[7] ***.

[7] In the sales volumes and sales values section, the exports have been adjusted slightly from the amounts shown in the shipments data in Part III of this report in order to tie into the totals shown in the results of operations section. There was no breakdown of domestic sales and exports in the financial section of the questionnaire.

Table VI-2
Results of operations of U.S. producers on their trade and transfer operations producing certain ESBR, fiscal years 1995-97

* * * * * * *

Table VI-3
Results of operations of U.S. producers, by firms, on their trade operations producing certain ESBR, fiscal years 1995-97

* * * * * * *

The cost of raw materials is the major cost element for producing ESBR, and these costs (primarily styrene and butadiene) have declined over the period of investigation.[8] On a per-unit cost basis, raw materials accounted for *** percent of the cost of goods sold in 1995, 1996, and 1997, respectively. Unit cost of goods sold data are shown below (in dollars per pound):

Item	1995	1996	1997
Raw materials	***	***	***
Direct labor	***	***	***
Factory overhead	***	***	***
Total	***	***	***

Selling prices for ESBR under contract generally contain provisions for price adjustments based on changes in certain basic raw material costs, generally styrene and butadiene. ***.[9]

The variance analysis showing the effects of prices and volume on the producers' net trade sales of ESBR, and of costs and volume on their total expenses, is shown in table VI-4. Export sales and volume are shown separately and captive production is excluded from the analysis. For the domestic producers the change in unit prices was a major factor in declining profitability, including between 1996 and 1997 when costs increased slightly.

Table VI-4
Variance analysis for trade sales of certain ESBR, fiscal years 1995-97

* * * * * * *

[8] ***.

[9] Questionnaire responses, attachment to p. 13.

INVESTMENT IN PRODUCTIVE FACILITIES, CAPITAL EXPENDITURES, AND RESEARCH AND DEVELOPMENT EXPENSES

The value of fixed assets (property, plant, and equipment), capital expenditures, and research and development costs for ESBR are shown in table VI-5. ***.

Table VI-5
Value of assets, capital expenditures, and research and development expenses for producers of certain ESBR, by firm, 1995-97

* * * * * * *

CAPITAL AND INVESTMENT

The Commission requested the producers to describe any actual or potential negative effects of imports of certain ESBR from Brazil, Korea, and/or Mexico on their growth, investment, ability to raise capital, and/or their development efforts (including efforts to develop a derivative or more advanced version of the product). Their responses are in appendix E.

PART VII: THREAT CONSIDERATIONS

The Commission analyzes a number of factors in making threat determinations (see 19 U.S.C. § 1677(7)(F)(i)). Information on the nature of the alleged dumping was presented earlier in this report; information on the volume and pricing of imports of the subject merchandise is presented in parts IV and V; and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in part VI. Information on inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting;" any other threat indicators, if applicable; and any dumping in third-country markets, follows.

THE SUBJECT FOREIGN INDUSTRIES

Table VII-1 presents aggregate data for production and shipments of ESBR for the three subject countries. As noted earlier, the four reporting firms are believed to account for all production of ESBR in Brazil, Korea, and Mexico. The lone Brazilian firm, Petroflex Industria e Comercio S.A., reported that ESBR production accounted for nearly *** of its total sales in 1997. It also reported sales to ***. The two Korean producers, Korea Kumho Petrochemical Co., Ltd. and Hyundai Petrochemical Co., Ltd. (which started production in August of 1996), accounted for all ESBR production in Korea and reported exports to ***. Industrias Negromex, S.A. de C.V. is reported to be the sole producer of ESBR in Mexico and reported in addition to U.S. sales shipments to ***.

Table VII-1
Certain ESBR: Aggregate Brazilian, Korean, and Mexican capacity, production, inventories, capacity utilization, and shipments, 1995-97 and projected 1998-99

* * * * * * *

THE INDUSTRY IN BRAZIL

Table VII-2 presents data for the sole known producer of ESBR in Brazil.

Table VII-2
Certain ESBR: Brazilian capacity, production, inventories, capacity utilization, and shipments, 1995-97 and projected 1998-99

* * * * * * *

THE INDUSTRY IN KOREA

Table VII-3 presents data for the two known producers of ESBR in Korea.

Table VII-3
Certain ESBR: Korean capacity, production, inventories, capacity utilization, and shipments, 1995-97 and projected 1998-99

* * * * * * *

THE INDUSTRY IN MEXICO

Table VII-4 presents data for the sole known producer of ESBR in Mexico.

Table VII-4
Certain ESBR: Mexican[1] capacity, production, inventories, capacity utilization, and shipments, 1995-97 and projected 1998-99

* * * * * * *

U.S. IMPORTERS' INVENTORIES

Importers' end-of-year inventories of imported ESBR are presented in table VII-5.

Table VII-5
Certain ESBR: U.S. importers' imports, shipments, and end-of-period inventories of imports, 1995-97

* * * * * * *

U.S. IMPORTERS' CURRENT ORDERS

In response to a question on whether importers had ordered ESBR from Brazil, Korea, or Mexico for delivery after December 31, 1997, the majority of importers responded "Yes" and listed varying amounts of imports for between 2 and 12 months hence. *** firms reported a total of *** pounds of Brazilian product; *** firms reported a total of *** pounds of Korean product; and *** firm reported *** pounds of Mexican product.

DUMPING IN THIRD-COUNTRY MARKETS

On May 27, 1995, Mexico's Trade Ministry placed tariffs of between 71.4 percent and 96.3 percent on synthetic rubber (which includes ESBR) from Brazil. The ministry said the imposition of compensatory tariffs was made because of dumping of the products on the Mexican market at prices below production costs. The ministry said the tariffs offer protection to the national industry of synthetic rubber.[1]

[1] News release from *Reuters Financial Service*, May 28, 1996.