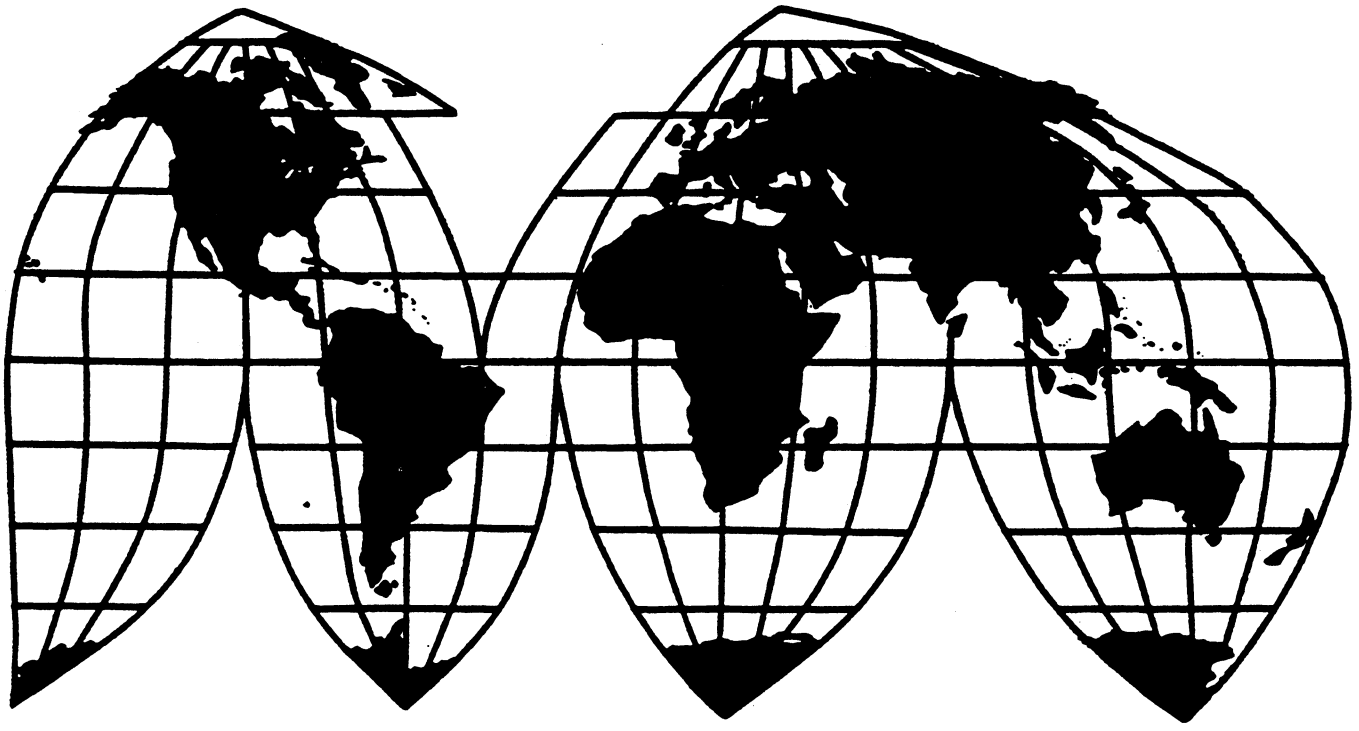
Polyvinyl Alcohol from China, Japan, and Taiwan

Investigations Nos. 731-TA-726, 727, and 729 (Final)

Publication 2960 **May 1996**

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

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Address all communications to
Secretary to the Commission
United States International Trade Commission
Washington, DC 20436

U.S. International Trade Commission

Washington, DC 20436

Polyvinyl Alcohol from China, Japan, and Taiwan

Publication 2960

May 1996

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GLOSSARY

Air Products	Air Products and Chemicals, Inc.
Beta	Beta Chemicals
Chang Chun	Chang Chun Petrochemical Co., Ltd.
Commerce	U.S. Department of Commerce
Commission	U.S. International Trade Commission
Denki	Denki Kagaku Kogyo Kabushiki Kaisha
DuPont	E.I. DuPont de Nemours Co.
EP	Emulsion polymerization
GMP	Good Manufacturing Principles
Guangxi	Guangxi Vinylon Works
HTS	Harmonized Tariff Schedule of the United States
Isolyser	Isolyser Co., Inc.
Kuraray	Kuraray Co., Ltd.
LTFV	Less than fair value
Monsanto	Monsanto Co.
Nippon	Nippon Synthetic Chemical Co., Ltd.
Perry	Perry Chemical Corp.
PRW	Production and related worker
PVA	Polyvinyl alcohol
PVB	Polyvinyl butyral
Ryan Commerce	Ryan Commerce, Inc.
SG&A	Selling, general, and administrative
Sichuan	Sichuan Vinylon Works
Shanghai	Shanghai Petrochemical Co., Ltd.
USP/NF	U.S. Pharmacopeia/National Formulary
VAM	Vinyl acetate monomer

Note.--Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report.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-726, 727, and 729 (Final)

POLYVINYL ALCOHOL FROM CHINA, JAPAN, AND TAIWAN

Determinations

On the basis of the record[1] developed in the subject investigations, the Commission determines,[2] pursuant to section 735(b) of the Tariff Act of 1930 (19 U.S.C. § 1673d(b)) (the Act), that an industry in the United States is materially injured or threatened with material injury by reason of imports from China, Japan, and Taiwan of polyvinyl alcohol (PVA),[3] provided for in subheading 3905.30.00 of the Harmonized Tariff Schedule of the United States,[4] that have been found by the Department of Commerce to be sold in the United States at less than fair value (LTFV).[5]

Background

The Commission instituted these investigations effective October 5, 1995, following preliminary determinations by the Department of Commerce that imports of PVA from China, Japan, and Taiwan were being sold at LTFV within the meaning of section 733(b) of the Act (19 U.S.C. § 1673b(b)). Notice of the institution of the Commission's investigations and of a public hearing 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 November 9, 1995 (60 F.R. 56614). The hearing was held in Washington, DC, on March 26, 1996, and all persons who requested the opportunity were permitted to appear in person or by counsel.

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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] Chairman Watson, Vice Chairman Nuzum, and Commissioner Rohr dissenting.

[3] The imported product subject to these investigations is PVA, which is a dry, white to cream-colored, water-soluble synthetic polymer. This product consists of PVA hydrolyzed in excess of 85 percent, whether or not mixed or diluted with defoamer or boric acid. Excluded from the scope of the investigations is PVA covalently bonded with acetoacetylate, carboxylic acid, or sulfonic acid uniformly present on all polymer chains in a concentration equal to or greater than two mole percent, and PVA covalently bonded with silane uniformly present on all polymer chains in a concentration equal to or greater than one-tenth of one mole percent. PVA in fiber form is not included in the scope of these investigations.

[4] Prior to Jan. 1996, PVA was provided for in subheading 3905.20.00 of the Harmonized Tariff Schedule of the United States.

[5] Commissioner Newquist and Commissioner Bragg, who find that an industry in the United States is threatened with material injury, further determine pursuant to 19 U.S.C. § 1673d(b)(4)(B), that they would not have found material injury but for the suspension of liquidation of entries of the merchandise under investigation.

VIEWS OF THE COMMISSION

Based on the record in these final investigations, we find that an industry in the United States is threatened with material injury by reason of imports of polyvinyl alcohol ("PVA") from the People's Republic of China ("China"), Japan, and Taiwan that have been found by the Department of Commerce ("Commerce") to be sold in the United States at less than fair value ("LTFV").[1] [2] [3] [4]

I. DOMESTIC LIKE PRODUCT AND DOMESTIC INDUSTRY

A. In General

In determining whether 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."[5] Section 771(4)(A) of 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."[6] 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."[7]

Our decision regarding the appropriate domestic like product(s) in an investigation is a factual determination, and we apply the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis.[8] No single factor is dispositive, and the Commission may consider other factors it deems

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[1] These are the first final investigations subject to the Uruguay Round Agreements Act ("URAA") amendments to the Tariff Act of 1930 ("the Act"). P.L. 103-465, approved Dec. 8, 1994, 108 Stat. 4809, amending section 701 et seq. of the Trade Act of 1930, 19 U.S.C. § 1671 et seq.

[2] Whether the establishment of an industry in the United States is materially retarded is not an issue in these investigations.

[3] Commissioner Crawford finds that the domestic industry is materially injured by reason of the subject imports. See Additional Views of Commissioner Carol T. Crawford. Commissioner Crawford joins sections I-IV. Commissioner Bragg finds that the domestic industry is not materially injured by reason of the subject imports. See Additional Views of Commissioner Bragg. Commissioner Bragg joins sections I-V. Chairman Watson, Vice Chairman Nuzum, and Commissioner Rohr find that the domestic industry is not materially injured or threatened with material injury by reason of the subject imports. See Dissenting Views of Chairman Watson and Vice Chairman Nuzum, and Dissenting Views of Commissioner Rohr. Chairman Watson, Vice Chairman Nuzum, and Commissioner Rohr join sections I-IV.

[4] On Apr. 24, 1996, parties provided comments on information upon which they had not previously had an opportunity to comment, pursuant to 19 U.S.C. § 1677m(g). Several of these comments contained new factual information. See Memorandum INV-T-032 (Apr. 26, 1996). As required by Section 782m(g) of the Act, the Commission disregarded comments containing such new factual information in reaching its determinations in these investigations. Commissioner Rohr notes that he considered only those final comments in accordance with Rule 207.29 of the Commission's interim rules.

[5] The URAA changes the terminology in the domestic industry provision by referring to "producers" instead of "domestic producers" and by changing the term "like product" to "domestic like product." 19 U.S.C. § 1677(4)(A).

[6] 19 U.S.C. § 1677(4)(A).

[7] 19 U.S.C. § 1677(10).

[8] See e.g., Nippon Steel Corp. v. United States, 19 CIT__, Slip Op. 95-55 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) common manufacturing facilities, production processes, and production employees; (5)

relevant based upon the facts of a particular investigation.[9] The Commission looks for "clear dividing lines among possible like products" and disregards minor variations.[10]

The imported product subject to investigation has been defined by the Department of Commerce ("Commerce") as PVA.[11] PVA[12] is a water-soluble, synthetic polymer, usually prepared by hydrolysis of polyvinyl acetate, and is available in powdered or granular form.[13] A wide variety of grades is available, of varying molecular weight and degree of hydrolysis. PVA is also available in formulations made to particular customer specifications.[14] PVA is used in the textile and paper industries in sizing formulations; as a binder in adhesive formulations and soil binding compounds; as an emulsion or polymerization aid in colloidal suspensions; and as an intermediate in the production of polyvinyl butyral ("PVB"), which is used as an adhesive film in automobile safety glass.[15]

B. Analysis of Domestic Like Product Issues

In the preliminary investigations, the Commission found a single like product encompassing all PVA "like" that within the scope of investigation, i.e., all PVA hydrolyzed in excess of 85 percent. The Commission rejected arguments made by parties in the preliminary investigations that PVA in excess of 95 percent hydrolyzed and PVA formulated for use in the production of PVB ("PVB-grade PVA") were distinct domestic like products.[16] These final investigations present two domestic like product issues: whether wet "ethanol-swollen" PVA is included in the domestic like product and, as in the preliminary investigations,

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customer or producer perceptions; and, where appropriate, (6) price. Timken Co. v. United States, Slip Op. 96-8 at 9 (Ct. Int'l Trade, Jan. 3, 1996).

[9] E.g., S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

[10] 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).

[11] Commerce defines PVA as "a dry, white to cream-colored, water soluble synthetic polymer. This product consists of polyvinyl alcohols hydrolyzed in excess of 85 percent, whether or not mixed or diluted with defoamer or boric acid. Excluded from this investigation are polyvinyl alcohols covalently bonded with acetoacetylate, carboxylic acid, or sulfonic acid uniformly present on all polymer chains in a concentration equal to or greater than two mole percent, or polyvinyl alcohols covalently bonded with silane uniformly present on all polymer chains in a concentration equal to or greater than one-tenth of one mole percent. Polyvinyl alcohol in fiber form is not included in the scope of this investigation." Notice of Final Determination of Sales at LTFV: Polyvinyl Alcohol from Taiwan, 61 Fed. Reg. 14064, 14065 (Mar. 29, 1996).

[12] All references to PVA herein should be construed to mean only PVA hydrolyzed in excess of 85 percent.

[13] Confidential Report ("CR") at I-2, Public Report ("PR") at I-2.

[14] CR at I-5-I-7, PR at I-4-I-6.

[15] CR at I-7, PR at I-6. Based on responses to the Commission's questionnaires, the percentage of U.S. producers' shipments in 1994 by end-use applications were as follows: PVB, *** percent; textiles, *** percent; paper, *** percent; adhesives, *** percent; and all other end-uses, *** percent. CR at I-13, PR at I-13.

[16] In the preliminary investigations, the Commission found one domestic like product, "encompassing all PVA, because all grades share certain common physical and chemical characteristics, many grades are used in the same general end uses (e.g., textiles, adhesives, paper) and some grades may be used in more than a single end use. Moreover, all grades are manufactured using the same production facilities, processes, and production employees and are distributed primarily to end-users." Polyvinyl Alcohol from the China, Japan, Korea, and Taiwan, Invs. Nos. 731-TA-726-729 (Prelim.) (Apr. 1995) USITC Pub. 2883 at I-8.

whether the differences that distinguish certain grades or specifications of PVA are sufficient to warrant the finding of multiple domestic like products.

Petitioner argues that wet ethanol-swollen PVA, which is domestically produced by Monsanto Company (Monsanto) in its captive production of PVB, should not be included in the domestic like product, as the scope of the investigation includes only dry PVA.[17] With respect to the other domestic like product issues, petitioner argues that, while there are some differences between grades of PVA, those differences are outweighed by other common characteristics.[18] The foreign producers and U.S. importers generally do not contest the petitioner's definition of the domestic like product and do not assert that the Commission should find multiple domestic like products; however, one non-petitioning domestic producer and two purchasers request that the Commission designate multiple domestic like products. Monsanto, which produces PVA as an intermediate product in its manufacture of PVB, claims (as it did in the preliminary investigations) that PVB-grade PVA should be considered a distinct domestic like product.[19] Isolyser Company (Isolyser), which is a U.S. purchaser of PVA, contends that there should be two domestic like products consisting respectively of PVA hydrolyzed at 98 percent or greater (which it terms "fully hydrolyzed") and that hydrolyzed below 98 percent (which it terms "partially hydrolyzed").[20] Colorcon, which is also a U.S. purchaser of PVA, argues that PVA manufactured using "Excipient Good Manufacturing Principles" (GMP PVA)[21] is a separate domestic like product largely because it is suitable for certain pharmaceutical enduses for which non-GMP PVA cannot be used.[22]

For the reasons discussed below, we find one like product consisting of all PVA hydrolyzed in excess of 85 percent. All PVA generally shares certain physical characteristics and chemical composition.[23] Many grades of PVA are available, of varying molecular weight and degree of hydrolysis.[24] Although all PVA grades are not interchangeable with other grades, there is considerable overlap among grades sold for different end uses.[25] Most PVA is produced to customer specifications.[26] The vast majority of PVA sold in

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[17] Petitioner's Prehearing Brief at 10.

[18] Petitioner's Prehearing Brief at 8-10. Moreover, the petitioner contends that there are no clear dividing lines between different grades that would permit the finding of distinct domestic like products. Id.

[19] Monsanto's Prehearing Brief at 3-16.

[20] Isolyser argues that PVA hydrolyzed at 98 percent or greater constitutes a distinct domestic like product due to the allegedly unique physical characteristics of that PVA. Isolyser's Prehearing Brief at 1. This argument is slightly different than the argument that Isolyser made in the preliminary investigations in that Isolyser now defines "fully hydrolyzed" as PVA which is hydrolyzed at 98 percent or greater, and in the preliminary investigations it defined fully hydrolyzed PVA as PVA hydrolyzed in excess of 95 percent.

[21] GMP are manufacturing guidelines used to meet pharmacopeia/national formulary requirements. Colorcon's Prehearing Brief at 3.

[22] Colorcon's Prehearing Brief at 7. This argument was not made in the preliminary investigations. Commissioner Rohr notes that GMP applies only to the production of the excipients themselves, not to the production of the raw materials such as PVA used in those excipients.

[23] CR at I-4, PR at I-3.

[24] Id.

[25] CR at I-9, PR at I-7.

[26] Eighty percent of purchasers reported that they require their products to be prequalified, although the length of time for qualification varies. This suggests that most PVA is produced to customers' specifications. CR at II-8, PR at II-5.

the United States is sold in the same channels of distribution, directly to end users.[27] The same production facilities, processes, and employees are used to manufacture the various PVA grades.[28] With respect to price, standard grades of PVA are sold largely within a relatively narrow price range, although PVA prices to different end-use markets for the same grade may vary.[29]

Thus, despite some limits on the interchangeability of specific grades, we find that the similarities among the various grades of PVA support a finding of a single like product consisting of all PVA.[30] The following discussion analyzes each of the domestic like product factors with respect to the distinctions proposed by the parties.

Wet, Ethanol-Swollen PVA[31]

Commerce's published definition of the merchandise subject to investigation describes PVA as a "dry, white to cream-colored, water-soluble synthetic polymer." Although "wet" ethanol-swollen PVA does not fit the definition of the subject product, it is not specifically excluded from the scope of investigation. Whether or not wet, ethanol-swollen PVA is included in the scope of investigation, we find that the lack of a clear dividing line between it and dry, water-soluble PVA supports its inclusion in the domestic like product.[32] We arrive at the same conclusion using either the traditional or the semi-finished like product analysis.

Using the traditional domestic like product analysis, we find that first, ethanol-swollen PVA shares essential physical characteristics with dry PVA.[33] The record indicates that the only difference between ethanol-swollen PVA and "dry" PVA is that the former is "wet" and if dried, would be the same product as "dry" PVA.[34] The two products are interchangeable to some extent. While there are some enduses for which wet, ethanol-swollen PVA is not suitable,[35] both dry PVA and wet, ethanol-swollen PVA are used in the

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[27] CR at I-11-I-12, PR at I-9.

[28] CR at I-14, PR at I-10.

[29] CR at I-15, PR at I-10.

[30] Our finding is consistent with the Commission's general practice of declining to find separate domestic like products based solely on the existence of different grades of a chemical product. See, e.g., Glycine from the People's Republic of China, Inv. No. 731-TA-718 (Final), USITC Pub. 2863 (Mar. 1995) at I-6; Silicon Carbide from the People's Republic of China, Inv. No. 731-TA-651 (Final), USITC Pub. 2779 at I-9 (June 1994).

[31] Commissioner Rohr and Commissioner Newquist find that the issue of the inclusion of wet, ethanol-swollen PVA in the domestic like product is largely academic. Neither Monsanto, nor any other producer sells wet, ethanol-swollen PVA into the merchant market, which, for the reasons discussed infra at note 71, is the primary focus of their analysis in these investigations.

[32] Where a product is not encompassed by Commerce's scope of investigation, the domestic like product may nonetheless be defined to include such articles. See, e.g., Certain Pasta from Italy and Turkey, Invs. Nos. 701-TA-365 and 366 and 731-TA-734 and 735 (Preliminary), USITC Pub. 2905 at I-7-I-9 (July 1995); Certain Calcium Aluminate Cement and Cement Clinker from France, Inv. No. 731-TA-645 (Final), USITC Pub. 2772 at I-7, n.18 (May 1994).

[33] Monsanto's Posthearing Brief at 1.

[34] Monsanto's Posthearing Brief at 2.

[35] Petitioner's Prehearing Brief at 11.

manufacture of PVB.[36] Wet, ethanol-swollen PVA cannot be used to manufacture PVB using the "aqueous" production process (unless it is first dried).[37] However, ethanol-swollen PVA and dry PVA are to a great extent interchangeable in the production of PVB through the solvent process.[38] The two products share common channels of distribution, in that wet, ethanol-swollen PVA and dry PVA are used in captive production of downstream products, although only dry PVA is sold in the merchant market. Petitioner argues that the production facilities for producing wet, ethanol-swollen PVA are different than those used to produce dry PVA.[39] This is currently true, as the producers of the two products are different. Monsanto reports, however, that it has used the same production facilities to produce both wet, ethanol-swollen PVA and dry PVA.[40] Based on the foregoing, we find that wet, ethanol-swollen PVA is sufficiently like dry PVA to warrant the inclusion of both in the domestic like product consisting of all PVA hydrolyzed in excess of 85 percent.[41]

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[36] Monsanto's Posthearing Brief at 5.

[37] Monsanto manufactures PVB by both an "aqueous" and a "solvent" production process. Monsanto's Prehearing Brief at 3.

[38] Monsanto's Posthearing Brief at 31. Monsanto routinely used dry PVA in the PVB solvent process in the past but does not currently do so since it built its aqueous process PVB plant. Id. Furthermore, Monsanto stated that it formerly dried the swollen PVA and sold it commercially as a fully hydrolyzed grade prior to the closing of one of its production sites. Id at 3.

[39] Petitioner's Prehearing brief at 13, n.19.

[40] The only difference is that the production of dry PVA requires the use of Monsanto's *** drying equipment, which Monsanto estimates adds a cost of *** to the production process. Monsanto's Posthearing Brief at 2. This represents a *** of total production costs. Compare CR at J-4, J-6, PR at J-3. Monsanto claims that it has the *** drying facilities in its production facilities currently, and thus is capable of producing the two products on the same production line. Monsanto's Posthearing brief at 2.

[41] We reach the same conclusion using a semi-finished products analysis. In a semi-finished products analysis, the Commission examines: (1) whether the upstream article is dedicated to the production of the downstream article or has independent uses; (2) whether there are perceived to be separate markets for the upstream and downstream articles; (3) differences in the physical characteristics and functions of the upstream and downstream articles; (4) differences in the costs or value of the vertically differentiated articles; and (5) significance and extent of the processes used to transform the upstream into the downstream articles. Canned Pineapple Fruit from Thailand, Inv. No. 731-TA-706 (Final), USITC Pub. 2907 (July 1995), at I-8, n.25; Stainless Steel Bar from Brazil, India, Japan, and Spain, Invs. Nos. 731-TA-678, 679, 681, and 682 (Final), USITC Pub. 2856 (Feb. 1995), at I-6.

Monsanto uses the PVA it manufactures as an "intermediate product" in the production of PVB, and thus wet, ethanol-swollen PVA is primarily used as a semi-finished product within the context of the production of a downstream article, PVB. Monsanto's Posthearing Brief at 3-4; Petitioner's Prehearing Brief at 13, n.21. However, Monsanto reports that it also used wet, ethanol-swollen PVA in the past to manufacture dry PVA, which it sold as a fully hydrolyzed grade on the merchant market. Monsanto's Posthearing Brief at 3. While ethanol-swollen PVA is only used captively and not sold on the merchant market, dry PVA is also used captively, indicating some similarity of the markets for the semi-finished wet, ethanol-swollen PVA and dry PVA. Id. Wet, ethanol-swollen PVA possesses the same physical characteristics as dry PVA, with the exception of the fact that it is not dried. Monsanto's Posthearing Brief at 1. In addition, dry PVA is also used to manufacture PVB, and thus wet, ethanol-swollen PVA and dry PVA have common uses. Finally, as noted above, the cost of converting wet, ethanol-swollen PVA to dry PVA represents *** portion of the overall cost of producing dry PVA, and the processes used to make the conversion are relatively insignificant in relation to the production process as a whole.

Whether Certain PVA Grades Are Distinct Domestic Like Products

For the reasons set forth in our preliminary determinations, we find that fully hydrolyzed PVA and PVB-grade PVA are part of the single domestic like product consisting of PVA hydrolyzed in excess of 85 percent. The information on the record does not provide any reason to change our analysis with respect to those two products.[42] [43] We also find that GMP PVA is part of the single domestic like product consisting of PVA hydrolyzed in excess of 85 percent.

As previously noted, all PVA generally shares certain physical characteristics and chemical composition.[44] Many grades of PVA are available, varying in molecular weight and degree of hydrolysis.[45] Colorcon argues that GMP PVA is suitable for certain pharmaceutical enduses for which non-GMP PVA cannot be used.[46] While GMP PVA may have some distinct physical properties, this is true of all grades of PVA. Moreover, notwithstanding these differences, all PVA grades, including GMP PVA, possess common physical characteristics.[47] While there is limited interchangeability of non-GMP PVA with GMP PVA,[48] there is no evidence on the record that GMP PVA cannot be used in applications other than to manufacture pharmaceutical products.[49] The record also shows that GMP PVA is sold in the same channels of distribution as non-GMP PVA.[50] In addition, the same basic production facilities and processes are used to manufacture

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[42] While Isolyser's definition of fully hydrolyzed PVA has been revised in these final investigations, Isolyser's arguments for distinguishing PVA hydrolyzed in excess of 95 percent and PVA hydrolyzed at 98 or greater from PVA hydrolyzed below those respective percentages are virtually the same as in the preliminary investigations, and the record in these final investigations continues to support the conclusion reached in the preliminary investigations. Indeed, the fact that the term "fully hydrolyzed" can be interpreted differently (see, also CR at I-8, PR at I-6) undermines Isolyser's claim that it is a distinct domestic like product.

[43] To the extent that the domestic like product discussion set forth below pertains to the characteristics of PVA generally, it provides an additional basis for our decision to decline to find fully hydrolyzed PVA and PVB-grade PVA to be separate domestic like products.

[44] CR at I-4, PR at I-3.

[45] Id.

[46] Colorcon's Prehearing Brief at 8.

[47] CR at I-4, PR at I-3; Petitioner's Prehearing Brief at 8.

[48] Colorcon argues that if PVA is not manufactured pursuant to GMP it cannot be used in pharmaceutical applications, unless it is subjected to a lengthy testing process. Colorcon's Prehearing Brief at 8. The fact that Colorcon has used non-GMP PVA in such applications after testing, however, supports our findings that these products are both physically similar and at least somewhat interchangeable. See id. at 5.

[49] The absence of complete interchangeability between the enduses of different grades of PVA does not require the finding of separate domestic like products. See Nippon Steel v. United States, Slip Op. 95-57 (CIT Apr. 3, 1995).

[50] The vast majority of PVA sold in the United States, including GMP PVA, is sold directly to endusers. CR at I-11-12, PR at I-9.

the various PVA grades,[51] although some variations are necessary for individual grades.[52] Customers do not appear to differentiate GMP PVA to a greater degree than they distinguish between other grades.[53] Finally, the record shows that while pricing of PVA grades depends to some extent on whether or not it is a specialty grade such as GMP PVA, pricing may also be affected by other product characteristics, including level of hydrolysis, and viscosity.[54] On balance, we do not find that the differences between GMP PVA and other forms of PVA support treating GMP PVA as a distinct domestic like product.

For the reasons stated above, we find one domestic like product in these investigations, encompassing all PVA.

C. Domestic Industry

In making its determination, the Commission is directed to consider the effect of the imports on the domestic industry, defined as "the producers as a [w]hole of a domestic like product..." 19 U.S.C. § 1677(4)(A). In doing so, the Commission includes all domestic production, including tolling operations and captively consumed product, within the domestic industry.[55] One issue arises in these final investigations with respect to the definition of the domestic industry: whether any of the producers of the domestic like product are related within the meaning of the statute and if so, whether circumstances exist that warrant their exclusion from the domestic industry.[56]

As in our preliminary determinations,[57] we find that it is not appropriate to exclude any of the domestic producers as related parties. Only three firms -- Air Products, Du Pont, and Monsanto -- produce PVA in the United States.[58] The related parties provision, 19 U.S.C. § 1677(4)(B), as amended by the URAA, authorizes the exclusion of certain producers from the domestic industry.[59] If the Commission

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[51] All grades of domestically produced PVA are manufactured using the same general continuous production process, involving polymerization of vinyl acetate monomer (VAM) into polyvinyl acetate, which is then converted to PVA. CR at I-14, PR at I-10; See also, Petitioner's Prehearing Brief at 9; Monsanto's Prehearing Brief at 12.

[52] Colorcon argues that special controls are required to ensure that GMP standards are met, and that the equipment be designed properly, although specific equipment is not required. Colorcon's Prehearing Brief at 8-9; Colorcon's Posthearing Brief at 13.

[53] Colorcon argues that Air Products recognizes the distinction between PVA manufactured according to GMP and PVA not manufactured according to GMP because they acknowledged that they could not meet those standards. Colorcon's Prehearing Brief at 9. Petitioner argued that it could meet the standard, but did not find it cost effective to do so. Hearing Transcript (Tr.) at 62.

[54] CR at V-3, PR at V-4.

[55] See United States Steel Group, et al. v. United States, Slip Op. 94-201 at 16 (Ct. Int'l Trade Dec. 30, 1994). As discussed further below, the URAA amendments provide that, under certain circumstances involving captive production, the Commission should focus primarily on the merchant market in determining market share and the factors affecting financial performance set forth in 19 U.S.C. § 1677(7)(C)(iii).

[56] For the reasons set forth above in the domestic like product discussion, we find that wet, ethanol-swollen PVA is part of the domestic like product. Thus, we include Monsanto in the domestic industry, and reject petitioner's argument that Monsanto should not be included in the domestic industry.

[57] USITC Pub. 2883 at I-10-I-11.

[58] CR at III-1, PR at III-1.

[59] 19 U.S.C. § 1677(4)(B) contains the definition of related parties.

determines that a domestic producer meets the definition of a related party, the Commission may exclude such a producer from the domestic industry if "appropriate circumstances" exist.[60] Exclusion of a related party is within the Commission's discretion based upon the facts presented in each case.[61]

*** are direct importers and, thus, are related parties within the statutory definition.[62] Appropriate circumstances are not present, however, to warrant their exclusion from the domestic industry. *** significant producers of PVA. Moreover, *** did not import commercial quantities of subject merchandise during the period of investigation, and stated in *** questionnaire response *** .[63] *** imports of subject merchandise from *** never constituted more than *** percent of its U.S. shipments (including internal transfers) of PVA.[64] Thus, on the basis of the record in these final investigations, we find that the primary interest of *** related producer lies in production, not in importation. We therefore do not exclude any producer as a related party, and determine that the domestic industry consists of all three producers of PVA hydrolyzed in excess of 85 percent.

II. CONDITION OF THE DOMESTIC INDUSTRY

In assessing whether the domestic industry is materially injured or threatened with material injury by reason of LTFV imports, we consider all relevant economic factors that bear on the state of the industry in the United States.[65] 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."[66]

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[60] 19 U.S.C. § 1677(4)(B). The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include:

(1) the percentage of domestic production attributable to the importing producer;
(2) the reason the U.S. producer has decided to import the product subject to investigation, i.e., whether the firm benefits from the LTFV sales or subsidies or whether the firm must import in order to enable it to continue production and compete in the U.S. market; and
(3) the position of the related producer vis-a-vis the rest of the industry, i.e., whether inclusion or exclusion of the related party will skew the data for the rest of the industry.

See, e.g., Torrington Co. v. United States, 790 F. Supp. 1161 (Ct. Int'l Trade 1992), aff'd without opinion, 991 F.2d 809 (Fed. Cir. 1993). The Commission has also considered the ratio of import shipments to U.S. production for related producers and whether the primary interest of the related producer lies in domestic production or importation. See, e.g., Sebacic Acid from the People's Republic of China, Inv. No. 731-TA-653 (Final), USITC Pub. 2793 at I-7-8 (July 1994).

[61] See Torrington Co. v. United States, 790 F. Supp. at 1168.

[62] CR at III-11, PR at III-6.

[63] CR at III-11, PR at III-7.

[64] *** Questionnaire Response.

[65] 19 U.S.C. § 1677(7)(C)(iii).

[66] 19 U.S.C. § 1677(7)(C)(iii).

We note certain conditions of competition pertinent to our analysis of the domestic PVA industry. First, approximately *** percent of domestic production of PVA is internally transferred for the production of downstream articles.[67] We have determined that the criteria for applicability of the captive production provision are satisfied in these investigations[68] and, accordingly, in analyzing the market share and financial performance of the domestic industry, we have focused primarily on the merchant market.[69] [70] [71] [72]

We find that the domestic PVA industry internally consumes significant production of the domestic like product in the production of one or more downstream articles, and sells even more significant production

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[67] CR at III-6, PR at III-5.

[68] 19 U.S.C. § 1677(7)(C)(iv) sets forth the factors to be considered by the Commission in determining whether the captive production provision is applicable. If the threshold criteria are present, i.e., domestic producers internally transfer significant production of the domestic like product for the production of a downstream article and sell significant production of the like product in the merchant market, then the Commission shall determine whether:

> (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 . . .

19 U.S.C. § 1671(7)(C)(iv).

[69] Data for the entire U.S. market are presented in footnotes, for comparison purposes. Data for the U.S. market as a whole generally show somewhat more favorable trends than data for the merchant market. The Statement of Administrative Action, H.R. Doc. 316, Vol. 1, 103rd Cong., 2nd Sess. (1994) ("SAA") states that the captive production provision "does not require the Commission to focus exclusively on the merchant market in analyzing the market share and financial performance of the domestic industry" even when the statutory provision applies. SAA at 852.

[70] Commissioner Newquist takes no position as to whether the captive production provision applies and thus does not join the following discussion. He notes, however, that he focuses his analysis here primarily on the merchant market. See Certain Flat-Rolled Carbon Steel Products from Argentina, Australia, Austria, Belgium, Brazil, Canada, Finland, France, Germany, Italy, Japan, Korea, Mexico, the Netherlands, New Zealand, Poland, Romania, Spain, Sweden, and the United Kingdom, Invs. Nos. 701-TA-319-332, 334, 336-342, 344, and 347-353 (Final) and Invs. Nos. 731-TA-573-579, 581-592, 594-597, 599-609, and 612-619 (Final) USITC Pub. 2664 (Aug. 1993). He further notes that nothing in the statute or the legislative history of the URAA precludes the Commission from considering as a condition of competition that a significant portion of domestic production is captively consumed, and that this may affect our assessment of whether the industry is materially injured by subject imports.

[71] As discussed above in note 31, supra., Commissioner Rohr and Commissioner Newquist note that a focus on the merchant market effectively excludes Monsanto from the domestic industry.

[72] For Commissioner Crawford's analysis respecting captive production and the merchant market, see the Additional Views of Commissioner Carol T. Crawford, infra.

of the domestic like product in the merchant market.[73] Consequently, the Commission must consider whether the remaining requirements of the captive production provision are met.[74]

The first factor, whether the domestic like product that is internally transferred also enters the merchant market, appears to be satisfied in this case as none of the PVA that is internally transferred for the production of downstream articles is sold into the merchant market for PVA; all three producers indicated that their downstream products do not compete for sales in the PVA merchant market.[75] [76] The second factor, whether the domestic like product is the predominant input into the downstream article, also appears to be satisfied as PVA accounts for approximately *** percent of the material costs of PVB, the principal downstream product produced by domestic manufacturers of PVA.[77] Production of downstream products other than PVB consumes only a small portion of total U.S. PVA production. Viewing the domestic industry as a whole, PVA constitutes the predominant input in the industry's downstream production of PVB, which accounts for the greater majority of downstream production.[78]

The third statutory factor requires that "production of the domestic like product sold in the merchant market is not generally used in the production of that downstream article." This factor also appears to be

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[73] Approximately *** percent of domestic production of PVA is transferred for production of downstream articles. CR at III-6, PR at III-5. Approximately *** percent of domestic production is sold to the merchant market. These percentages appear to be significant in this case.

[74] Respondents and Monsanto contend that the provision is inapplicable because the first and the third conditions of the statute are not satisfied. Chang Chun's Posthearing Brief at 27; Joint Japanese Producers' Posthearing brief at 7 (Question section); Monsanto's Posthearing Brief at 29.

[75] CR at III-11, PR at III-6.

[76] Commissioner Bragg does not necessarily agree that the first factor described above requires an analysis of whether the downstream product competes with sales in the merchant market of the PVA that is internally transferred. She notes that the statute requires analysis of whether the domestic like product that is internally transferred enters the merchant market for the domestic like product. Since the Commission has not found PVB or other downstream products to be part of the domestic like product, PVA, in these investigations, the issue of whether PVB or other downstream products compete with PVA in the merchant market would appear to be irrelevant. Commissioner Bragg notes, however, that PVA produced for captive use in the manufacture of PVB (i.e., Monsanto's PVB-grade PVA) is not sold by Monsanto in the merchant market. Similarly, the record shows that with one minor exception, U.S. producers generally do not sell the same grades of PVA in the merchant market for the same uses for which they consume PVA internally. Although Air Products both sells PVA in the merchant market for emulsion polymer applications and captively consumes PVA in limited quantities for the same end use, that end-use segment represents only about *** percent of domestic PVA shipments, (Figure II-1, CR at II-2, PR at II-1), and thus does not detract from a finding that the domestic industry as a whole does not sell PVA that is internally transferred for processing into the merchant market. Thus, Commissioner Bragg finds that the captive production provision can be found to apply under a different theory than that applied by the majority of Commissioners in these investigations. She does not find either theory particularly compelling, however, and concurs with Commissioner Newquist that she would in any event exercise her discretion to focus on the merchant market in these investigations.

[77] CR at III-10, PR at III-6. Staff Memorandum to File (Apr. 17, 1996). The relative volume of the inputs, or other alternative measurements, may also be an appropriate benchmark for determining whether the domestic like product transferred for downstream production is the predominant input, depending on the circumstances of a particular case. In the instant investigations, the same result is reached regardless of whether relative cost or relative weight is used. See CR at III-10, PR at III-6 (for the producer of the majority of captive production, PVA is the predominant material input on the basis of weight).

[78] The manufacture of PVB accounts for *** percent of downstream captive production of PVA. CR at III-10, PR at III-6.

satisfied in these investigations. Subsection (III) of the captive production provision only requires that the production of the domestic like product sold in the merchant market is not "generally" used in the production of that downstream product. This subsection appears to be satisfied in these investigations because only *** percent of the volume of PVA sold in the merchant market is used in producing the downstream article PVB.[79] Accordingly, we have analyzed the market share and financial performance of the domestic industry primarily on the basis of its merchant market sales.

The Commission notes as a further condition of competition that the production of PVA is highly capital intensive. Due to the capital-intensive nature of production in this industry and resulting high fixed costs, producers have a strong incentive to maintain production and capacity utilization at high levels to allow fixed costs to be absorbed over the largest possible volume. Similarly, to maximize shipment and production volumes, producers have an incentive to seek alternative markets. In this regard, we note that export shipments account for a significant percentage of both domestic and foreign producers' total PVA shipments.[80]

Apparent U.S. consumption of PVA in the merchant market increased over the entire period examined, first declining from 1992 to 1993 and then recovering in 1994. Apparent merchant market consumption was higher in interim 1995 than in interim 1994.[81] [82] Similarly, the value of apparent U.S. consumption for the merchant market decreased from 1992 to 1993 before increasing in 1994, and was higher in interim 1995 than in interim 1994.[83] [84]

The U.S. industry's domestic shipments to the merchant market increased consistently throughout the period of investigation.[85] [86] The total value of the U.S. industry's domestic shipments to the U.S. merchant market fluctuated, declining from 1992 to 1993 and then increasing in 1994, and was higher in interim 1995

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[79] CR at III-12, PR at III-7.

[80] See Tables VII-1, VII-2, VII-3, CR at VII-3, VII-7, VII-9, PR at VII-2, VII-4; Table C-1, CR at C-4, PR at C-4.

[81] Table IV-3, CR at IV-8, PR at IV -5. Apparent domestic consumption in the merchant market declined from *** to *** million pounds between 1992 and 1993 and then increased to *** million pounds in 1994. Apparent domestic consumption in the merchant market was *** million pounds in interim (Jan.-Sept.) 1995 compared with *** million pounds in interim 1994. Id.

[82] Apparent domestic consumption for the market as a whole decreased from 256.5 to 253.3 million pounds between 1992 and 1993, before increasing to 276.1 million pounds in 1994. Total consumption was 221.2 million pounds in interim 1995 compared with 207.5 million pounds in interim 1994. Table IV-2, CR at IV-7, PR at IV-4.

[83] Table IV-3, CR at IV-8, PR at IV-5. The value of apparent domestic consumption in the merchant market decreased from *** million in 1992 to *** million in 1993, before increasing to *** million in 1994; the value of consumption for the merchant market was *** million in interim 1995 compared with *** million in 1994. Id.

[84] The value of PVA consumption for the market as a whole declined from $210.4 million to $196.4 million between 1992 and 1993 and then increased in 1994 to $214.6 million; the value of consumption was $189.3 million in interim 1995 compared with $161.3 million in interim 1994. Table IV-2, CR at IV-7, PR at IV-4.

[85] Table IV-3, CR at IV-8, PR at IV-4. The U.S. industry's domestic shipments to the merchant market increased from *** million pounds to *** million pounds between 1992 and 1993 before increasing to *** million pounds in 1994; domestic merchant market shipments were *** million pounds in interim 1995 compared with *** million pounds in interim 1994. Id.

[86] Table IV-2, CR at IV-7, PR at IV-5. U.S. producers' total domestic shipments increased from 200.1 to 211.7 million pounds between 1992 and 1993 prior to increasing to 233.5 million pounds in 1994; total shipments were 190.0 million pounds in interim 1995 compared with 175.5 million pounds in interim 1994. Id.

compared with interim 1994.[87] [88] The unit value of domestic industry shipments to the merchant market declined from *** per pound in 1992 with *** per pound in 1993, before further declining to *** per pound in 1994. Unit values recovered in interim 1995, and were *** per pound compared with *** per pound in interim 1994.[89]

The domestic industry's share of merchant market consumption also increased from 1992 to 1994, and was higher in interim 1995 compared with interim 1994.[90] [91]

U.S. producers' PVA production capacity fell from 1992 to 1994, but was higher in interim 1995 compared with interim 1994.[92] Production volume rose from 1992 to 1993, declined in 1994 and was higher in interim 1995 compared with interim 1994.[93] As a consequence of these fluctuations, capacity utilization rose from 1992 to 1993, declined in 1994, and was higher in interim 1995 compared with interim 1994.[94] Domestic producer inventories increased from 1992 to 1993, before declining in 1994, and were higher in interim 1995 compared with interim 1994.[95]

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[87] Table IV-3, CR at IV-8, PR at IV-5. The value of merchant market shipments by the domestic industry declined from *** to *** million between 1992 and 1993 before increasing to *** million in 1994.

[88] The total value of all U.S. industry U.S. shipments declined from $159.3 million in 1992 to $158.6 million in 1993 before increasing to $175.9 million in 1994. U.S. producers' U.S. shipment values were $158.2 million in interim 1995 compared with $132.3 million in interim 1994. Table IV-2, CR at IV-7, PR at IV-4. Average unit values for combined merchant market and captive shipments fell from $.80 per pound in 1992 to $.75 per pound in 1994; average unit values were higher in interim 1995 at $.83 per pound than $.75 per pound in interim 1994. Table III-2, CR at III-7 PR at III-4.

[89] Table III-2, CR at III-7, PR at III-4.

[90] Table IV-5, CR at IV-10, PR at IV-7. The domestic industry's share of merchant market shipments increased from *** to *** percent between 1992 and 1993 before further increasing to *** percent in 1994; the domestic industry's share of merchant market shipments was *** percent in interim 1995 compared with *** percent in interim 1994.

[91] The domestic industry's share of total apparent consumption increased from 78.0 percent in 1992 to 83.6 percent in 1993 and then increased again to 84.6 percent in 1994; this share was 85.9 percent in interim 1995 compared with 84.6 percent in interim 1994. Table IV-4, CR at IV-9, PR at IV-6.

[92] Table III-1, CR at III-6, PR at III-3. Production capacity decreased from *** million pounds to *** million pounds between 1992 and 1993 and then increased to *** million pounds in 1994; capacity was *** million pounds in interim 1995 compared with *** million pounds in interim 1994. Id. Air Products' new Pasadena, TX PVA facility came on stream in 1991, and completed its first full year of operation in 1992. CR at III-4, PR at III-3.

[93] Id. Production rose from 1992 to 1993, increasing from *** pounds in 1992 to *** pounds in 1993, and then dropped to *** pounds in 1994; production was *** million pounds in interim 1995 compared with *** million pounds in interim 1994. Id.

[94] Id. Capacity utilization rose from *** percent in 1992 to *** percent in 1993, but then declined to *** percent in 1994; capacity utilization was *** percent in interim 1995 compared with ***
percent in interim 1994. Id.

[95] Table III-4, CR at III-14, PR at III-7. Domestic producer inventories increased from *** million pounds in 1992 to *** million pounds in 1993, before declining to *** million pounds in 1994; inventories were *** million pounds in interim 1995 compared with *** million pounds in interim 1994. Domestic inventories as a percentage of shipments reached the lowest level during the period of investigation in 1994, following Air Products' decision to shut down operations temporarily to reduce inventory. CR at III-4, PR at III-3.

Both the number of production and related workers and the hours worked declined from 1992 through 1994 but were higher in interim 1995 compared with interim 1994.[96] Wages paid, however, increased overall between 1992 and 1994.[97] While productivity (measured in pounds produced per hour) improved between 1992 and 1994, unit labor costs (per pound) remained relatively constant.[98]

*** in domestic industry sales volume in the merchant market resulted in *** in net sales revenue in both 1993 and 1994. Net sales revenue *** was higher in interim 1995 compared with interim 1994.[99] Due to *** in the cost of sales, however, gross *** on merchant market sales *** from 1992 to 1994, before *** in interim 1995.[100] As a result, the operating income of the domestic industry on its sales to the merchant market declined both on a unit basis and as a percentage of sales from 1992 to 1994.[101] In absolute terms, operating income on merchant market sales *** from 1992 to 1993, but declined sharply in 1994, resulting in *** in that year.[102] In interim 1995, the domestic industry showed improvement in operating profitability compared with interim 1994.[103] [104] Relative stability in the cost of goods sold and SG&A expenses from 1992 to 1993 helped offset the lower sales prices in the merchant market.[105] In 1994, however, increases in

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[96] The number of production and related workers declined from 489 in 1992 to 463 in 1994, and were 472 in interim 1995 in comparison with 463 in interim 1994; the hours worked declined from 1.15 million hours to 1.10 million hours between 1992 and 1994, and were .827 in interim 1995 compared with .824 in interim 1994. Table III-5, CR at III-15, PR at III-8.

[97] Id.

[98] Id. Wages paid increased from $23.1 million in 1992 to $25.0 million in 1994, and were slightly lower in interim 1995 compared with interim 1994. Productivity (measured in pounds per hour) improved between 1992 and 1994 from 242.9 to 272.3, and was 300.1 in interim 1995 compared with 268.5 in interim 1994. Unit labor costs (per pound) were $.08 throughout the period, with the exception of a slight decline to $.07 in 1993. Id.

[99] Table VI-1, CR at VI-3, PR at VI-1. Net domestic industry sales value in the merchant market *** from *** in 1992 to *** in 1993 and *** in 1994 to ***; net merchant market sales value was higher in interim 1995, at ***, compared with *** in interim 1994. Id. Domestic industry total net sales value *** between 1992-1994 from *** to *** in 1994, and was *** in interim 1995 compared with *** in interim 1994. Table K-1, CR at K-3, PR at K-3.

[100] Table VI-1, CR at VI-3, PR at VI-1. Gross profits *** from *** in 1994 to *** in 1994; gross profits in interim 1995 were *** compared with *** in interim 1994. Id.

[101] On a unit basis, operating income on merchant market sales *** from *** per pound in 1992 to *** per pound in 1993, and to a *** of *** per pound in 1994. As a percentage of net sales, income on merchant market sales *** from *** percent in 1992, to *** percent in 1993, and to *** percent in 1994. Id.

[102] For merchant market sales, operating income *** from *** to *** between 1992 and 1993, and the domestic industry *** of *** in 1994. Id.

[103] For merchant market sales, operating income in interim 1995 was ***, compared with *** in interim 1994. As a ratio to net sales, operating income was *** percent in interim 1995 compared with an *** percent in interim 1994; in terms of unit value (per pound), operating income (or loss) was *** in interim 1995 compared with *** in interim 1994. Id.

[104] For the domestic industry as a whole, operating income *** from *** in 1992 to *** in 1993, then *** to *** in 1994 and was higher at *** in interim 1995 compared with *** in interim 1994. Table K-1, CR at K-3, PR at K-3.

[105] Table VI, CR at VI-3, PR at VI-1. Between 1992 and 1993 cost of goods sold *** from *** percent to *** percent of net sales in the merchant market and SG&A *** from *** to *** percent of net sales value. On a unit basis, cost of goods sold *** from *** per pound in 1992 to *** per pound in 1993, while SG&A expenses *** from *** per pound to *** per pound. Id. For combined merchant market and captive production sales by the domestic industry, cost of goods sold rose from *** percent to *** percent of net sales, and SG&A declined from *** percent to *** percent of

the cost of goods sold and SG&A expenses contributed to the substantial declines in both operating income and gross profits on merchant market sales.[106] Cost of goods sold and SG&A expenses were *** in interim 1995 compared with interim 1994, contributing to *** operating income and *** gross profits in interim 1995 compared to interim 1994.[107] [108] [109]

Capital expenditures by the domestic industry declined from 1992 to 1994, and were lower in interim 1995 compared with interim 1994.[110] Research and development expenses by the domestic industry also

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net sales. Table K-1, CR at K-3, PR at K-3.

[106] Table VI-1, CR at VI-3, PR at VI-1. Cost of goods sold as a percentage of sales revenue *** between 1993 and 1994 from *** to *** percent, and SG&A expenses *** from *** to *** percent. On a per unit basis, the cost of goods sold in the merchant market *** from *** per pound in 1993 to *** per pound in 1994. Id. Gross profits on merchant market sales *** from *** in 1993 to *** in 1994 and operating income in 1993 of *** in 1994. Per unit values (per pound) for gross profits *** from *** in 1993 to *** in 1994 Id. For domestic industry sales to both the merchant and captive markets, cost of goods sold as a percentage of sales revenue *** between 1993 and 1994 from *** to *** percent, and SG&A expenses *** from *** to *** percent. Table K-1, CR at K-3, PR at K-3. Gross profits on combined sales fell from *** to *** between 1993 and 1994, and operating income declined from *** to ***. Id.

[107] Table VI-1, CR at VI-3, PR at VI-1. In the merchant market, cost of goods sold as a ratio to net sales was *** percent in interim 1995 compared with *** percent in interim 1994; similarly, SG&A expenses as a ratio to net sales were *** percent in interim 1995 compared with *** percent in interim 1994. Id. For the combined domestic industry merchant and captive market sales, cost of goods sold as a ratio to net sales was *** percent in interim 1995 compared with *** percent in interim 1994; similarly, SG&A expenses as a ratio to net sales were *** percent in interim 1995 compared with *** percent in interim 1994. Table K-1, CR at K-3, PR at K-3.

[108] Commissioners Newquist and Bragg note that the unit cost of VAM, the principal raw material used in PVA production, *** in interim 1995. Tables J-1, J-2, CR at J-4, PR at J-3. *** . Tables VI-1, VI-2, VI-3, J-1 and J-2, CR at VI-2, VI-4, VI-5, J-3 and J-5, PR at VI-1, V-2, and J-3. Thus, *** net sales *** in interim 1995, the increase did not fully absorb increasing VAM costs. See discussion infra in Section V.

[109] Commissioner Rohr notes that while he generally concurs with his colleagues in their analysis of the financial condition of the industry, there are several unique factors which require further analysis. First, the merchant market consists of only two producers, Air Products and Du Pont, one of whom, Du Pont, claims ***. Second, the fiscal years of the two companies are different; Air Products' being October 1-September 30 and Du Pont's being on a calendar-year basis. As a result, cost and price changes affecting the individual firms in the latter part of calendar year 1994 will be treated differently. Third, the data show that export sales had a particularly great effect on the financial operations of Air Products. In 1994, while the unit value of U.S. open market shipments showed a small decline there was a *** in the unit value of export shipments. This *** in the value of export shipments has more to do with the appearance of the financial condition of the domestic industry than the changes in the unit value of cost of goods sold, and the value of export shipments has little value in my analysis of the operation of the domestic industry in the U.S. market. For these reasons as well as those in the joint views of the Commission, I cannot find the domestic industry to be experiencing material injury. Further, given the substantial improvement in the condition of the industry, which appears to have begun in the last quarter of 1994 and the first quarter of 1995, before the filing of these cases, I cannot find the industry is currently experiencing material injury or displaying a significant vulnerability to the effects of the subject imports.

[110] Table VI-6, CR at VI-11, PR at VI-3. Capital expenditures *** from *** to *** between 1992 and 1994, and were *** in interim 1995 compared with *** in interim 1994. Id.

declined from 1992 to 1993 and *** in 1994, and were *** in interim 1995 compared with interim 1994.[111] [112] [113]

III. NEGLIGIBLE IMPORTS

The URAA amends the statutory provisions pertaining to final antidumping duty determinations[114] to require that investigations terminate by operation of law without an injury determination if the subject imports are negligible. In these investigations, negligibility is an issue only with respect to subject imports from China. Respondents, and other parties opposing the petition, argue that imports from China are negligible under the new statutory criteria as they constitute less than 3 percent of total imports of PVA.[115]

The provision defining "negligibility" provides that subject imports from a country that are less than 3 percent of the volume of all such merchandise imported into the United States shall be deemed negligible.[116] Whether the 3 percent threshold has been reached is to be evaluated based on the volume of all such merchandise imported into the United States in the most recent 12-month period for which data are available that precedes the filing of the petition. The statute allows the Commission to make "reasonable estimates on the basis of available statistics" of import levels for purposes of making negligibility determinations.[117]

Commerce determined that PVA manufactured and exported by one Chinese producer, Sichuan Vinylon, were fairly traded and not subject to antidumping duties. Commerce expressly stated, however, that only exports by Sichuan of PVA which it both manufactured and exported to the United States were considered fairly traded, and that sales to the United States *** are subject to its final affirmative LTFV determination.[118] The record shows that subject LTFV imports from China of PVA corresponding to the domestic like product found by the Commission in these investigations accounted for *** percent of total imports for the 12-month period immediately preceding the filing of the petitions.[119] This import share is

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[111] Table VI-6, CR at VI-11, PR at VI-3.

[112] Commissioner Rohr determines on the basis of the above analysis that the domestic industry is neither injured nor is it particularly vulnerable to the effects of the subject imports. He therefore does not join in the remainder of this opinion and proceeds directly to an analysis of the lack of threat posed to the domestic industry.

[113] Based on an examination of the relevant statutory factors, including the domestic industry's fluctuating profitability and the increase in raw materials costs at a more rapid rate than the increase in sales prices, Commissioner Newquist determines that the domestic industry is vulnerable to the continuing adverse effects of LTFV imports. He thus proceeds to a threat of material injury analysis.

[114] 19 U.S.C. § 1673d(b).

[115] Guangxi Vinylan Import and Export Corp.'s Posthearing Brief at 4; Isolyser Posthearing Brief at 6. Those parties rely, however, on computations which exclude all of Sichuan's exports to the United States, including those sold through the Hong Kong trading company. Based on such statistics, they claim that the subject imports from China equaled *** percent of total imports for the 12-month period immediately preceding the filing of the petition and, therefore, are negligible as a matter of law.

[116] 19 U.S.C. § 1677(24).

[117] See SAA at 856 ("the Commission may not have access to either complete questionnaire data or official import statistics corresponding exactly to the Commission's like product(s) designations").

[118] Staff Notes on conversation with Commerce case analyst David Goldberger (Apr. 11, 1996).

[119] Table IV-1, CR at IV-4, PR at IV-2. The Chinese LTFV imports in Table IV-1 include subject imports *** of PVA manufactured by Sichuan.

above the 3-percent statutory threshold for negligibility. Thus, we find that imports from China are not negligible.

IV. CUMULATION[120]

Section 771(7)(G)(i) provides the general rule for cumulation for determining material injury.[121] This provision 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.[122]

In assessing whether imports compete with each other and with the domestic like product, the Commission generally has 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;
>
> (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
>
> (4) whether the imports are simultaneously present in the market.[123]

While no single factor is 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.[124] Only a "reasonable overlap" of competition is required.[125] Thus, even if a

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[120] Commissioner Newquist does not join this discussion as it pertains to present material injury. He notes, however, he generally concurs that there is a reasonable overlap of geographic and temporal competition among the subject imports themselves and between the subject imports and the domestic like product. See Additional and Dissenting Views of Chairman Newquist in Flat-Rolled Carbon Steel, USITC Pub. 2664 at 260-61. Accordingly, the discussion herein serves as the basis for his determination to cumulate for purposes of threat of material injury. See Section V.

[121] The URAA relocates the provisions concerning cumulation to new Sections 771(7)(G) and 771(7)(H), 19 U.S.C. §§ 1677(7)(G) and (H). New Section 771(7)(G) concerns cumulation for determining material injury; new Section 771(7)(H) concerns cumulation for determining threat of material injury.

[122] 19 U.S.C. § 1677(7)(G)(i).

[123] 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 1988), aff'd, 859 F.2d 915 (Fed. Cir. 1988).

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

[125] See id, 718 F. Supp. at 52 ("Completely overlapping markets are not required."); United States Steel Group v. United States, Slip Op. 94-201 (Ct. Int'l Trade Dec. 30, 1994). The SAA 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." SAA at 848 (citing Fundicao Tupy, S.A. v. United States, 678 F. Supp. 898, 902 (Ct. Int'l Trade), aff'd 859 F.2d 915 (Fed. Cir. 1988)).

certain volume of subject imports from a country are of a type or specification not produced by the domestic industry, imports from that country will be cumulated if the remaining imports "collectively do compete with the domestic like product (and with other imports)."[126]

In these investigations, only the first of these four factors is disputed by the parties.[127] As to the remaining three factors, the record indicates that subject imports from all three remaining countries were simultaneously present in the U.S. market, sold in the same geographic markets, and sold through the same channels of distribution as each other and the domestic like product.[128] The petitioner contends that imports from Japan, China, and Taiwan should be cumulated because the subject imports both compete with the domestic like product and with each other.[129] In general, respondents and other parties opposing the petitions have argued only that it is not appropriate to cumulate subject imports from China with other subject imports.[130] [131]

The record shows that Japanese PVA competes with PVA imported from Taiwan and China and the domestic like product. While the Japanese producers do sell some specialty grades which may not compete with either other imports or the domestic like product,[132] a substantial portion of their product sold in the United States is sold in standard grades and competes directly with imports from China and Taiwan, as well as the domestic like product.[133] The market segments into which Japanese and domestic PVA are sold also

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[126] See Torrington Co. v. United States, 790 F. Supp. 1161 (Ct. Int'l Trade 1992).

[127] Although Beta Chemical states that subject imports from China are sold *** for use in textile processing and, therefore, pass through a distinct channel of distribution from other imports and the domestic like product, the record indicates that Chinese PVA is sold to other end users as well. See Petitioner's Postconference Brief at 19.

[128] CR at I-11, PR at I-9; CR at IV-3-IV-4, PR at IV-2; Figure IV-4, CR at IV-11, PR at IV-7; Petitioner's Prehearing Brief, Exh. One.

[129] The petitioner asserts that subject imports from China are sold increasingly in the standard grades that compete with subject imports from Japan and Taiwan, and are not confined to a narrow range of lower quality grades. Petitioner also argues that the subject imports from Japan are not concentrated in a few specialized grades, but instead are comprised largely of standard grades that are sold into the same market segments supplied by the other foreign producers of the subject imports. Petitioner's Prehearing Brief at 27-34.

[130] Joint Japanese Producers' Posthearing Brief at 7; Isolyser's Posthearing Brief at 8-9; Guangxi Vinylan Import and Export Corp.'s Posthearing Brief at 1-2.

[131] Although the Japanese producers argue that their exports to the United States are concentrated in specialty grades, some of which they claim that the domestic industry and the other foreign manufacturers do not produce, they admit that they are not able to substantiate their claim that their products are sufficiently distinct to warrant not cumulating subject merchandise from Japan with subject imports from Taiwan. Joint Japanese Producers' Posthearing Brief at 7. The Taiwan and Chinese representatives likewise argued primarily that the imports from China were so inferior to all other subject imports that it is inappropriate to cumulate imports from China with other subject imports. Chang Chun's Posthearing Brief at 35 (See Chang Chun's Postconference Brief at 17-21); Beta Chemicals' Brief at 6-7.

[132] The Japanese producers argue that their PVA consists in substantial part of high-quality, specialty grades that are sold to market segments distinct from those served by the PVA from China, and to a lesser extent those served by Taiwan and domestic producers. Joint Japanese Producers' Posthearing Brief at 7-8.

[133] See Figure II-1, CR at II-2, PR at II-1. See also Apr. 4, 1995 letter on behalf of Nippon Synthetic Chemical Industry Co., Ltd. stating that only *** percent of its U.S. exports are "special" or "modified" grades. Nippon accounted for *** percent of Japan's production of PVA and, more importantly, *** percent of Japanese exports to the United States. CR at VII-5, PR at VII-3. Wego reports that Japanese and Taiwan PVA products compete with one another. Wego's Postconference Brief at 4.

indicate that there is substantial competition both with other subject imports and with the domestic like product.[134] For example, the largest single product market for Japanese PVA is for use in emulsion polymerization, a use for which Taiwan and U.S. producers also supply a significant portion of their total shipments.[135] The U.S. producers were also strongly represented in the other two markets, paper and adhesives, which were responsible for consumption of almost all of the remaining subject imports from Japan.[136] The Taiwan producer, Chang Chun, also shipped substantial quantities of PVA into each of the same three market segments (paper, adhesives, and emulsion polymers) responsible for the vast majority of imports from Japan.[137] Although Chinese imports were used primarily for textile applications, Chinese producers also supplied a significant share of their shipments to the paper and adhesives markets, which are two of the most important markets for the other suppliers. Moreover, all producers supplied the textile market to some degree. The textile market is important not only to the producers in China, but also to U.S. PVA producers and Chang Chun.[138] Thus, subject imports from China are being sold into the same major markets for textiles, adhesives, and paper in which domestic producers sell the domestic like product and the producers in Japan and Taiwan sell the subject merchandise.

The record contains additional evidence of a reasonable overlap of competition among the various subject imports and the domestic like product. For example, Taiwan PVA was purchased by Air Products in substantial quantities in 1992 to help fill demand while Air Products' Pasadena plant was being phased into operation.[139] Such purchases were discontinued when sufficient domestic production was available, indicating that those imports were fungible with the domestic like product. Furthermore, most purchasers responding to the Commission's questionnaires indicated that both the quality and the consistency of Japanese and Taiwan PVA are comparable to those of PVA offered by the domestic industry.[140] With respect to the subject imports from China, the quality problems affecting PVA from China[141] appear to have been a problem primarily during the beginning of the period of investigation.[142]

While the importance of individual markets varies for the producers in each country, the overlap in competition is certainly "reasonable." In the U.S. market in interim 1995, the textile market represented ***

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[134] Figure II-1, CR at II-2, PR at II-1.

[135] Id.

[136] Table D-1, CR at D-3, PR at D-3.

[137] Id.

[138] Figure II-1, CR at II-2, PR at II-1.

[139] Petitioner's Prehearing Brief at 37, 39.

[140] Figures II-4 and II-5, CR at II-15, II-17, PR at II-9, II-10. The following percentage of purchasers said that they could use the subject imports in their applications: 47 percent of the purchasers of PVA from China; 88 percent of the purchasers of PVA from Taiwan; and 85 percent of the purchasers of PVA from Japan. Ibid. CR II-11, II-14, II-16, PR at II-7, II-9.

[141] The Chinese producers argue that their PVA is generally lower in quality than that provided by all other sources and that it is consequently sold into markets where there is little competition either with other foreign producers or the domestic industry. Beta Chemicals' Prehearing Brief at 6-7.

[142] CR at VII-2, n.6, PR at VII-2, n.6. An importer whose imports accounted for *** percent of subject imports from China, *** wrote the Commission on Mar. 29, 1996, stating that highly hydrolyzed PVA from China, which had been the subject of testimony regarding quality problems, was phased out of the U.S. market by early 1994. *** also noted with respect to the question of quality that Sichuan produced "a more world acceptable grade of PVA" and that Guangxi's PVA was at least equal, if not superior, in quality to Sichuan's PVA.

percent of U.S. producer shipments, *** percent of U.S. shipments of Taiwanese PVA, *** percent of U.S. shipments of Japanese PVA, and *** percent of U.S. shipments of Chinese PVA; the paper market represented *** percent of U.S. producer shipments, *** percent of U.S. shipments of Taiwan PVA, *** percent of U.S. shipments of Japanese PVA, and *** percent of U.S. shipments of Chinese PVA; and the adhesives market represented *** percent of U.S. producer shipments, *** percent of U.S. shipments of Taiwan PVA, *** percent of U.S. shipments of Japanese PVA, and *** percent of U.S. shipments of Chinese PVA.[143] Thus, three product markets (textiles, paper, and adhesives) represent, on a total quantity basis, approximately *** percent of the PVA from Japan, virtually *** percent of the PVA from China, *** percent of the PVA from Taiwan, and *** percent of domestic producers' shipments during this period. The presence of such large quantities of all of the subject imports and the domestic like product in the same market segments suggests a sufficient degree of competition between PVA from Japan, China, Taiwan, and the United States to warrant cumulation.

Based on the record in these final investigations, we find a reasonable overlap of competition among subject imports from Japan, China, and Taiwan, and the domestic like product, and therefore cumulate such imports for purposes of determining whether there is material injury by reason of the subject imports.

V. THREAT OF MATERIAL INJURY BY REASON OF LTFV IMPORTS[144]

We have cumulated the subject imports from China, Japan, and Taiwan for the purposes of our threat analysis. Under section 771(7)(H) of the Act, the Commission may "to the extent practicable" cumulatively assess the volume and price effects of subject imports from all countries as to which petitions were filed on the same day if the requirements for cumulation for material injury are satisfied.[145] We determined in Section IV above that the requirements for cumulation for material injury analysis were satisfied in these investigations. In light of the competitive overlap discussed therein, we have determined to exercise our discretion to cumulate the subject imports for purposes of our threat analysis.[146] [147]

Section 771(7)(F) of the Act directs the Commission to consider whether "further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued. . . ."[148] The Commission may not make such a determination "on the basis of mere conjecture or supposition,"[149] and considers the threat factors "as a whole." In making our determination, we have

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[143] Figure II-1, CR at II-2, PR at II-1.

[144] Chairman Watson, Vice Chairman Nuzum, Commissioner Rohr, and Commissioner Crawford do not join this section.

[145] 19 U.S.C. § 1677(7)(H).

[146] We note that with the exception of subject imports from China, the volume of imports from all subject countries followed a similar trend, falling in 1993 and then rising in 1994. Subject imports from all three subject countries rose in the most recent interim period, however.

[147] See Commissioner Newquist's note 120, supra.

[148] 19 U.S.C. §§ 1673d(b) and 1677(7)(F)(ii). While the language referring to imports being imminent (instead of "actual injury" being imminent and the threat being "real") is a change from the prior provision, the SAA indicates the "new language is fully consistent with the Commission's practice," the existing statutory language, "and judicial precedent interpreting the statute." SAA at 184.

[149] 19 U.S.C. § 1677(7)(F)(ii). An affirmative threat determination must be based upon "positive evidence tending to show an intention to increase the levels of importation." Metallverken Nederland B.V. v. United States, 744 F. Supp. 281, 287 (Ct. Int'l Trade 1990), citing American Spring Wire, 8 CIT at 28, 590 F.Supp. at 1280.

considered, in addition to other relevant economic factors,[150] all statutory factors[151] that are relevant to these investigations.[152]

As an initial matter, we note that in evaluating the threat of material injury to the domestic industry, we have placed particular emphasis on the fact that the PVA industry is capital intensive in nature, a factor which causes both domestic and foreign producers to seek to maximize their production and shipments to allow recovery of high fixed costs.[153] This factor renders the domestic industry vulnerable to increases in other input costs, as well as to any price suppression caused by substantial volumes of shipments by foreign exporters similarly seeking to increase volumes and thereby lower unit costs.

The domestic merchant industry experienced substantial declines in profitability from 1992-1994, including operating losses in 1994. Although the domestic industry returned to profitability in interim 1995, its profitability did not reach the level achieved early in the period of investigation.[154] Moreover, we find that the increased profitability experienced in interim 1995 is unlikely to be maintained. *** in the unit cost of goods sold in the merchant market in interim 1995 compared with interim 1994, the cost of raw materials has continued to rise, reaching a period high of *** percent of sales in interim 1995,[155] and increasing the vulnerability of domestic merchant producers to price suppression by subject imports.

Information on the record indicates that there is a likelihood of a substantial increase in the volume of subject imports into the U.S. market. First, the volume of subject imports increased by *** percent -- a significant increase -- in interim 1995 compared with interim 1994.[156] This increase not only represents the first increase in import volume during the period of investigation, but is also somewhat remarkable given that this increase in subject imports followed the filing of the petitions and the Commission's preliminary affirmative determinations in these investigations. Increased volumes of subject imports will exacerbate the current vulnerability of the domestic industry, as the industry attempts to cover increasing costs for raw

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[150] Suramerica de Aleaciones Laminadas, C.A. v. United States, 44 F.3d 978 (Fed. Cir. 1994). The Federal Circuit held that 19 U.S.C. § 1677(7)(F)(i) requires the Commission to consider "all relevant factors" that might tend to make the existence of a threat of material injury more probable or less probable. The Commission cannot limit its analysis to the enumerated statutory criteria when there is other pertinent information in the record. Moreover, the court appears to require consideration of the present condition of the industry as among the "relevant economic factors." Id. at 984.

[151] The URAA amended these factors to track more closely the language concerning threat of material injury in the Antidumping and Subsidies Agreements, although "[n]o substantive change in Commission threat analysis is required." SAA at 855.

[152] 19 U.S.C. § 1677(7)(F)(i). Two statutory threat factors have no relevance to these investigations. Because there are no subsidy allegations, factor I is not applicable. Factor VII regarding raw and processed agriculture products is also inapplicable to the product at issue. Moreover, there are no outstanding dumping findings in third countries which were relevant to the Commission's consideration in these investigations. See 19 U.S.C. § 1677(7)(F)(iii)(I).

[153] Because of this need to maximize output, we view the domestic industry's export shipments in a different light than certain of our colleagues. Importantly, in our view, the adverse effects of unfair imports in the domestic market, particularly with regard to price effects, forced the domestic industry to increase its reliance on export markets in order to maintain its production at levels sufficient to allow recovery of fixed costs. Moreover, as discussed infra., we find that lower sales values in export markets relative to the U.S. market indicate a likelihood that increased volumes of subject imports will be directed to the U.S. market.

[154] Table VI-1, CR at VI-3, PR at VI-1.

[155] See supra n. 108.

[156] Table IV-1, CR at IV-4, PR at IV-2.

materials.[157] Second, although relatively high levels of capacity utilization exist in the subject countries,[158] we find that exports to the U.S. market are likely to continue to increase due to a likelihood of diversion of subject imports from other markets to the U.S. market. The U.S. export market is relatively small in comparison with the third-country markets for the three subject countries.[159] The record shows that exporters from both Taiwan, the largest supplier of subject imports, and Japan, the second largest, shifted sales from other markets to the U.S. market during interim 1995: PVA exports from both countries to the United States increased not only in absolute terms, but also as a percentage of both production and total export sales in interim 1995 compared with interim 1994.[160] [161] The record also provides some evidence that declining prices in other export markets may increase the likelihood that the industries in China, Japan, and Taiwan, which share the same export markets as U.S. producers, will further divert exports from other export markets to the United States.[162]

We further determine that the subject imports are likely to enter the U.S. market at prices that will suppress domestic prices and increase demand for the subject imports to a significant degree. The subject imports undersold the domestic like product in a substantial number of the direct price comparisons during the period of investigation.[163] Because subject imports are generally substitutable with the domestic like product in the applications for which they are qualified, and because price is an important factor in purchasing decisions,[164] the availability of increasing volumes of low-priced subject imports will likely lead to

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[157] The record indicates that the domestic industry has, until the interim 1995 period, had difficulty in recovering increased costs and was only recently able to cover increasing costs of raw materials following the increase in prices in the last quarter of 1994 and in interim 1995.

[158] Tables VII-1-VII-3, CR at VII-3, VII-7, VII-9, PR at VII-2, VII-4.

[159] Ibid.

[160] Producers of subject merchandise in China and Japan also have the ability to divert sales from their home markets, which are very large in proportion to their exports to the U.S. market. See Tables VII-1-VII-2, CR at VII-3, VII-7, PR at VII-2, VII-4.

[161] Table VII-3, CR at VII-9, PR at VII-4.

[162] We note that the domestic industry's unit values in export markets declined throughout the period, indicating that prices in those markets are declining. Table III-2, CR at III-7, PR at III-4. Unit values in both the domestic market and in export markets declined from 1992 to 1994, then recovered in interim 1995. The unit value of U.S. export shipments in interim 1995 was below the unit value of domestic merchant sales, however, at a time when subject imports were increasing.

[163] The Commission collected pricing data with respect to sales of five different grades of PVA. Pricing data were submitted regarding sales of PVA to textile, paper, and adhesive manufacturers. Subject imports generally undersold the domestic like product in sales to the textile industry. Id. Tables G-6-G-10, CR at G-6-G-8, PR at G-3. Margins of underselling ranged as high as 28 percent. Id.

Prices of imports from China were below those of U.S. producers during virtually every quarter for which sales were reported for sales to the paper industry, and prices of imports from Taiwan were below those of the U.S. producers in the majority of the quarters. Tables G-1-G-5, CR at G-3-G-5, PR at G-3. Subject imports from Japan were sold at prices both below and above the domestic like product prices. The margin of underselling was as high as 29 percent. Id.

Imports of Chinese PVA were sold to the adhesive manufacturers at prices that were generally below domestic producer prices, whereas prices of the Japanese and Taiwanese subject merchandise were mixed. Tables G-12-17, CR at G-9-G-11, PR at G-4-G-5. Margins of underselling were as high as 23 percent.

[164] See generally, CR at II-8-II-19, PR at II-5-II-10.

price suppression or depression,[165] and to a further increase in the quantities demanded of the subject imports. Furthermore, the presence of large U.S. inventories of subject merchandise overhanging the market will cause price suppression.[166] Subject import inventories are substantially higher in interim 1995 compared with interim 1994.[167]

While the increase in import volume in interim 1995 and the simultaneous increase in prices could suggest a lack of correlation between pricing levels and increasing import volumes, we find that the existence of large U.S. inventories of subject imports, coupled with lower shipments of subject imports in interim 1995 compared with interim 1994, indicates that the effects of the increased imports are likely to be experienced in the near future.[168]

Finally, we do not find that but for the suspension of liquidation, we would have found the domestic industry to be experiencing present material injury. Available data do not indicate that, absent suspension of liquidation in October 1995, the domestic industry would have been materially injured by reason of subject imports.

CONCLUSION

For the foregoing reasons, we determine that the domestic PVA industry is threatened with material injury by reason of LTFV imports from Japan, China, and Taiwan.

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[165] Indeed, evidence on the record indicates that the subject imports had some adverse effects on prices for the domestic like product during the period of investigation. Selling prices of both the subject imports and the domestic like product followed the same trend, declining generally until the second half of 1994, and then increasing through interim 1995. Figures V-3 through V-6, CR at V-7-V-10, PR at V-5. The record also shows that price is an important factor in purchasing decisions (of the 52 purchasers polled, 38 purchasers rated price as one of the top three factors in purchasing decisions.) CR at II-8, PR at II-5. Purchasers rate imports from all three subject countries above U.S.-produced PVA with respect to providing the lowest price. Figure II-3, CR at II-12, PR at II-8; Figure II-4, CR at II-15, PR at II-9; Figure II-5, CR at II-17, PR at II-10. The record also shows that purchasers will switch suppliers when offered a lower price. CR at II-13, II-14, H-5-H-15, PR at II-7, H-2. Subject imports, moreover, undersold the domestic like product in many instances, as noted above. The evidence suggests that underselling by the subject imports and declining prices for subject imports may have had a price suppressing or depressing effect during the period of investigation, making it difficult for domestic producers to recover increased material costs. For example, cost of goods sold as a percentage of sales revenue increased in 1994. Table VI-1, CR at VI-3, PR at VI-1; Table K-1, CR at K-3, PR at K-3.

[166] Table C-1, CR at C-3, PR at C-3. U.S. inventories of subject imports were *** pounds in interim 1995 compared with *** pounds in interim 1994. Id.

[167] Id.

[168] We also find some evidence of a potential for product-shifting by foreign producers. PVA production facilities in Taiwan and Japan are used to produce some products other than subject PVA, including non-subject PVA, ***, and acetic acid (a co-product of PVA). See CR at VII-4-VII-8, PR at VII-3. With regard to negative effects on development or production efforts by the domestic industry, we note that *** reported some such effects, but that *** , did not. See Appendix L, CR at L-3-L-4, PR at L-3. We note, however, that *** accounts for *** of domestic producers' merchant sales. Table F-6, CR at F-11, PR at F-8.

ADDITIONAL VIEWS OF COMMISSIONER CAROL T. CRAWFORD

On the basis of information obtained in these investigations, I determine that the industry in the United States producing polyvinyl alcohol ("PVA") is materially injured by reason of imports of PVA from the People's Republic of China ("China"), Japan, and Taiwan that the Department of Commerce has found to be sold in the United States at less-than-fair-value ("LTFV"). I join my colleagues in the findings with respect to like product, domestic industry, negligible imports, and cumulation. I also join the discussion of the condition of the domestic industry. However, I do not concur in the determination that the domestic industry producing PVA is threatened with material injury by reason of the subject imports. Rather, I determine that the industry in the United States producing PVA is materially injured by reason of the cumulated subject imports of PVA from China, Japan, and Taiwan. Because my determination differs from my colleagues', my separate views follow.

I. ANALYTICAL FRAMEWORK

In determining whether a domestic industry is materially injured by reason of LTFV imports, the statute directs the Commission to consider:

> (I) the volume of imports of the merchandise which is the subject of the investigation,
> (II) the effect of imports of that merchandise on prices in the United States for like products, and
> (III) the impact of imports of such merchandise on domestic producers of like products, but only in the context of production operations within the United States. . . .[1]

In making its determination, the Commission may consider "such other economic factors as are relevant to the determination."[2] In addition, the Commission "shall evaluate all relevant economic factors which have a bearing on the state of the industry . . . within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[3]

The statute directs that we determine whether there is "material injury by reason of" the dumped imports. Thus we are called upon to evaluate the effect of dumped imports on the domestic industry and determine if they are causing material injury. There may be, and often are, other "factors" that are causing injury. These factors may even be causing greater injury than the dumping. However, the statute does not require us to weigh or prioritize the factors that are independently causing material injury. Rather, the Commission is to determine whether any injury "by reason of" the dumped imports is material. That is, the Commission must determine if the subject imports are causing material injury to the domestic industry. "When determining the effects 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."[4] It is important, therefore, to assess the effects of the dumped imports in a way that distinguishes those effects from the effects of other factors unrelated to the dumping. To do this, I compare the current condition of the industry to the industry conditions that would have existed without the dumping, that is, had subject imports

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[1] 19 U.S.C. § 1677(7)(B)(I).

[2] 19 U.S.C. § 1677(7)(B)(ii).

[3] 19 U.S.C. § 1677(7)(C)(iii).

[4] S. Rep. No. 71, 100th Cong., 1st Sess. 116 (1987)(emphasis added).

all been fairly priced. I then determine whether the change in conditions constitutes material injury. The Court of International Trade has held that the "statutory language fits very well" with my mode of analysis.[5]

In my analysis of material injury, I evaluate the effects of the dumping[6] on domestic prices, domestic sales, and domestic revenues. To evaluate the effects of the dumping on domestic prices, I compare domestic prices that existed when the imports were dumped with what domestic prices would have been if the imports had been priced fairly. Similarly, to evaluate the effects of dumping on the quantity of domestic sales,[7] I compare the level of domestic sales that existed when imports were dumped with what domestic sales would have been if the imports had been priced fairly. The combined price and quantity effects translate into an overall domestic revenue impact. Understanding the impact on the domestic industry's prices, sales and overall revenues is critical to determining the state of the industry, because the impact on other industry indicators (e.g., employment, wages, etc.) is derived from the impact on the domestic industry's prices, sales, and revenues.

I then determine whether the price, sales and revenue effects of the dumping, either separately or together, demonstrate that the domestic industry would have been materially better off if the imports had been priced fairly. If so, the domestic industry is materially injured by reason of the dumped imports.

For the reasons discussed below, I determine that the domestic industry producing PVA is materially injured by reason of the subject imports.

II. CONDITIONS OF COMPETITION

To understand how an industry is affected by unfair imports, we must examine the conditions of competition in the domestic market. The conditions of competition constitute the commercial environment in which the domestic industry competes with unfair imports, and thus form the foundation for a realistic assessment of the effects of the dumping. This environment includes demand conditions, substitutability among and between products from different sources, and supply conditions in the market.

A. Demand Conditions

An analysis of demand conditions tells us what options are available to purchasers, and how they are likely to respond to changes in market conditions, for example an increase in the general level of prices in the market. Purchasers generally seek to avoid price increases, but their ability to do so varies with conditions in the market. The willingness of purchasers to pay a higher price will depend on the importance of the product to them (e.g., how large a cost factor), whether they have options that allow them to avoid the price increase, for example by switching to alternative products, or whether they can exercise buying power to negotiate a lower price. An analysis of these demand-side factors tells us whether demand for the product is elastic or inelastic, that is, whether purchasers will reduce the quantity of their purchases if the price of the product increases. For the reasons discussed below, I find that the overall elasticity of demand for PVA is relatively low.

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[5] U.S. Steel Group v. United States, 873 F. Supp. 673, 695 (Ct. Int'l Trade 1994), appeal docketed, No. 95-1245 (Fed. Cir. March 22, 1995).

[6] As part of its consideration of the impact of imports, the statute as amended by the URAA now specifies that the Commission is to consider in an antidumping proceeding, "the magnitude of the margin of dumping." 19 U.S.C. § 1677(7)(C)(iii)(V).

[7] In examining the quantity sold, I take into account sales from both existing inventory and new production.

Cost Factor. The first factor that measures the willingness of purchasers to pay higher prices is the importance of the product to purchasers. In the case of an intermediate product ("input"), the importance will depend on the significance of the input's cost relative to the total cost of the downstream product in which it is used. When the price of the input is a small portion of the total cost of the downstream product in which it is used, changes in the price of the input are less likely to alter demand for the downstream product, and, by extension, the demand for the input.

Purchasers stated that PVA accounts for a small percentage of the final cost of the wide variety of end-use products in which it is used, although for some intermediate products, such as textile and adhesive compounds, it may account for a larger percentage.[8] However, even in the textile market segment, textile mills estimated that PVA accounts only for between one and five percent of the final cost of the textile product.[9]

Alternative Products. A second important factor in determining whether purchasers would be willing to pay higher prices is the availability of viable alternative products. Often purchasers can avoid a price increase by switching to alternative products. If such an option exists, it can impose discipline on producer efforts to increase prices.

Nearly 80 percent of purchasers stated that there were no economically feasible substitutes for PVA.[10] Although some textile and adhesive users stated that there were some substitutes for PVA, the record in these investigations indicated that purchasers did not shift to alternative products when price levels for PVA fluctuated, indicating that the availability of viable alternatives is quite limited.[11] Thus, PVA generally does not face competition from viable alternative products.

I find that the small cost share of the product relative to the downstream product in which it is used indicates an inelastic demand for PVA. The lack of viable alternative products further reduces the price sensitivity of demand. Thus, I find that the overall elasticity of demand for PVA is relatively low. That is, purchasers will not reduce significantly the amount of PVA they buy in response to a general increase in the price of PVA.

B. Substitutability

Simply put, substitutability measures the similarity or dissimilarity of imported versus domestic products from the purchaser's perspective. Substitutability depends upon 1) the extent of product differentiation, measured by product attributes such as physical characteristics, suitability for intended use, design, convenience or difficulty of usage, quality, etc.; 2) differences in other non-price considerations such as reliability of delivery, technical support, and lead times; and 3) differences in terms and conditions of sale. Products are close substitutes and have high substitutability if product attributes, other non-price considerations and terms and conditions of sale are similar.

While price is nearly always important in purchasing decisions, non-price factors that differentiate products determine the value that purchasers receive for the price they pay. If products are close substitutes, their value to purchasers is similar, and thus purchasers will respond more readily to relative price changes. On the other hand, if products are not close substitutes, relative price changes are less important and are therefore less likely to induce purchasers to switch from one source to another.

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[8] CR at II-7, PR at II-4.

[9] Id.

[10] CR at II-7, PR at II-4.

[11] CR at II-22, PR at II-12.

Because demand elasticity for PVA is relatively low, overall purchases will not decline significantly if the overall prices of PVA increase. However, purchasers can avoid price increases from one source by seeking other sources of PVA. In addition to any changes in overall demand for PVA, the demand for PVA from different sources will decrease or increase depending on their relative prices and their substitutability. If PVA from different sources is substitutable, purchasers are more likely to shift their demand when the price from one source (i.e., subject imports) increases. The magnitude of this shift in demand is determined by the degree of substitutability among the sources.

Purchasers have three potential sources of PVA: domestically produced PVA, subject imports, and nonsubject imports.[12] Purchasers are more or less likely to switch from one source to another depending on the similarity, or substitutability, between and among them. I have evaluated the substitutability among PVA from different sources as follows.

I find that subject imports, nonsubject imports and domestic PVA are all fairly good substitutes for each other. Thus, a shift in demand away from subject imports would increase demand for both nonsubject imports and domestic PVA.

Purchasers indicated that the domestic like product is highly substitutable with most of the subject imports from both Taiwan and Japan. For instance, more than eighty percent of purchasers stated that subject imports from Japan, Taiwan, and PVA from the domestic producers could be used in their applications.[13] Subject imports from Taiwan and Japan and the domestic like product are also sold primarily into three market segments: textiles, adhesives, and emulsion polymers.[14] Moreover, purchasers stated that the domestic like product and subject imports from Taiwan and Japan are comparable in terms of product consistency, product quality, and reliability of supply.[15]

Subject imports from China, although less substitutable overall for the domestic like product than subject imports from Japan and Taiwan, are substitutable in such important end-uses as textiles and adhesives.[16] Thus, forty-seven percent of purchasers said that PVA from China could be used in their applications.[17] Furthermore, while PVA from China was judged to be lower in quality than other subject imports and the domestic like product early in the period of investigation, quality problems appear to have been largely overcome by 1994.[18]

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[12] Nonsubject imports are a small presence in the U.S. market, accounting for only *** percent of consumption in 1994. CR at Table IV-4; PR at Table IV-4.

[13] CR at II-11, 14, 16; PR at II-7, 9.

[14] CR at Figure II-1; PR at Figure II-1. Although a fourth market segment, polyvinyl butryal (PVB), important to the domestic industry was not supplied by subject imports, Japanese PVA had been qualified by domestic purchasers for PVB use and a Taiwanese producer of PVA was also being qualified by a U.S. purchaser. CR at III-11 n.25; PR at II-7 n.22.

[15] CR at Figures II-4 and II-5; PR at Figures II-4 and II-5. I do not find respondents' arguments that subject imports were not substitutable with the domestic producers' PVA because of non-price factors to be convincing. Any advantage that the domestic industry enjoyed based on delivery time or availability was small, as purchasers generally found the domestic like product and subject imports from Taiwan and Japan to be comparable in these areas. CR at Figures II-4 and II-5; PR at Figures II-4 and II-5.

[16] CR at II-13-14; PR at II-7.

[17] CR at II-11; PR at II-7.

[18] See March 29, 1996, Letter from ***, an importer of PVA from China. In addition, ***, which purchased *** percent of PVA imports from China during 1994, *** of subject imports from both China and Taiwan when ***. CR at II-13; PR at II-7.

For these reasons, I find that subject imports, nonsubject imports,[19] and domestic PVA are fairly good substitutes for each other. Therefore, I find that purchasers would have switched from purchases of subject imports to purchases of nonsubject imports and domestic PVA had subject imports been fairly priced.[20] Due to the apparently limited ability of nonsubject producers to increase shipments to the United States,[21] most purchasers would have shifted their purchases to the domestic like product.

C. Supply Conditions

Supply conditions in the market are a third condition of competition. Supply conditions determine how producers would respond to an increase in demand for their product, and also affect whether producers are able to institute price increases and make them stick. Supply conditions include producers' capacity utilization, their ability to increase their capacity readily, the availability of inventories and products for export markets, production alternatives and the level of competition in the market. For the reasons discussed below, I find that the elasticity of supply of PVA is fairly low.

Capacity Utilization and Capacity. Unused capacity can exercise discipline on prices, if there is a competitive market, as no individual producer could make a price increase stick. Any attempt at a price increase by any one producer would be beaten back by its competitors who have the available capacity and are willing to sell more at a lower price. In 1994, only *** percent of the domestic industry's capacity to produce PVA was not used and therefore was available to increase production.[22] However, the total quantity of subject imports was slightly more than reported available domestic capacity in 1994.[23] Thus, the domestic industry did not have sufficient unused capacity available to supply the entire demand for subject imports.

Inventories and Exports. The domestic industry had *** pounds of PVA in inventories available at the end of 1994 which it could have shipped into the U.S. market.[24] In addition, the domestic industry's exports in 1994 were *** pounds.[25] Although export commitments by U.S. producers undoubtedly would have limited the extent to which exports of PVA could be shifted to the domestic market, at least some of those exports could have been available for sale in the domestic market.[26] Thus, the domestic industry had available some inventories and exports that could have filled some of the demand supplied by subject imports.

Level of Competition. The level of competition in the domestic market has a critical effect on producer responses to demand increases. A competitive market is one with a number of suppliers in which no

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[19] The majority of nonsubject imports is produced in China by Sichuan Vinylon Works, a producer whose direct exports to the United States were found to be fairly traded by the Commerce Department.

[20] Purchasers of subject imports from Taiwan stated that a one to ten percent increase in the price of subject imports would have caused them to shift their purchases to the domestic like product. CR at II-18; PR at II-10.

[21] See Prehearing Brief of Sichuan Vinylon Works at 15-24.

[22] CR at Table III-1; PR at Table III-1.

[23] CR at Table IV-2; PR at Table IV-2.

[24] CR at Table III-4; PR at Table III-4. In 1994, domestic industry inventories reached their lowest level during the period of investigation, both in absolute terms and as a percentage of U.S. shipments. Id. Therefore, inventories which traditionally constitute a ready product source to meet demand shifting from subject imports is somewhat limited in these investigations.

[25] CR at Table III-2; PR at Table III-2.

[26] Export shipments by the domestic industry equaled approximately *** percent of total industry shipments in 1994, but declined in the immediately following 9-month period. During the interim period in 1995, exports equaled *** percent of total domestic shipments by U.S. producers. CR at Table III-2; PR at Table III-2.

one producer has the power to influence price significantly. In this market, there are three large domestic producers of PVA. However, they do not compete actively with each other in the U.S. market. Monsanto Co., for example, captively consumes all of the PVA that it produces. One other domestic producer also internally consumes a significant quantity of its PVA production.[27] Exports account for *** percent of the domestic industry's shipments,[28] and nonsubject imports are not a substantial source of competition in this market, accounting for only *** percent of consumption in 1994.[29] The record thus indicates that there is only limited competition among domestic producers of PVA in the U.S. market.

Because of the limited competition in the U.S. market and the constraints on production and domestic producers' shift of exports to the U.S. market that limit the domestic industry's ability to supply the demand for subject imports, I find that the elasticity of supply is low to moderate. That is, I find that suppliers to the market will not significantly increase their output and sales in the short run in response to an increase in demand for PVA.

III. MATERIAL INJURY BY REASON OF LTFV IMPORTS OF PVA FROM CHINA, JAPAN AND TAIWAN

The statute requires us to consider the volume of subject imports, their effect on domestic prices, and their impact on the domestic industry.[30] I consider each requirement in turn.

A. Volume of Subject Imports

Cumulated subject imports of PVA decreased from *** pounds in 1992 to *** pounds in 1993, and remained relatively steady at *** pounds in 1994.[31] The value of subject imports was $*** in 1992, $*** in 1993, and $*** in 1994. By quantity, subject imports held a market share of *** percent in 1992, *** percent in 1993, and *** percent in 1994. Their market share by value was *** percent in 1992, *** percent in 1993, and *** percent in 1994. While it is clear that the larger the volume of subject imports, the larger the effect they will have on the domestic industry, whether the volume is significant cannot be determined in a vacuum, but must be evaluated in the context of its price and volume effects. Based on the market share of subject imports and the conditions of competition in the domestic market, I find that the volume of subject imports is significant in light of its price and volume effects.

B. Effect of Subject Imports on Domestic Prices

To determine the effect of subject imports on domestic prices, I examine whether the domestic industry could have increased its prices if the subject imports had not been dumped. As discussed, both demand and supply conditions in the PVA market are relevant. Examining demand conditions helps us understand whether purchasers would have been willing to pay higher prices for the domestic product, or buy less of it, if subject imports had been sold at fairly traded prices. Examining supply conditions helps us understand whether available capacity and competition among suppliers to the market would have imposed

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[27] CR at III-6; PR at III-5.

[28] CR at III-6; PR at III-5.

[29] CR at Table IV-4; PR at Table IV-4.

[30] In reaching my determinations, I have considered the relevant arguments made by parties to the investigation concerning volume, price effects, and impact on the industry of imports of the subject merchandise.

[31] See Memorandum INV-T-026 (April 18, 1996).

discipline and prevented price increases for the domestic product, even if the subject imports had not been unfairly priced.

If the subject imports had not been dumped, their prices in the U.S. market would have increased significantly. Thus, if the subject imports had been fairly priced, they would have become more expensive relative to domestic PVA. In such a case, if subject imports are good substitutes with other PVA, purchasers would have shifted towards the relatively less expensive products.

In this investigation, the alleged dumping margins for subject imports from China are 0.0 percent for Chinese producer Sichuan Vinylon Works (Sichuan) and 116.75 percent for all other Chinese producers; 77.49 percent for PVA from Japan; and 19.21 percent for PVA from Taiwan. At these margins, subject imports would have been priced significantly higher had they been fairly traded. Subject imports, nonsubject imports and domestic PVA are all fairly good substitutes, and thus the demand for subject imports likely would have shifted to both domestic PVA and nonsubject imports had subject imports been fairly traded. Although some of the demand for subject imports from China likely would have shifted to nonsubject imports from China, production capacity and other limitations constrain the ability of Sichuan to increase the volume of exports to the United States. With the exception of a few specialty PVA grades produced only in Japan, demand for the remainder of subject imports would have shifted to the domestic like product. Moreover, nonsubject imports other than those China have only a small presence in the market and thus most of the demand for subject imports would have shifted to domestic PVA. Since subject imports held a market share of *** percent by quantity in 1994, the shift in demand away from subject imports would have been substantial. The elasticity of demand indicates that domestic suppliers should have been able to increase prices in response to this shift in demand.

Given the low elasticity of demand and the limited competition in the U.S. market, domestic producers would have succeeded in increasing their PVA prices.[32] Based on the foregoing, I find the subject imports are having significant effects on prices for domestically produced PVA.

C. Impact of Subject Imports on the Domestic Industry

To assess the impact of subject imports on the domestic industry, I consider output, sales, inventories, capacity utilization, market share, employment, wage, productivity, profits, cash flow, return on investment, ability to raise capital, research and development and other relevant factors.[33] These factors together either encompass or reflect the volume and price effects of the dumped imports, and so I gauge the impact of the dumping through those effects.

As I have discussed above, had subject imports not been dumped, the domestic industry would have captured most of the demand satisfied by subject imports. Thus, the increase in demand for domestic PVA would have been substantial. As noted above, the domestic industry would have been able to increase its prices at least somewhat if subject imports had been sold at fairly traded prices. In addition, domestic suppliers could have increased their production and sales somewhat to satisfy the increased demand. Given the lack of competition from nonsubject imports, the domestic industry would have captured enough of the demand for subject imports that it would have increased significantly its prices, output and sales, and

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[32] Some price increases, in fact, were attempted and achieved by the domestic industry during the first three calendar quarters of 1995 as demand shifted from subject imports to domestic PVA producers.

[33] 19 U.S.C. § 1677(7)(C)(iii).

therefore its revenues, significantly had subject imports not been dumped.[34] Consequently, the domestic industry would have been materially better off if the subject imports had been fairly traded.

IV. CONCLUSION

On the basis of the foregoing analysis, I determine that the domestic industry producing PVA is materially injured by reason of cumulated LTFV imports of PVA from the People's Republic of China, Japan and Taiwan.

[34] I have evaluated the domestic industry as a whole in finding that the domestic industry would have been materially better off if the subject imports had been fairly traded, and thus need not focus primarily on the merchant market. However, I note that the revenue effects relative to the merchant market would have been even greater had I evaluated the volume, price and impact of subject imports on the merchant market.

ADDITIONAL VIEWS OF COMMISSIONER BRAGG

NO MATERIAL INJURY BY REASON OF LTFV IMPORTS

In final antidumping duty investigations, the Commission determines whether an industry in the United States is materially injured by reason of the imports under investigation.[1] In making this determination, the Commission must consider the volume of imports, their effect on prices for the like product, and their impact on domestic producers of the like product, but only in the context of U.S. production operations.[2] [3]

Although the Commission may consider causes of injury to the industry other than the allegedly LTFV imports, it is not to weigh causes.[4]

For the reasons discussed below, I find that the domestic PVA industry is not materially injured by reason of LTFV imports from Japan, China, and Taiwan.[5] As discussed in the Views of the Commission, in these investigations, I have focused primarily on the merchant market in analyzing the market share and financial performance of the domestic industry.[6]

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[1] 19 U.S.C. § 1673d(b). The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant." 19 U.S.C. § 1677(7)(A).

[2] 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 U.S.C. § 1677(7)(B).

[3] As part of its consideration of the impact of imports, the statute as amended by the URAA now also specifies that the Commission is to consider "the magnitude of the margin of dumping." 19 U.S.C. § 1677(7)(C)(iii)(V). The SAA indicates that the amendment "does not alter the requirement in current law that none of the factors which the Commission considers is necessarily dispositive in the Commission's material injury analysis." SAA at 850.

New section 771(35)(C), 19 U.S.C. § 1677(35)(C) defines the "margin of dumping" to be used by the Commission in its final determinations as the margin or margins most recently published by Commerce prior to the closing of the Commission's administrative record. The dumping margins identified by the Commerce Department in its final determinations are as follows: Japan, 77.49 percent; China, 116.75 for all producers and exporters except PVA both manufactured and exported to the United States by Sichuan Vinylon Works, which is excluded from the final affirmative LTFV determination; and Taiwan, 19.21 percent. 61 Fed. Reg. 14057 (Mar. 29, 1996).

[4] See, e.g., Citrosuco Paulista, S.A. v. United States, 704 F. Supp. 1075, 1101 (Ct. Int'l Trade 1988). Alternative causes may include the following:

> [T]he volume and prices of imports sold at fair value, contraction in demand or changes in patterns of consumption, trade, restrictive practices of and competition between the foreign and domestic producers, developments in technology, and the export performance and productivity of the domestic industry.

S. Rep. No. 249, 96th Cong., 1st Sess. 74 (1979). Similar language is contained in the House Report. H.R. Rep. No. 317, 96th Cong., 1st Sess. 46-47 (1979).

[5] As discussed in Section IV of the Views of the Commission, I have cumulated subject imports from all three countries for purposes of determining whether there is material injury by reason of LTFV imports.

[6] See footnote 76 in the Views of the Commission.

A. Volume of the Subject Imports

In assessing the volume of subject imports, I note that U.S. shipments of subject imports declined throughout the period examined, falling from *** pounds to *** pounds between 1992 and 1994, and from *** pounds to *** pounds between interim periods.[7] In absolute terms, the volume of subject imports also fell from 1992-94; subject imports were higher in interim 1995 at *** pounds compared with *** pounds in interim 1994, however.[8]

The market share of subject imports also declined throughout the period of investigation: when measured on the basis of merchant market sales, where the most direct competition with the domestic industry occurs, the market share of subject imports fell from *** percent in 1992 to *** percent in 1994, and was lower in interim 1995 at *** percent compared with *** percent in interim 1994.[9] Over the same period, the share of the merchant market held by domestic producers rose from *** percent in 1992 to *** percent in 1994, and was higher at *** percent in interim 1995 compared with *** percent in interim 1994.

Although the absolute volume and market share of subject imports are substantial, I do not find the volume of subject imports to be significant given that domestic producers increased their share of the merchant market, while subject imports reduced theirs, throughout the period of investigation.

B. Price Effects of the Subject Imports

The evidence of record indicates that the subject imports have had some adverse effects on prices for the domestic like product. Selling prices of both the subject imports and the domestic like product followed the same trend, generally declining until the second half of 1994, and then increasing through interim 1995.[10] The record also shows that price is an important factor in purchasing decisions,[11] and purchasers rate imports from all three subject countries above U.S.-produced PVA with respect to providing the lowest price.[12] The record also shows that purchasers will switch suppliers when offered a lower price.[13] Subject imports, moreover, undersold the domestic like product in many instances.[14] The evidence suggests that underselling

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[7] Table IV-3, CR at IV-8, PR at IV-5.

[8] Table IV-1, CR at IV-4, PR at IV-2.

[9] Table IV-5, CR at IV-10, PR at IV-7.

[10] Figures V-3 through V-6, CR at V-7-10, PR at V-5.

[11] Of the 52 purchasers polled, 38 purchasers rated price as one of the top three factors in purchasing decisions. CR at II-8, PR at II-5.

[12] Figure II-3, CR at II-12, PR at II-8; Figure II-4, CR at II-15, PR at II-9; Figure II-5, CR at II-17, PR at II-10.

[13] CR at II-13-II-14, H-5-H-15, PR at II-7, H-3.

[14] The Commission collected pricing data with respect to sales of five different grades of PVA. Pricing data were submitted regarding sales of PVA to textile, paper, and adhesive manufacturers. Subject imports generally undersold the domestic like product in sales to the textile industry. Id. Tables G-6-G-10, CR at G-6-G-8, PR at G-3-G-4. Margins of underselling ranged as high as 28 percent. Id.

Prices of imports from China were below those of U.S. producers during virtually every quarter for which sales were reported for sales to the paper industry, and prices of imports from Taiwan were below those of the U.S. producers in the majority of the quarters. Tables G-1-G-5, CR at G-3-G-5, PR at G-3. Subject imports from Japan were sold at prices both below and above the domestic like product prices. The margin of underselling was as high as 29 percent. Id.

Imports of Chinese PVA were sold to the adhesive manufacturers at prices that were generally below domestic producer prices, whereas prices of the Japanese and Taiwan subject merchandise were mixed. Tables G-12-G-17, CR at G-9-G-11, PR at G-4-G-5. Margins of underselling were as high as 23 percent.

by the subject imports and declining prices for subject imports may have had a price suppressing or depressing effect during the period of investigation, making it more difficult for domestic producers to recover increased material costs.[15] Nonetheless, prices increased in late 1994 and interim 1995, allowing the domestic industry to return to profitability. As the improvement in pricing predates the filing of the petition by a considerable period, I do not find that improvement to be related to the initiation of these investigations.

C. Impact of the Subject Imports on the Domestic Industry

Despite the evidence of some adverse price effects, I am unable to find material injury by reason of subject imports. The declines in the financial performance of the domestic merchant producers in 1993 and 1994 do not appear to be related to subject imports: as previously noted, the shipments and market share of subject imports declined throughout this period. Although subject imports increased in interim 1995 compared with interim 1994, U.S. shipments of subject imports were lower in interim 1995 than in interim 1994.[16] Moreover, it does not appear that the increase in the volume of subject imports in interim 1995 has had an adverse effect during the period of investigation. The prices of both subject imports and domestic PVA increased from the last quarter of 1994 through the interim 1995 period. These price increases coincide with the industry's return to profitability in interim 1995, and with generally improving indicators of the condition of the industry. Accordingly, I conclude that the subject imports have had no present adverse impact on the condition of the industry.

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[15] Cost of goods sold as a percentage of sales revenue increased in 1994. Table VI-1, CR at VI-3, PR at VI-1; Table K-1, CR at K-3, PR at K-3.

[16] The existence of large U.S. inventories of subject imports, coupled with lower shipments of subject imports in interim 1995 compared with interim 1994, also indicate that the U.S. market has yet to experience the effects of the volume increase. U.S. inventories of subject imports were *** pounds in interim 1995, compared with *** pounds in interim 1994. Table C-1, CR at C-3, PR at C-3.

DISSENTING VIEWS OF
CHAIRMAN PETER S. WATSON AND VICE CHAIRMAN JANET A. NUZUM

Investigations Nos. 731-TA-726, 727 and 729 (Final)
Polyvinyl Alcohol from the People's Republic of China, Japan and Taiwan

Based on the record developed in these investigations, we determine that the domestic polyvinyl alcohol ("PVA") industry is not materially injured by reason of imports of PVA from the People's Republic of China, Japan and Taiwan that have been found to be sold at less than fair value ("LTFV"). The domestic industry's market share, shipments, sales and profits were generally strong throughout most of the period examined, notwithstanding frequent underselling by subject imports. In 1994, the industry did experience a downturn in its financial performance. However, that downturn was rapidly reversed during the first nine months of 1995. At no time during the period did subject imports significantly increase their market penetration. Although subject imports did undersell domestic PVA by sizeable margins, this was true both when the domestic industry was profitable and when it was not. The differences between domestic and subject import prices also did not change significantly at any point during the period.

We also determine that the domestic PVA industry is not threatened with material injury by reason of LTFV imports. We are not persuaded that the industry's rebound in the last nine months of the period of investigation was due to the filing of the antidumping petitions in March 1995. Evidence of recovering prices and profits appears prior to the filing. The record also does not indicate to us that the events which transpired in 1994 and led to the industry's downturn are likely to recur in the imminent future or that subject imports are otherwise likely to threaten material injury to the domestic industry.

We join our colleagues with regard to findings on domestic like product and domestic industry, related parties, condition of the industry and cumulation.[1] These dissenting views present our analysis of the remaining issues that led to our negative determinations on both present injury and threat.

I. No Present Material Injury

A. Volume of the Subject Imports

Cumulated subject imports declined substantially from 1992 to 1993, from *** million pounds to *** million pounds. They continued to decline slightly the next year, falling to *** million pounds in 1994. Subject imports from January to September 1995 ("interim 1995") were *** million pounds, as compared to *** million pounds in interim 1994.[2] In terms of market share, shipments of cumulated subject imports fell from *** percent of the merchant market in 1992 to *** percent in 1993 and *** percent in 1994. Merchant market share held by subject imports in interim 1995 was *** percent, down from *** percent in interim

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[1] See Views of the Commission, supra. The domestic like product is polyvinyl alcohol with a hydrolysis of more than 85 percent, which corresponds to the scope of the investigation as defined by the Department of Commerce at 61 FR 14064 (Mar. 29, 1996). *** of the domestic producers qualify as related parties, but appropriate circumstances do not exist to exclude *** them from the domestic industry. We agree with our colleagues that subject imports from China are not negligible, and we cumulated subject imports from all three countries for purposes of our present injury, as well as our threat, analysis. We also agree with our colleagues that the captive production provision of the statute is applicable in these investigations, and accordingly focused primarily on the merchant market in determining market share and analyzing the factors affecting the industry's financial performance.

[2] See Table IV-1, CR at IV-4, PR at IV-2.

1994.[3] As the market share percentages indicate, subject import volumes generally did not exhibit significant swings throughout most of the period examined.[4] We also note that DuPont ***, and then *** for sale in the United States.[5] Hence, a portion of the volume of subject imports that entered the United States during the period examined supplemented the domestic industry's production.

Domestic producers' market share increased throughout the period examined, irrespective of whether domestic consumption was increasing or decreasing. From 1992 to 1993, when open-market consumption was declining by *** percent, domestic industry market share increased from *** to *** percent. When open market consumption rebounded in 1994 by *** percent, domestic industry market share again increased to *** percent. A similar increase in domestic open market share occurred in interim 1995, when open market consumption was *** percent higher as compared to interim 1994.[6] Based on the foregoing, we conclude that, although the volume of subject imports was significant in absolute terms, there were no significant increases in those volumes, either in absolute terms or relative to domestic production or consumption. Nor did subject imports have significant adverse volume effects on the domestic industry market share, either in the open market or the total market.

B. Price Effects of the Subject Imports

In assessing the price effects of subject imports on domestic prices, we considered several factors. PVA is sold to a variety of end users, including the manufacturers of textiles, adhesives, paper, and polyvinyl butyral ("PVB").[7] Purchasers typically require suppliers to qualify their product, and the qualification process takes an average of 4.5 months to complete. Given the time required for qualification, most purchasers do not often change suppliers.[8] Within any given end-use sector, the driving factor for substitutablity is product qualification. Where several suppliers' PVA products are qualified by the same customer for a particular end use, those suppliers' PVA products are highly substitutable.[9] Purchasers who use PVA to make PVB and paper were reported to be the most demanding in terms of qualifying new suppliers while emulsion manufacturers were characterized as somewhat rigorous and adhesive manufacturers less demanding.[10]

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[3] See Table IV-5, CR at IV-10, PR at IV-7. Trends in total market share held by subject imports were similar. See Table IV-4, CR at IV-9, PR at VI-6.

[4] The largest decline in subject imports occurred during 1992 to 1993, when domestic producers' purchases of subject PVA were supplanted by domestic production. In particular, Air Products *** as it increased production at its new Pasadena facility. CR at III-11, PR at III-6, III-7.

[5] CR at III-11, III-12, PR at III-6, III-7.

[6] Table C-2, CR at C-5, PR at C-5. The trends in total PVA consumption and domestic market share for the total market are similar. Table C-1, CR at C-3, PR at C-3.

[7] We recognize that, for the grade of domestically-produced PVA used to make PVB, there were no commercially significant corresponding imports. This fact might appear to call into question the logic of defining the like product to include this particular grade of PVA. The Commission's like product determination, however, is based on an assessment of what domestic product is "like" the imported product. Imported PVA spans a variety of grades and serves a range of end uses. In these particular investigations, therefore, we consider it appropriate to define the like product to include, similarly, a variety of grades serving a range of end use markets. Further, as noted in the Views of the Commission, all grades of PVA are made on the same production facilities by the same employees using the same processes, and generally move through the same channels of distribution.

[8] See CR at II-8, PR at II-5.

[9] CR at II-11 - II-18, PR at II-7 - II-10.

[10] CR at V-5, PR at V-4.

We also note that the textile sector appears to be more price sensitive than other sectors. Compounders who use PVA to make blended products are less concerned with the PVA's quality and appearance than purchasers for other end uses.[11] The vast majority of the Chinese product, which ranked at the low end of the quality scale, is sold for textiles, while only a very small portion of the Japanese product, which ranked at the high end of the quality scale, was present in the textile sector.[12]

The available pricing information is based on the prices collected for PVA sold to purchasers in the textile, paper, and adhesives markets.[13] Out of 345 price comparisons, subject imports undersold domestic PVA in 238 instances, with margins of underselling ranging from low single digits to the 30-40 percent range.[14] These different underselling margins appear to reflect differences in quality levels to some degree. In particular, the largest underselling margins observed were for sales of Chinese PVA. [15] On the other hand, prices for sales of domestic "off-spec" PVA in the textile sector were much lower than prices for either prime domestic PVA or subject imports from all three countries.[16] To the extent that the textile sector is the most price sensitive and exhibited the largest price declines among the end-use sectors examined, domestic sales of "off-spec" PVA appear to have contributed to the pricing pressures in that sector.

We found no particular pattern of underselling during the period examined. Underselling margins were frequently as large in 1992 and 1993 as they were in 1994. Thus, it does not appear that underselling by the subject imports increased during the period. Indeed, in many instances, underselling margins were much smaller in 1994 than earlier in the period examined. Although subject imports undersold prime domestic PVA in a majority of instances and often by significant margins, we do not find the underselling to be significant in terms of its effects. We note that the domestic industry's financial performance was strong in 1992 and 1993, even though subject imports undersold domestic product as frequently in those two years as they did in 1994.

Price trends varied, depending on the end-use sector examined. In the textile sector, prices of domestic and subject import PVA generally declined from 1992 to 1994. Some PVA prices in this sector began to increase in the third and fourth quarters of 1994 while other prices began increasing in the first quarter of 1995. Prices of PVA sold to the paper industry were generally flat during 1992 and 1993 and then increased throughout 1994 and interim 1995. Prices of some PVA products sold to adhesive manufacturers were stable through 1992 to 1994 while other declined. Prices in this sector generally increased in 1995. We note that in several instances, domestic PVA prices declined as much or more from 1992 to 1993 than from 1993 to 1994. Yet, as noted above, the industry's financial performance did not reveal significant adverse effects from subject import competition in 1993.

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[11] Accord CR at II-1, PR at II-1. Petitioner's Prehearing Brief at 69-70 (textile blenders are only purchasers capable of using PVA that is out of line with specification), Petitioner's Posthearing Brief at 4 (characterizing textile sizing market as "most price sensitive").

[12] CR at II-1, PR at II-1.

[13] Prices also were collected for sales of PVA to make PVB. These prices were based on Air Products' sales to Monsanto, the only commercial shipments of PVA for PVB production that occurred during the period. CR at III-11, PR at III-6; Hearing Transcript ("Tr.") at 178-179. All of these shipments were made under *** contract which included various formulas for establishing prices. Air Products contends that it agreed to *** reduced prices to Monsanto because Monsanto had offers from Nippon Goshei and Chang Chun to purchase PVA at lower prices. Petitioners' Posthearing Brief at Q&A 13, Tr. at 34-35. Monsanto disputes this assertion, contending that *** to induce Monsanto to increase the amount of PVA it purchased. Monsanto's Prehearing Brief at 22; Tr. at 181. We note the pricing data indicate ***. Table G-18, CR at G-12, PR at G-4.

[14] Tables G-1 - G-16, CR at G-3 - G-11, PR at G-3 - G-5.

[15] Table G-5, CR at G-5, PR at G-2.

[16] Table G-11, CR at G-8, PR at G-5.

Petitioner Air Products argues that subject imports suppressed domestic prices, pointing as evidence to the increase in the cost of the raw material vinyl acetate monomer ("VAM"), a significant input in the production of PVA.[17] The record indicates that the price of VAM to Air Products *** from the beginning of the period through the first two quarters of 1994. From the second quarter of 1994 through the first quarter of 1995, the price of VAM increased ***.[18] Air Products argues the industry was faced with a cost-price squeeze in 1994 when raw material prices increased rapidly.

We are not persuaded that the rise in the price of VAM purchased by Air Products resulted in a cost-price squeeze for Air Products in its 1994 fiscal year. The record indicates that prices of domestic and subject import PVA showed increases in mid-1994 at the same time that VAM prices started their climb. Although the ratio of the domestic industry's cost of goods sold as a percentage of net sales did increase in 1994, the actual cost of VAM to Air Products ***. As discussed in more detail below, the increase in the industry's cost of goods sold in 1994 appears to be more attributable to Air Products' cutback in production of PVA that year,[19] which resulted in less output to cover the industry's high fixed costs, than to increases in Air Products' raw material costs. In interim 1995, the ratio of cost of goods sold ("COGS") as a percentage of net sales returned to 1992 and 1993 levels as production and prices increased.[20] Importantly, this reduction in the COGS ratio occurred even though ***.[21]

The presence of subject imports in the market in 1994 may have added to the competitive pressures the domestic industry was facing that year, although subject import market share was slightly lower than in 1993. The pricing data, however, do not indicate to us any significant changes in the relative price levels between the domestic product and subject imports in that year as compared to 1992 and 1993, when the industry was operating profitably.

Given the relatively stable presence of subject imports in the market and the absence of significant changes in pricing behavior by the subject imports, we do not find that subject imports had significant price depressing or suppressing effects.

C. Impact of the Subject Imports on the Domestic Industry

In further examining the impact of subject imports on the domestic industry, we focused primarily on the industry's performance in the merchant market, as required by the captive production provision of the statute.[22] Of the three domestic producers, Air Products accounts for *** of domestic production of PVA and sells the largest proportion of its PVA on the merchant market. Air Products *** contends it is materially injured by subject imports. Accordingly, in examining the industry's overall performance, we paid particular attention to Air Products' performance.

The domestic industry began the period examined with a robust share of the domestic merchant market and improved its market share throughout the period, both when consumption declined and when consumption increased. Domestic shipments kept increasing, as did the value of net sales. Throughout most

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[17] Petitioner's Prehearing Brief at 21-22; Petitioner's Posthearing Brief at Q&A 25.

[18] Figure V-1, CR at V-1, PR at V-1; see also Petitioner's Prehearing Brief at 21.

[19] See Petitions at 22, 27; Tr. at 28.

[20] Table VI-1, CR at VI-3, PR at VI-3.

[21] Table J-1, CR at J-4, PR at J-3.

[22] 19 U.S.C. §1677(7)(C)(iv).

of the period, the industry's operating income margin was consistently above *** percent.[23] Only in 1994 did the domestic industry experience a significant downturn in its financial performance, notwithstanding increasing shipments, sales and market share. During the entire period, however, subject imports were not increasing in the merchant market and their pricing behavior in 1994 were not significantly different from that in 1992 or 1993. Thus, the record begs the question as to what happened in 1994 to cause a decline in the industry's financial performance.

In our view, the answer lies in an examination of domestic production and inventory levels. The production of PVA is highly capital intensive, requiring high levels of capacity utilization in order to cover high fixed costs. In 1991, Air Products had completed work on its new Pasadena, Texas facility, which added approximately 75 million tons of production capacity.[24] Air Products brought this capacity on line in stages in 1992 and 1993.[25] Domestic industry production increased from *** million pounds to *** million pounds during this period, an increase of more than *** percent. ***.

Open market consumption, however, fell from 1992-93 by *** percent. Much of this decline appeared to occur in sales of PVA to make ***. Increases in open market shipments of *** percent were not enough to absorb the full increase in production. Consequently, inventories increased over *** percent. Air Products in particular, which already had inventories that constituted *** percent of its total shipments in 1992 saw this ratio increase to *** percent in 1993. This ratio was ***.[26]

In 1994, Air Products cut back *** on production, producing about *** pounds less PVA in 1994 than in 1993, as it sought to reduce its inventory levels.[27] As a result, Air Products extended the shutdown of both of its production facilities beyond the normal maintenance schedule to permit a reduction in inventory levels.[28] Its capacity utilization fell from*** percent to *** percent.[29] Air Products' cost of goods sold also was exacerbated by ***.[30] The cut back in production enabled Air Products to reduce its inventories to *** percent of total shipments in 1994.[31]

Air Products also produced *** off-spec PVA during 1992 and 1993. Commercial shipments of the off-spec product *** in 1993 and *** in 1994.[32] While we disagree with the magnitude of the impact this production of off-spec PVA had on Air Products' condition that respondents have suggested, it nevertheless contributed to reduced revenues and increased costs at the same time that Air Products was encountering other significant difficulties.

In interim 1995, domestic open market consumption was *** percent higher than in interim 1994. Domestic production jumped *** percent, and domestic open market shipments increased *** percent. Capacity utilization actually exceeded *** percent and the ratio of the industry's cost of goods sold to net sales returned to 1992 and 1993 levels. Operating income margins consequently also recovered strongly,

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[23] Table VI-1, CR at VI-3, PR at VI-3. When total industry data are examined, the domestic industry's operating income margin was even higher, consistently exceeding *** percent in every year except 1994. Table C-1, CR at C-4, PR at C-4.

[24] Tr. at 27.

[25] Id.

[26] Table F-3, CR at F-7, PR at F-5.

[27] Table F-1, CR at F-3, PR at F-3; Tr. at 32-33.

[28] CR at III-4, PR at III-3.

[29] Table F-1, CR at F-3, PR at F-3.

[30] This ***. Table J-1, CR at J-3, PR at J-3.

[31] Table F-3, CR at F-7, PR at F-3.

[32] Table III-6, CR at III-17, PR at III-9.

increasing to *** percent, as compared to *** percent in interim 1994. Air Products attributes this recovery to price increases resulting from the filing of the petitions in March 1995. We disagree with this view. The record indicates that prices of non-subject imports as well as subject imports were increasing in interim 1995, as suggested by unit value data.[33] And, as discussed earlier, the record indicates that subject import prices were beginning to increase as early as the third quarter of 1994. The industry's rebound, in our view, was due as much to increases in production and capacity utilization (that were made possible by the selling off of *** inventory in 1994 and the accompanying extended shutdowns of Air Products' two production facilities, as well as a growing market) as to increasing prices.

As a result of the Uruguay Round Agreements Act, we are now required to consider the magnitude of the margins of dumping in evaluating the impact of subject imports on the domestic industry. In these investigations, there is a wide range of applicable dumping margins. For Chinese PVA (other than that produced and exported directly to the United States by Sichuan Vinylon Works), the margin of dumping found by the Commerce Department was 116.75 percent. That margin greatly exceeds the margins by which the Chinese product undersold domestic PVA. This suggests that the Chinese PVA would not be underselling the domestic product absent the dumping. On the other hand, evidence suggests that the underselling by the Chinese product may be attributable to lower quality. Moreover, Chinese PVA accounts for an extremely small share of the market, and has not increased that share appreciably. Thus, notwithstanding an extremely large dumping margin, we find minimal effects from this dumping on the domestic industry.

For Japanese PVA, the margin of dumping is 77.49 percent. Open market share held by Japanese PVA never exceeded *** percent, and declined throughout the period. Most Japanese PVA was sold to end-use applications such as emulsion polymerizations, which are less price sensitive than textiles, paper and adhesives. And, even in the textile, paper and adhesive end uses, there was mixed overselling and underselling by the Japanese product. Consequently, in light of declining market share and lack of adverse price effects, we conclude that dumping of this magnitude by Japanese PVA also had a minimal impact on the domestic industry.

For PVA from Taiwan, the dumping margin is 19.21 percent. Taiwan had a significantly larger presence in the U.S. PVA market than China or Japan, although it also declined during the period. Open market share of imports from Taiwan was *** percent in 1992, *** percent in 1993 and 1994 and *** percent in interim 1995, and large volumes of Taiwanese PVA were sold in most end-use applications, including textiles, paper and adhesives. The dumping margin for Taiwan's PVA was either comparable to or exceeded the vast majority of underselling margins indicated by the pricing tables. On the other hand, Taiwanese PVA frequently oversold domestic PVA. In light of the declining market share and lack of adverse price effects, we find that the dumping associated with PVA from Taiwan had a minimal impact on the domestic industry.

In short, the disruption in the industry's financial performance in 1994 can be traced to the relationship between domestic inventory levels and production increases in 1993 that greatly outpaced the increase in domestic shipments, and Air Products' decision to curtail production in 1994, which meant less output to cover its high fixed costs. The presence of subject imports in the market in 1994 likely added to the competitive pressures the industry was facing, but not significantly more than was the case in 1992 and 1993. Industry developments concerning production and inventory ratios rather than subject imports led to the downturn in 1994. In any event, the recovery in prices that began in mid-1994 and the *** positive operating income levels in interim 1995 indicate to us that subject imports are not having a present adverse impact on the domestic industry.

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[33] Table IV-1, CR at IV-4, PR at IV-2.

II. No Threat of Material Injury

A. Cumulation for purposes of Threat Analysis

In assessing whether a domestic industry is threatened with material injury by reason of imports from two or more subject countries, the Commission has discretion to cumulate the volume and price effects of such imports, to the extent practicable. In these investigations, we cumulated subject imports from all three countries in our analysis principally because of the similar trends in import volumes and importer inventories in the most recent part of the period. Levels of imports from each of the subject countries were higher in interim 1995 as compared to interim 1994, as were the end of period inventories.[34] There is some evidence in the record that these increases were due to efforts by importers to increase their stocks of subject PVA prior to Commerce's suspension of liquidation of entries in October 1995.[35] We also note that although respondents contend Japanese PVA was sold at higher prices than that from China and Taiwan, the pricing data indicate it also was frequently priced near the same levels as other subject imports.

B. No Threat of Material Injury By Reason of LTFV Imports

Having determined that the domestic industry is not materially injured by reason of subject imports, we now turn to the issue of whether the subject imports are a threat of material injury. Section 771(7)(F) of the Act directs us to make our decision "on the basis of evidence that the threat of material injury is real and that actual injury is imminent."[36] While an analysis of the statutory threat factors necessarily involves projection of future events, "[s]uch a determination may not be made on the basis of mere conjecture or supposition."[37] We consider this factors "as a whole."[38] No one factor is dispositive.

The first factor we examine is foreign producers' capacity and capacity utilization. Chinese and Taiwanese PVA producers maintained *** capacity utilization during most of the period. Japan's capacity utilization, although *** than that in China or Taiwan, was still relatively high.[39] Thus,

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[34] Table IV-1, CR at IV-4, PR at IV-2.

[35] CR at IV-5, PR at IV-2. See also Respondent Chang Chun's Prehearing Brief at 44.

[36] 19 U.S.C. §§ 1673b(a) and 1677(7)(F)(ii).

[37] 19 U.S.C. § 1677(7)(F)(ii); see e.g., S. Rep. No. 249, 96th Cong., 1st Sess. 88-89 (1979); see also Metallverken Nederland B.V. v. United States, 744 F. Supp. 281, 287 (CIT 1990).

[38] While the statutory language referring to imports being imminent (instead of "actual injury" being imminent and the threat being "real") is a change from the prior provision, the Statement of Administrative Action indicates the "new language is fully consistent with the Commission's practice," the existing statutory language, "and judicial precedent interpreting the statute." See Uruguay Round Agreements Act Statement of Administrative Action, H. Doc. 103-316, Vol. 1, at 854. Another factor that must be considered is whether dumping findings or antidumping remedies in markets of foreign countries against the same class of merchandise suggest a threat of material injury to the domestic industry. 19 U.S.C. § 1677(7)(F)(iii)(I). There is no evidence in this record of foreign antidumping investigations or duties with respect to PVA.

[39] CR at VII-2 - II-4, PR at VII-2 - VII-5. Chinese producers reported capacity utilization rates of *** percent in 1994 and *** percent projected for 1995 and 1996. Table VII-1, CR at VII-3, PR at VII-2. Capacity is expected to remain constant due to raw material shortages, long lead times in purchasing, installing, and starting new production facilities. CR at VII-4, PR at VII-2. Japanese producers reported 86.2 percent capacity utilization in 1994 projected to increase to 93.6 percent in 1995 before falling to 92.1 percent in 1996. Table VII-2, CR at VII-7, PR at VII-4. Chang Chun Petrochemical, Ltd. ("Chang Chun"), the sole Taiwanese producer of PVA, operated at *** percent capacity in 1994 and projected a slight increase to *** percent in 1995 or 1996. Table VII-3, CR at VII-6, PR at VII-4. Yet, Chang

contrary to petitioner Air Products' contention, we do not find a significant amount of excess capacity. Further, only China increased its production capacity during the period. Given China's very low market penetration levels, however, we do not find this constitutes evidence of threat. Evidence of high capacity utilization and capacity constraints, therefore, suggests a limited ability by subject producers to increase their exports to the United States to a significant degree.

Although foreign producers could in theory divert shipments from home- or other export markets to the U.S. market, which currently represents only a small percentage of these countries' exports, we find this unlikely in light of other record evidence. With one exception, none of the subject countries' shipment patterns showed a significant shift among markets. The exception was the decline in Taiwan's exports to the United States from 1992 to 1993, when ***. Further, at no point during the period examined was the United States' PVA market a significant one for either China[40] or Japan. Both of these countries' PVA producers shipped the vast majority of their production to their respective home markets.[41] ***.[42]

Market share for all subject imports -- both in the total PVA market as well as the merchant market -- declined over the entire period of these investigations as U.S. producers' share of the market increased steadily.[43] Producers of the domestic like product increased their share of the quantity of U.S. consumption from 78 percent in 1992 to 83.6 percent in 1993 to 84.6 percent in 1994, with a 1995 market share by volume of 85.9 percent.[44] Concurrently, LTFV subject imports' share of the U.S. market by volume fell steadily from*** percent in 1992 to *** percent in 1993 to *** percent in 1994, with a market share of *** by volume in 1995.[45] The foregoing capacity and export data, viewed in light of the decreasing market

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Chun converted some of its PVA production to nonsubject PVA, ***. Id.

[40] We note that the data concerning China's PVA production and shipments excludes information concerning Sichuan, whose PVA was determined by Commerce not to be sold at LTFV prices in the United States. Table VII-1, n. 1, CR at VII-3, PR at VII-2.

[41] Tables VII-1 and VII-2, CR at VII-3, VII-7, PR at VII-2, VII-4.

[42] The vast majority of Chinese shipments are to the home market, and only *** percent (*** pounds) of Chinese production went to the U.S. market in 1994, projected to increase slightly to *** percent (*** pounds) in 1995. Table VII-1, CR at VII-3, PR at VII-2. Export sales to other markets are projected to increase from *** percent of production (*** pounds) in 1994 to *** percent of production (*** pounds) in 1995 before dropping slightly to *** percent of production (*** pounds) in 1996. Id. As for Japan, shipments to the U.S. market account for a very small percentage of Japanese production: only about *** percent of production (*** pounds) in 1994 went to the U.S. market, with the same percentage of production projected (estimated volume of *** pounds) in 1995. Table VII-2, CR at VII-6 and VII-7, PR at VII-2 and VII-4. Japanese exports of subject PVA to markets other than the U.S. are expected to increase from *** percent of production (*** pounds) in 1994 to *** percent of production (estimated volume of *** pounds) in 1995 and *** percent of production (estimated volume of *** pounds) in 1996. Id. Chang Chun shipped *** percent (*** pounds) of its 1994 production to the U.S. market, with decreases projected for 1995 and 1996. Table VII-3, CR at VII-9, PR at VII-4. Specifically, Chang Chun projects exports to the U.S. market to fall to *** percent of production (*** pounds) in 1995 and *** percent of production (*** pounds) in 1996 due to conversion of production to more profitable nonsubject PVA. Id. At the same time, exports to other markets than the U.S. are expected to remain steady, at *** percent of production (*** pounds) in 1994 and the same percentage of production in 1995 (estimated volume of *** pounds), projected to rise to *** percent of production (estimated volume of *** pounds) in 1996. Id.

[43] CR at IV-6, PR at IV-3.

[44] Table IV-4, CR at IV-9, PR at IV-6.

[45] With respect to market share by volume of individual countries, China's market share declined from *** percent in 1992 to *** percent in 1995, Japan's market share fell from *** percent in 1992 to *** percent in 1995, and Taiwan's market share dropped from *** percent in 1992 to *** percent in 1995. Id.

penetration of subject imports, lead us to conclude that there is little likelihood of substantially increased LTFV imports from the countries subject to these investigations.

We do not find that subject imports will enter the U.S. market at prices that will have a depressing or suppressing effect on domestic prices, or that prices of subject imports are likely to increase demand for further imports. As discussed earlier, the pricing behavior of subject imports did not change significantly during the period, and underselling margins were not significantly different in 1994 than in 1992 or 1993. Yet, the domestic industry operated profitably in the first two years of the period. It was the developments in the relationship between domestic production and inventories, not subject imports, that led to the downturn in 1994. Consequently, we do not believe subject imports are likely to have any more impact on domestic prices in the near future than they had in 1992 or 1993. In the most recent period, of course, domestic prices were increasing (as were subject import prices). Taken as a whole, imports' falling share of apparent U.S. consumption and generally rising prices do not support price suppression or depression in the incident investigations.

Similarly, we do not find that inventories of subject imports are indicative of a threat of material injury. U.S. importers' inventories of PVA fluctuated consistent with changes in U.S. demand from 1992 to 1994.[46] Importers' inventories were significantly higher in interim 1995 as compared to interim 1994.[47] We do not believe this increase is evidence of threat, however. First, the increase in inventories was not accompanied by an actual increase in U.S. shipments of subject imports. To the contrary, market share held by subject imports was lower in interim 1995 as compared to interim 1994. Further, the total inventories of imports in interim 1995 amounted to a small proportion of merchant market consumption of PVA.

In sum, capacity constraints in the countries subject to these investigations, falling exports to the U.S. market, and Chang Chun's decision to switch production to more profitable nonsubject PVA run counter to the conclusion that foreign production capacity would increase or shipments would be diverted to the U.S. market. Furthermore, there is no evidence that foreign producers of subject imports intend to convert other facilities to PVA production, as the facilities necessary for PVA production are highly specialized and capital intensive, and the record identifies no potentially suitable alternate production plants.

We also find no evidence of actual and potential negative effects on the existing development and production efforts of the domestic industry, or of any demonstrable adverse trends. The domestic industry returned to profitability in interim 1995 in an environment of increasing demand and increasing prices. Finally, it is worth noting that Air Products ***.[48]

CONCLUSION

Based on the record in these investigations, we find that the domestic PVA industry is neither materially injured nor threatened with material injury by reason of LTFV imports from China, Japan and Taiwan. The subject imports did not increase their penetration of the merchant market and their pricing behavior was largely stable throughout the period examined. The domestic industry's performance in most indicators was strong for most of the period. The downturn in 1994 was attributable to decisions by the industry, and Air Products in particular, to reduce inventories of PVA, which had reached high levels in 1992 and 1993. Following this sell-off, the industry was able to increase production and capacity utilization in

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[46] CR at VII-8, PR at VII-5.

[47] CR at VII-8,11, PR at VII-5. Most of this increase is attributable to higher inventories of PVA from Taiwan, which rose from *** pounds in interim 1994 to *** pounds in interim 1995. The Taiwanese respondent admits the increase was caused by importers seeking to build up their stocks before Commerce's suspension of liquidation. Respondent Chang Chun's Prehearing Brief at 44.

[48] CR at L-3, PR at L-3.

interim 1995. At the same time, prices were increasing and the domestic industry returned to the operating income margins of 1992 and 1993. There is no evidence that persuades us these developments are likely to be reversed, or that subject imports are likely to enter the United States in volumes or at prices that would result in material injury to the domestic PVA industry. Accordingly, we make negative determinations in these investigations.

DISSENTING VIEWS OF COMMISSIONER DAVID B. ROHR
ON
NO THREAT OF MATERIAL INJURY BY REASON OF SUBJECT IMPORTS FROM CHINA, JAPAN, AND TAIWAN

I determine that the domestic industry producing Polyvinyl Alcohol (PVA) is not threatened with material injury by reason of imports from China, Japan, and Taiwan found by the Department of Commerce to be sold at less than fair value.

Introduction

Over the last several years, I have refined and explained in detail the analysis which I use in making my determinations with regard to whether unfairly traded imports threaten domestic industries.[1] I begin by assessing the degree to which the domestic industry is vulnerable to the effects of unfair imports. This assessment is analogous to the explanation of the condition of the industry in a present injury determination in traditional Commission opinions. I then proceed to review the statutory factors listed in section 771(7)(F) of the Tariff Act of 1930, as amended, to assess what the effects of the imports are likely to be.

I reach my ultimate conclusions by evaluating those effects in light of the relative vulnerability of the industry. An industry whose condition is already weakened, though not yet at the level of material injury, may be threatened even if the effects of the unfair imports are relatively small. An industry that is performing at better levels would be threatened with material injury only if the effects of the imports are relatively greater.

Vulnerability

In these investigations, I cannot find that the industry displays any serious vulnerability to the effects of LTFV imports. In making this finding, I have focussed primarily on the domestic merchant market, which consists of two firms, Air Products and Dupont, ***. As explained above, in the Condition of the Industry section of the Commission's joint opinion, the only injury which is suggested by the data seems to have occurred in 1994, particularly in data reflecting the financial performance of producers in the open market segment of U.S. market. As I indicated in my footnotes to that section of the joint opinion, that injury is more apparent than real. It was the result of 1) the coincidence of changes in prices and costs and the end of Air Products fiscal year, and 2) changes in foreign market prices that *** Air Products' export shipments and, hence, its reported financial operation. In any event, the 1995 financial data for the industry rebounded significantly (which included a significant amount of time before the filing of the petitions in these investigations), and there is no information in the record that the significant improvement in the industry's condition in 1995 reversed after September 1995. Further, while it is true that there was a significant

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[1] *See, eg.,* Brass Sheet and Strip from Japan and the Netherlands, Invs. Nos. 731-TA-379 and 380, USITC Pub 2099 (July 1988), Separate Views of Commissioner David B. Rohr at 29; New Steel Rails from Canada, Inv. No. 701-TA-297 (F) and 731-TA-422 (F), USITC Pub. 2217 (Sept. 1989), Views of Commissioners Eckes, Rohr and Newquist at 3; Gray Portland Cement and Cement Clinker from Japan, Inv. No. 731-TA-461 (P), USITC Pub 2297 (July 1990), Views of Commissioner David B. Rohr at 45; Gray Portland Cement and Cement Clinker from Japan, Inv. No. 731-TA-461 (F), USITC Pub 2376 (Apr. 1991), Views of Commissioner David B. Rohr Finding Threat of Material Injury at 45; Tungsten Ore Concentrates from the People's Republic of China, Inv. No. 731-TA-497 (F), USITC Pub 2447 (Nov. 1991), Views of Commissioners David B. Rohr and Don Newquist at 11; Sulfanilic Acid from the People's Republic of China, Inv. No. 731-TA-538 (P), USITC Pub 2457 (Nov. 1991), Additional Views of David B. Rohr and Don Newquist at 15.

increase in the price of vinyl acetate monomer reflected in the 1995 data, this increase was offset by increases in revenues for production *** of PVA. I therefore cannot find that the industry is displaying any significant vulnerability to the effects of imports.

The Statutory Factors

The second part of my analysis is to evaluate the statutory factors which the Congress has directed the Commission to consider in its threat analysis. Section 771(7)(F) of the Tariff Act of 1930, as amended most recently by the Uruguay Round Agreements Act, directs the Commission to determine whether further dumped or subsidized imports are imminent, and whether material injury by reason of imports would occur unless an order is issued.

The factors the Commission must consider in a threat analysis are:

(I) if a countervailable subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the countervailable subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement), and whether imports of the subject merchandise are likely to increase,

(II) any existing unused production capacity or imminent, substantial increase in production capacity in the exporting country likely to result in a significant increase in imports of the merchandise to the United States, taking into account the availability of other export markets to absorb any additional exports,

(III) a significant rate of increase of the volume or market penetration of imports of the subject merchandise indicating the likelihood of substantially increased imports,

(IV) whether imports of the subject merchandise are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices and are likely to increase demand for further imports,

(V) inventories of the subject merchandise,

(VI) the potential for product-shifting if production facilities in the foreign countries, which can be used to produce the subject merchandise, are currently being used to produce other products,

(VII) in any investigation under this title, which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both),

(VIII) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the like product, and

(IX) any other demonstrable adverse trends that indicate the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time).[2]

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[2] 19 U.S.C. § 1677(7)(F)(I), as amended by the URAA..

The determination of the Commission cannot be based on mere speculation. In addition, the Commission must consider whether dumping findings or antidumping remedies in markets of foreign countries against the same class of merchandise suggest a threat of material injury to the domestic industry. [3]

As I have explained in the past, I do not engage in formal cumulation in analyzing threat. While the statute requires a formal cumulation analysis in the context of the causation analysis of a present material injury case, the issue of whether imports have a collective impact is more difficult in the context of a threat analysis. A threat analysis involves the assessment by the Commission of the capabilities and intentions of foreign producers with regard to the domestic market and domestic industry. Formal cumulation, by ignoring differences in the trends in the various threat indicators, raises the possibility that the capabilities or intentions of one set of foreign producers will be "assigned" to another set of foreign producers.

Nevertheless, under certain conditions, imports may have a collective impact on the domestic industry, and the courts have said that the Commission can exercise its discretion to cumulate imports in such circumstances. These conditions include the traditional factors that the Commission looks at to determine whether cumulation is appropriate, competition between the imports and between the imports and the like product, the temporal and geographical overlap of such competition, and that all the imports be subject to investigation. In addition other factors may be relevant, such as whether imports are increasing at similar rates in the same markets, and whether they exhibit similar pricing patterns. Where I find these conditions to be met, I consider the joint impact of the imports as another demonstrable adverse trend under statutory factor (IX).

For purposes of the present investigations I determine that the conditions for my informal cumulation have been met. Imports from all three countries are subject to simultaneously filed investigations required by section 771(7)(G)(I). None qualify for an exception to cumulation under section 771(7)(G)(ii). There is a significant overlap of competition between the imports and with the domestic like product. The trends in the volume of imports, while not identical, are similar, falling over the 3 years of the investigation and rising in interim 1995. Price trends are also similar. I therefore consider it appropriate to consider the joint effects of the imports as a factor affecting the domestic industry.

To begin my analysis of the statutory threat factors in these investigations, I start by noting that these investigations involve LTFV imports rather than countervailable subsidies. Therefore, Factor (I) is not relevant. Further, these investigations do not involve raw or processed agricultural products, so that Factor (VII) is also not relevant. I now proceed to examine the remaining factors seriatim as they apply to each country and conclude with a cumulative analysis under Factor (X).

Factor (II) requires the Commission to examine the capacity situation of the foreign industry to determine the likelihood of increased imports into the United States market. For China, I note a steady moderate increase in capacity for most of the period of investigation. Throughout this period, however, capacity utilization remained high. Further, the United States remained a very small market for China, while its home market grew and other export markets fluctuated.[4] For Japan, capacity was substantially higher than that for either China or Taiwan, but the data reveal Japanese capacity declined in 1994. Capacity utilization was relatively high but declined slightly. Against this, the data also show that the Japanese home market was relatively stable, with a very small declining trend, and the US market was small and represented a declining percentage of Japanese export shipments or total shipments.[5] For Taiwan, overall capacity was similar to that for China. Fluctuations in production led to fluctuations in capacity utilization, which is reported to have reached *** percent in 1994 and *** percent in interim 1995. Overall, the US market was a more substantial

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[3] See 19 U.S.C. § 1677(7)(F)(iii), as amended by 1988 Act, section 1329.

[4] Report, Table VII-1.

[5] Report, Table VII-2.

market for Taiwanese PVA than it was for either China or Japan. Nevertheless, shipments to the United States *** from *** percent of total Taiwanese shipments in 1992 to *** percent in 1994, and was reported at *** percent in interim 1994 compared to *** in interim 1995.[6] I do not view the capacity situation in any of the three countries subject to these investigations as likely to result in substantially increased imports to the United States within a reasonably imminent time frame.

Factor (III) requires me to look at the volume and rate of increase of imports into the United States. Chinese imports rose by less than *** pounds between 1992 and 1993 before falling by *** pounds between 1993 and 1994. The interim data show an increase of approximately *** pounds. As a percentage of apparent U.S. open market sales, the market share of shipments of Chinese imports declined from *** percent to *** percent from 1992 to 1994, and dropped from *** percent to *** percent in the interim period.[7] Japanese imports dropped by *** pounds from 1992 to 1993 before increasing by roughly *** pounds in 1994. The interim data show an increase in absolute terms of about *** pounds. As a share of the U.S. open market, these fluctuations are reflected in a steady decline in the market share of Japanese shipments, from *** percent in 1992 to *** percent in 1994 and from *** to *** percent in the interim comparison.[8] Taiwanese imports declined by approximately *** pounds between 1992 and 1993, increased by *** in 1994 and also show an increase of *** pounds in the interim period comparisons. Looking at shipments of Taiwanese imports in the open market, the Taiwanese lost *** percentage points of market share between 1992 and 1993, remained stable, despite the absolute increase in imports in 1994, and lost *** percentage points of market share in the interim comparison despite the absolute rise in the volume of imports in that period.[9] Once again I cannot find that these increases support a finding of substantial increases in imports.

Factor (IV) requires me to determine if the imports are having a price suppressive or depressive effect and are likely to result in increased demand for the imports. I note that, in general, prices for PVA tended to stay within narrow bands for all sellers, both foreign and domestic. Our data also show that, generally, the imports undersold the domestic product. It also reveals that, in general, prices were flat or declining very slightly in the 1992 to 1993 data and in data for 1993 to the middle or late 1994, with many increases thereafter.[10] I further must analyze these facts in the context of *** and by my analysis above of Air Products financial data which shows only minor effects from changes in domestic prices compared to major changes resulting from Air Products' export prices.[11] In light of these facts, I cannot conclude that the prices of the imports are having price depressive or suppressive effects or that the underselling is significantly increasing the demand for the imports from any of the three subject countries.

Factor (V) requires a consideration of the effects of inventories on the possibility of threat. The data show that there were considerable fluctuations in the absolute quantity of inventories and the inventories to shipments ratio of U.S. importers.[12] Chinese inventories increased in 1993, declined to 1992 levels in 1994 and increased in the interim period. Japanese inventories declined slightly from 1992 to 1993 and increased significantly in 1994 and in the interim comparison. Taiwanese imports increased slightly in 1993, declined to 1992 levels in 1994 and doubled in our interim comparison. This factor does tend to support the existence of threat to some degree, although none of these imports represent a significant portion of consumption during the period of these investigations.

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[6] Report, Table VII-3.

[7] Report, Table VII-1 and Table IV-5.

[8] Report, Table VII-2 and Table IV-5.

[9] Report, Table VII-3 and Table IV-5.

[10] Confidential report at V-6-12, public report at V-4-6.

[11] Report, Table F-2.

[12] Report, Table VII-1,2,3.

Factor (VI) relates to the possibility of product shifting. The information on the record does not indicate the possibility of such shifting with regard to production of PVA in any of the subject countries.

Factor (VIII) relates to the effect of imports on development and production activities of the domestic industry and the development of derivative or advanced domestic like products. ***[13] Air Products claims such effects primarily on the basis of its 1994 financial returns, which as indicated previously are not significantly affected by the imports. I cannot therefore conclude that this factor supports an affirmative threat finding.[14]

Finally, Factor (IX) relates to other demonstrable adverse trends. I find that the presence of other LTFV imports is another trend affecting the industry, but that the analysis of these imports on a cumulative basis also does not add any significant support for an affirmative threat finding. First, the cumulative volume of imports subject to these investigations declined through the period of investigation, with an increase only in the interim period. Imports declined from *** pounds in 1992 to *** pounds in 1993 to *** pounds in 1994, with an increase from *** pounds in interim 1994 to *** pounds in interim 1995.[15] In market share terms, shipments of the subject imports declined from *** percent to *** percent to *** percent from 1992 through 1994 and from *** percent in interim 1994 to *** percent in interim 1995.[16] A cumulative analysis of price shows no difference from that discussed above. No other factor suggests a different outcome when examined on a cumulative basis.

Based upon the above factors, I find that only one factor, the existence of inventories, supports an affirmative finding, and it does not appear that these inventories alone are sufficient to pose a threat to the domestic industry. I therefore find that LTFV imports from China, Japan, and Taiwan do not pose a threat of material injury to the domestic industry producing the like product.

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[13] Report at Appendix L.

[14] Report at Appendix L.

[15] Report, Table IV-1.

[16] Report, Table IV-5.

PART I: INTRODUCTION

BACKGROUND

These investigations result from petitions filed by counsel on behalf of Air Products and Chemicals, Inc. (Air Products), Allentown, PA, on March 9, 1995, 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 polyvinyl alcohol (PVA)[1] from China, Japan, and Taiwan.[2] Information relating to the background of the investigations is provided below.[3]

Date	*Action*
March 9, 1995	Petitions filed with Commerce and the Commission; institution of the Commission's preliminary investigations
April 4, 1995	Commerce's notice of initiation
April 24, 1995	Commission's preliminary determinations
October 10, 1995	Commerce's preliminary determinations; institution of the Commission's final investigations (60 F.R. 56614)
March 29, 1996	Commerce's final determinations (61 F.R. 14057)[4]
March 26, 1996	Commission's hearing[5]
April 29, 1996	Commission's vote
May 6, 1996	Commission determinations transmitted to Commerce

SUMMARY DATA

A summary of data collected in the investigations is presented in tables C-1 and C-2 of appendix C. Except as noted, U.S. industry data are based on questionnaire responses of three firms that accounted for all known U.S. production of PVA during 1994. U.S. import data are based on questionnaire responses of 34

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[1] PVA is currently provided for in subheading 3905.30.00 of the Harmonized Tariff Schedule of the United States (HTS) with a most-favored-nation tariff rate of 3.2 percent *ad valorem*, applicable to imports from China, Japan, and Taiwan. Prior to January 1996, PVA was provided for in subheading 3905.20.00 of the HTS.

[2] A petition was simultaneously filed by Air Products concerning PVA imports from Korea; however, the investigation concerning Korea was terminated on the basis of the unanimous Commission determination that imports of PVA from Korea are negligible. *Polyvinyl Alcohol from China, Japan, Korea, and Taiwan*, Invs. Nos. 731-TA-726-729 (Preliminary), USITC Pub. 2883 (Apr. 1995), p. I-3.

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

[4] Commerce calculated final LTFV margins to be as follows: 0 percent with respect to Chinese producer Sichuan Vinylon Works (Sichuan); 116.75 percent with respect to all other Chinese producers; 77.49 percent with respect to Japanese producers; and 19.21 percent with respect to Taiwan producers.

[5] A list of witnesses that appeared at the hearing is presented in app. B.

firms whose U.S. imports are believed to account for virtually all of the subject imports and approximately 80 percent of imports of PVA from other countries during 1994.[6]

THE PRODUCT

The imported product subject to these investigations is PVA, which is a dry, white to cream-colored, water-soluble synthetic polymer. This product consists of PVA hydrolyzed in excess of 85 percent, whether or not mixed or diluted with defoamer or boric acid.[7] PVA is available in granular or powdered form and in a wide variety of grades, molecular weights, and degrees of hydrolysis. This section presents information on both imported and domestically produced PVA, as well as information related to the Commission's "domestic like product" determination.[8]

During the preliminary investigations, only one issue concerning the domestic like product was presented: whether the differences that distinguish grades or specifications of PVA are sufficient to warrant the finding of multiple domestic like products.[9] The petitioner argued during the preliminary investigations that there are differences among grades of PVA in terms of relative interchangeability and some physical characteristics, but that those differences are outweighed by common physical characteristics, producer perceptions, manufacturing facilities, and channels of distribution.[10] The foreign producers and U.S. importers generally did not contest the petitioner's definition of the domestic like product and did not assert

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[6] Coverage of importers' questionnaires was calculated on the basis of information provided by the U.S. Customs Service. The coverage calculation concerning the subject imports is also supported by export data submitted by foreign producers in these investigations. Official import statistics are not presented in this report because the subheading under which the subject product falls is a residual or "basket" category that includes classes of merchandise not subject to these investigations. In addition, evidence on the record indicates that a substantial amount of nonsubject merchandise is included in the data concerning the subject imports from Japan.

[7] PVA hydrolyzed at 85 percent or less is not included in the scope of these investigations. In addition, PVA covalently bonded with acetoacetylate, carboxylic acid, or sulfonic acid uniformly present on all polymer chains in a concentration equal to or greater than two mole percent and PVA covalently bonded with silane uniformly present on all polymer chains in a concentration equal to or greater than one-tenth of one mole percent are excluded from the scope of these investigations.

[8] The Commission's decision 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) interchangeability; (3) channels of distribution; (4) customer and producer perceptions; (5) common manufacturing facilities and production employees; and, where appropriate, (6) price.

[9] There is no issue as to whether the PVA hydrolyzed at 85 percent or less is part of the same domestic like product as PVA hydrolyzed at more than 85 percent, because there is no domestic production of PVA hydrolyzed at 85 percent or less. *Polyvinyl Alcohol from China, Japan, Korea, and Taiwan*, Invs. Nos. 731-TA-726-729 (Preliminary), USITC Pub. 2883 (Apr. 1995), pp. I-7 and II-4. Likewise, it appears that there is no issue concerning other items explicitly excluded from the scope of the investigations because there is no domestic production of these items. Hearing transcript, p. 59. Hereafter, unless indicated otherwise, all references to PVA in this report refer to PVA hydrolyzed in excess of 85 percent.

[10] The petitioner added that there are no clear dividing lines between different grades that would permit the finding of distinct domestic like products. Petitioner's postconference brief, pp. 6-8.

that the Commission should find multiple domestic like products.[11] Two parties to the preliminary investigations, however, did argue for a finding of more than one domestic like product. Monsanto Co. (Monsanto), a domestic manufacturer which produces PVA as an intermediate product in its manufacture of polyvinyl butyral (PVB), claimed that the PVA that it uses in this process is a distinct domestic like product.[12] Isolyser Co., Inc. (Isolyser), a U.S. purchaser of PVA, argued that there should be two domestic like products consisting of PVA hydrolyzed in excess of 95 percent (which it describes as fully hydrolyzed) and that below 95 percent (which it describes as partially hydrolyzed).[13]

The Commission found one domestic like product in the preliminary investigations, encompassing all PVA hydrolyzed in excess of 85 percent, because evidence on the record indicated that all grades share certain common physical and chemical characteristics, many grades are used in the same general end uses, and some grades may be used in more than a single end use.[14] Moreover, all grades are manufactured using the same production facilities, processes, and production employees and are distributed primarily to end users.[15]

During these final investigations, the petitioner argues that "although there are a wide variety of standard and specialty grades of PVA available in the market, no clear dividing lines exist among the various grades."[16] The petitioner also argues that "wet, ethanol-swollen PVA that is captively produced by Monsanto is not within the scope of these investigations and is not the like product."[17] Three parties to the final investigations argue for a finding of more than one domestic like product. Monsanto argues that "PVB-grade" PVA constitutes a distinct domestic like product,[18] while Isolyser argues that PVA hydrolyzed at 98 percent or greater (which it describes as fully hydrolyzed in these final investigations) is a separate domestic like product from PVA hydrolyzed at less than 98 percent (which it describes as partially hydrolyzed in these

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[11] *Polyvinyl Alcohol from China, Japan, Korea, and Taiwan*, Invs. Nos. 731-TA-726-729 (Preliminary), USITC Pub. 2883 (Apr. 1995), p. I-7.

[12] Monsanto's postconference brief, p. 3.

[13] Isolyser's postconference brief, p. 1. The petitioner defines the degrees of hydrolysis differently. See the section of this report entitled *Interchangeability*.

[14] *Polyvinyl Alcohol from China, Japan, Korea, and Taiwan*, Invs. Nos. 731-TA-726-729 (Preliminary), USITC Pub. 2883 (Apr. 1995), p. I-8.

[15] Ibid.

[16] Petitioner's prehearing brief, p. 8.

[17] Petitioner states that Monsanto's wet, ethanol-swollen PVA is produced as an intermediate product in the production of PVB and is never isolated during the production process. It also claims that Monsanto's PVA is not part of the U.S. industry producing PVA because it has different physical characteristics; it is produced in different production facilities using a different production process; and it is perceived by producers and purchasers to be different from the dry, water-soluble PVA. Petitioner's prehearing brief, p. 8. Monsanto asserts that its ethanol-swollen PVA is within the scope of the investigations (but a separate domestic like product) inasmuch as it is the same as the material it purchases from Air Products and that it has used these items interchangeably. It argues that its wet, ethanol-swollen PVA has the same chemical composition as dry, water-soluble PVA and that the additional steps required to "wash" and "dry" the material to produce the dry, water-soluble PVA would cost ***. Hearing transcript, p. 190; and Monsanto's posthearing brief, pp. 1-5, and 31.

[18] Monsanto's prehearing brief, p. 1.

final investigations).[19] Colorcon, a U.S. purchaser of PVA for use in the manufacture of pharmaceutical products, argues that PVA produced in accordance with Good Manufacturing Principles (GMP) is a separate domestic like product from "non-GMP" PVA.[20]

Physical Characteristics and Uses

PVA can be categorized on the basis of the degree of hydrolysis, the viscosity of the aqueous solution, and the average molecular weight of the finished product. The degree of hydrolysis is determined by the percentage of acetate groups in the polyvinyl acetate feedstock that are replaced by hydroxyl groups in the finished PVA. Fully hydrolyzed PVA will have a replacement percentage of 98-99 percent. The viscosity, which is a function of mass, of an aqueous solution of PVA increases as the molecular weight of the PVA increases. The degree of hydrolysis of PVA affects a variety of PVA properties, such as solution interfacial tensions, compatibility, reaction kinetics, rheology, and water solubility.

For most applications, PVA is dissolved in an aqueous solution and its solubility behavior in water depends on several factors, including degree of polymerization, degree of hydrolysis, drying temperature, particle size, and molecular weight.[21] PVA polymers are unique in that they possess unusual solubility properties, ranging from solubility in cold (room temperature) water to solubility in only hot water. For example, PVA of 88 percent hydrolysis is soluble in both cold and hot water, whereas 98 percent hydrolyzed PVA may be soluble only in hot water. All other characteristics being equal, the higher the degree of hydrolysis, the lower the solubility. Petitioner indicates that by altering certain product characteristics, however, solubility can be changed.[22] The petitioner also points out that all standard grades of PVA, regardless of degree of hydrolysis, must be "cooked" to achieve complete solubility.[23] Figure I-1 illustrates the relation between the degree of hydrolysis and the solubility of PVA in water.

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[19] Although broader in scope than Monsanto's domestic like product argument, Monsanto agrees with Isolyser's argument. Monsanto's posthearing brief, pp. 17 and 28. Note that Isolyser's position in the preliminary investigations was that the distinction lay at 95 percent or greater hydrolyzed rather than at 98 percent or greater. Isolyser's prehearing brief, pp. 1-2.

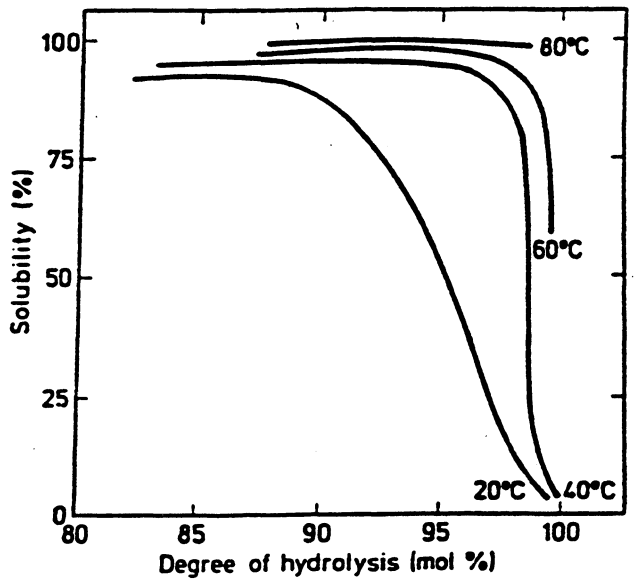
[20] For a pharmaceutical product to meet U.S. Pharmacopeia/National Formulary (USP/NF) requirements, it must be manufactured using GMP. Colorcon's prehearing brief, p. 6; and Colorcon's posthearing brief, p. 4.

[21] Petitioner's posthearing brief, p. Q&A-9 and exh. 12.

[22] Petitioner's posthearing brief, p. Q&A-9 and exh. 13.

[23] Depending on the grade, cook temperatures for Air Products' PVA are recommended in the range of 85-93 degrees centigrade.

Figure I-1
Relationship between the degree of hydrolysis and the solubility of polyvinyl alcohol



Source: T. Okaya, "General Properties of PVA in Relation to its Applications," in *Polyvinyl Alcohol--Developments*, edited by C. A. Finch, John Wiley & Sons, London, 1992, chapter 1, pp. 4-5.

The petitioner argues that all PVA has similar physical characteristics; it is a hard solid at the end of the saponification process[24] suitable for grinding into granular or powdered form.[25] Monsanto states that the type of PVA required to produce PVB is physically different from other types of PVA in that it must have a high hydrolysis level, narrow viscosity range, low ash content, low residual organic volatiles, and low resin color.[26] Isolyser argues that the physical characteristics of fully hydrolyzed PVA are different from partially hydrolyzed PVA and that the "true reason for the distinction" is the degree of solubility of the product.[27] Colorcon concedes that different grades of PVA have similar physical characteristics, but that their uses are

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[24] Saponification is the chemical reaction in which an ester is heated with aqueous alkali to form an alcohol and the sodium salt of the acid corresponding to the ester.

[25] The petitioner indicates that this does not include the wet, ethanol-swollen PVA produced by Monsanto. Petitioner's prehearing brief, p. 8. Monsanto argues that there is no difference between the chemical composition of PVB-grade PVA, whether in a wet, ethanol-swollen form or a dry, water-soluble form. The difference between the two forms is simply that the wet form has not been dried. Monsanto's posthearing brief, p. 1.

[26] Monsanto's prehearing brief, p. 3.

[27] Isolyser's prehearing brief, p. 4, hearing transcript, p. 128, and Isolyser's posthearing brief, p. 2. Contrary to Isolyser's claims, petitioner and Japanese respondents explain that there is a continuum among the grades of PVA with the more hydrolyzed PVA being less soluble. Petitioner's posthearing brief, p. Q&A-9; and Japanese respondents' posthearing brief, app. B, p. 2. Petitioner also argues that other PVA properties are of much greater importance than solubility in most PVA applications. Petitioner's posthearing brief, p. Q&A-9.

significantly different in that PVA that fails to meet GMP standards cannot be used in Colorcon's pharmaceutical applications.[28]

PVA is used in a wide variety of applications. It is used in the textile and paper industries in sizing formulations; as a binder in adhesive formulations and soil binding compounds; as an emulsion or polymerization aid in colloidal suspensions, water-soluble films, cosmetics, and joint compounds; and as an intermediate in the production of PVB, which is used as an adhesive film in automotive safety glass. The main use for PVA hydrolyzed at 85 percent and under is as a processing aid in producing polyvinyl chloride.[29]

Interchangeability[30]

PVA is sold in a variety of standard and specialty grades, each grade varying according to its molecular weight and the degree of hydrolysis. According to the petitioner, the degree of hydrolysis is commonly denoted as super (more than 99 percent hydrolyzed), fully (98-99 percent hydrolyzed), intermediate (90-98 percent hydrolyzed), and partial (85-89 percent hydrolyzed).[31]

The specific performance of various grades of PVA varies with the degree of hydrolysis and viscosity. For example, the greater the degree of hydrolysis, the better the water resistance. For this reason, in adhesive applications that require water resistance, a fully hydrolyzed grade of PVA is used. On the other hand, in adhesive applications that do not require water resistance, a partially hydrolyzed PVA may be used. Similarly, paper manufacturers select a specific grade of PVA dependent on the property required for the paper. Grease and water resistance, ink receptivity, and other components of the size solution determine grade selection. In the textile market, where PVA is used as a warp sizing for yarns to prevent breakage during weaving, various grades of PVA are selected for use depending on the yarn, machine type, other components of the sizing solution (e.g., starch), required viscosity, abrasion resistance, and ease of solution removal after fabric weaving.[32]

Although all grades of PVA are not completely interchangeable with other grades, more than one grade may be sold to specific end-use markets. For example, fully hydrolyzed PVA can be used in many of the same end uses in which intermediate or partially hydrolyzed PVA can be used, such as textiles, paper, and

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[28] Colorcon's prehearing brief, pp. 7-8. Colorcon explains that as a raw material in the production of polyvinyl acetate phthalate, the firm's primary use, PVA need not meet USP/NF requirements; however, it adds that, according to industry standards, PVA should adhere to GMP standards assuring consistency in final pharmaceutical products. Colorcon's more minor use in pharmaceutical film coating systems does require that PVA meet USP/NF standards. Colorcon's posthearing brief, pp. 4-5 and 14.

[29] Petition, p. 5.

[30] This section includes a discussion of customer and producer perceptions concerning interchangeability.

[31] Petition, p. 6. The definitions of fully, intermediate, and partially hydrolyzed PVA in terms of degrees of hydrolysis vary somewhat within the industry. For example, in its product literature, E.I. DuPont de Nemours and Co. (DuPont) defines fully hydrolyzed PVA as 98 percent or greater and partially hydrolyzed as less than 98 percent hydrolyzed. Also, in a document entitled "General Properties of Polyvinyl Alcohol in Relation to its Applications," author T. Okaya of Kuraray Co., Ltd. (Kuraray) indicated that the principal grades of PVA can be classified as fully hydrolyzed (97.5-99.5 percent) and partially hydrolyzed (87-89 percent). He adds that the "partially hydrolyzed group also includes subgroups with 80 percent hydrolysis together with those with 'intermediate' degrees of hydrolysis between 88 and 98 percent."

[32] Petitioner's producer questionnaire response, att. I, pp. 1-2.

adhesives.[33] The petitioner states that the same grade of PVA is frequently sold for different commercial uses, and many end users are able to use a wide range of grades.[34] In response to a questionnaire inquiry concerning substitutability in end use between PVA products of differing degrees of hydrolysis and viscosity, petitioner Air Products stated that "there is broad substitutability across grades and applications. Many applications have evolved using particular grades such that substitution, although possible, could involve some cost and time to reformulate."[35] DuPont advertises in its product literature that both fully and intermediate hydrolyzed PVA are used in textile and adhesive applications; however, *** reported in its questionnaire response that in its production of ***, PVA products of differing degrees of hydrolysis and viscosity cannot be substituted.[36] Japanese respondents claim that it is not possible to use fully hydrolyzed PVA and partially hydrolyzed PVA in the same manner. They add that, in a "practical industrial" use, it is sometimes possible to use either fully hydrolyzed or partially hydrolyzed PVA, but the resulting performance would be different.[37] Respondent Chang Chun Petrochemical Co., Ltd. (Chang Chun) asserts that partially and fully hydrolyzed PVA are completely interchangeable in a number of specific applications;[38] however, it indicates that end users seldom change the grade of PVA they use in their applications because their formulas and process parameters would change with any product specification change.[39]

Many purchasers reported in their questionnaire responses that their specific end-use applications require PVA products of specific degrees of hydrolysis and viscosity, although some indicated that PVA products of differing degrees of hydrolysis and viscosity can be used interchangeably in their end-use applications. One purchaser, Isolyser, argues that there is no interchangeability between and among PVA hydrolyzed at less than 98 percent and PVA hydrolyzed at 98 percent and greater, and that where end use and customer specification dictate that fully hydrolyzed PVA be supplied, a partially hydrolyzed PVA product cannot be interchanged. However, it explains that fully hydrolyzed PVA can be "tolerated" in limited quantities for use in applications requiring partially hydrolyzed PVA.[40] Another purchaser, Colorcon, indicates that it requires PVA manufactured in accordance with GMP for its pharmaceutical applications and cannot use non-GMP PVA interchangeably for this end use. However, it explains that Air Products' non-

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[33] See table D-1 and pricing tables in app. G for evidence of interchangeability and simultaneous presence in the market.

[34] Petitioner's prehearing brief, p. 9.

[35] Petitioner concedes that there are some end-use applications in which it is difficult to substitute between partially and fully hydrolyzed PVA. Petitioner's posthearing brief, pp. Q&A-4-5.

[36] In its prehearing brief, Monsanto concedes that "although it may be the case that other end users of PVA possibly could use PVB-grade PVA for their applications, the likelihood of their doing so is remote, given that PVB-grade PVA is difficult to manufacture and can be procured only from limited sources, and given the availability of other types of PVA suitable for their particular end uses." Monsanto's prehearing brief, p. 9; and hearing transcript, p. 182. On the other hand, Air Products states that it sells the virtually identical PVA product that it sells to Monsanto for PVB applications to a large number of other customers serving a wide variety of other markets. Hearing transcript, p. 40.

[37] Posthearing brief of Kuraray and Nippon Synthetic Chemical Co., Ltd. (Nippon), app. B, p. 1.

[38] Chang Chun cites the following applications: temporary binder for ceramic compounds and fertilizers, pelletizing aid for detergents, preservatives and plant protection pellets, and adhesives for office glues. Chang Chun's posthearing brief, pp. 35-36.

[39] Chang Chun's posthearing brief, pp. 36-37.

[40] Isolyser's prehearing brief, pp. 4 and 9; and hearing transcript, p. 129.

GMP PVA has been used in the past in its pharmaceutical applications.[41] Both Chris Craft and Colorcon, U.S. PVA purchasers, testified at the Commission's hearing that many grades of PVA are not interchangeable and that their particular needs for specialty PVA items are not available from domestic sources.[42]

Beta Chemicals (Beta), an importer of Chinese PVA, noted that significant differences exist between imported and domestically produced grades of PVA, resulting in a product that is not entirely fungible or substitutable. For example, Beta alleged that Japanese PVA is sold at the high end of the market and does not compete with Chinese-produced PVA, which is sold at the low end of the market.[43] Chinese-produced PVA, it is alleged, competes directly with petitioner's so-called "offspec" or "offgrade" PVA and must be blended with other producers' PVA, starch, or other additives.[44]

Evidence in the record, however, indicates that there is a certain degree of interchangeability between U.S. and imported PVA, as well as between PVA imported from the subject countries in terms of grades and end-use applications. Fifteen out of 48 purchasers of PVA indicated that U.S.-produced PVA, as well as PVA produced in China, Japan, and Taiwan, could be used in their end-use applications, although only two purchasers actually reported purchases from all four sources during the investigative period. Eleven purchasers reported that the Chinese PVA could not be used in their end-use applications; three of these cited poor quality and one cited unreliable supply as the reason it could not be used. Three purchasers indicated that the Taiwan PVA could not be used in their end-use applications, while three indicated that the U.S. product and one indicated that the Japanese product could not be used. In their questionnaire responses, both *** and *** reported that the U.S.-produced and imported PVA from the subject countries are used interchangeably.[45] *** reported that it could not use Chinese PVA in its production of ***, but could possibly use the PVA product produced in Japan and Taiwan, subject to qualification.

Because it is a unique synthetic water soluble polymer with unique characteristics, PVA has few substitutes for most end-use applications. In fact, most purchasers questioned in these investigations indicated that there were no economically feasible substitutes for PVA in their end-use applications. In textile and adhesive applications, however, several purchasers indicated that substitute products for PVA exist. In addition, end users of PVA in the textile and paper industries may increase the ratio of the starch and clay mixtures to PVA as a cost savings measure, but this lessens the strength of the end product.

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[41] Colorcon explains that it was necessary to test all of Air Products' non-GMP PVA for consistency, which it asserts is "an unreasonable and uneconomical burden" to bear. Colorcon's prehearing brief, p. 8.

[42] Hearing transcript, pp. 20, 121, 151, and 161. As indicated previously, Colorcon purchased Air Products' specialty PVA for GMP use in the past, but found that it was necessary to test every bag received to ensure acceptable quality. Hearing transcript, p. 155. Petitioner indicates that it is capable of producing the PVA for specialized applications, such as required by Isolyser and Colorcon, but that historically there has not been enough demand for the firm to do so cost effectively for those purchasers. It adds that it currently supplies a significant amount of PVA for specialty applications (including pharmaceutical products), although the bulk of its sales are of the "industrial grade" PVA. Hearing transcript, pp. 61-62 and 201-202; and petitioner's posthearing brief, p. Q&A-6. Colorcon also indicates that in its search for alternative potential U.S. sources for PVA, DuPont appeared "hesitant" as a supplier of GMP PVA. Colorcon's posthearing brief, p. 8.

[43] Beta's prehearing brief, p. 3.

[44] Ibid, pp. 3-4 and 8-10.

[45] ***.

Channels of Distribution

Based on responses to Commission questionnaires, the vast majority of all PVA sold in the United States, whether domestically produced or imported, is either internally transferred or sold directly to end-user customers. Distributors, while present in the U.S. market, play a somewhat insignificant role, accounting for *** percent and *** percent, respectively, of producers' and subject importers' U.S. shipments of PVA in 1994.

In terms of end-use applications, *** percent of U.S. producers' U.S. shipments of PVA in 1994 were for internal use in producing PVB; in contrast, no shipments of imported PVA were reported for this end use during this period (figure I-2).[46] During the same time period, the textile market accounted for the largest share of the U.S. producers' and importers' U.S. open-market sales of PVA, followed by the adhesives market.[47]

Figure I-2
Shares of U.S. producers' and LTFV importers' U.S. shipments of polyvinyl alcohol, by end-use applications, 1994

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The petitioner states that all PVA travels through similar channels of distribution;[48] however, Isolyser argues that PVA hydrolyzed at 98 percent or greater and PVA hydrolyzed at less than 98 percent are sold in different markets.[49] In addition, Monsanto argues that the channels of distribution for PVB-grade PVA are distinct from those for "commercial grades" of PVA. Monsanto receives its purchases of PVB-grade PVA directly from Air Products in bulk (railroad cars), whereas other commercial shipments of Air Products' PVA are packed into 50-pound bags *** before shipment.[50] However, evidence on the record indicates that at least one other purchaser, Chris Craft, purchases U.S.-produced PVA in bulk for use in mold-release films and containers for hospital waste.[51] Chinese respondent Guangxi Vinylon Works (Guangxi) argues that the Chinese PVA imports are distinct in terms of channels of distribution because they are sold only to ***. These *** blend the Chinese PVA with PVA from other sources to be used in the production of sizing for the textile industry.[52]

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[46] ***. Monsanto's prehearing brief, p. 8.

[47] See table D-1 in app. D for the data collected in these investigations concerning end-use applications of PVA.

[48] Petitioner indicates that this does not include Monsanto's internally consumed PVA. Petitioner's prehearing brief, p. 9. Monsanto states that it formerly produced a fully hydrolyzed PVA for open-market sales, but discontinued its PVA production for this market in the early 1980s. Monsanto's posthearing brief, p. 3.

[49] Isolyser's prehearing brief, p. 4.

[50] Monsanto's prehearing brief, p. 10; and hearing transcript, pp. 178-179.

[51] Hearing transcript, p. 123.

[52] Guangxi indicates that these *** can use only up to *** percent Chinese PVA in the final blended product. Guangxi's posthearing brief, pp. 2-3.

Common Manufacturing Facilities and Production Employees

PVA is generally manufactured by hydrolyzing the acetate groups of vinyl acetate monomer (VAM) with methanol in the presence of anhydrous sodium methylate or aqueous sodium hydroxide and suitable catalysts at moderate temperatures and pressures. In the United States, this is a continuous process wherein the VAM is polymerized into polyvinyl acetate, which is then converted to PVA. The continuous process produces product hydrolyzed in excess of 85 percent.[53]

The petitioner asserts that although production processes may differ somewhat, all of the U.S. and subject foreign producers use some form of a continuous process in manufacturing PVA.[54] Colorcon argues that different manufacturing facilities are required for producing GMP and non-GMP PVA. That is, GMP requires that "systems be designed properly and that certain levels of controls be in place to ensure that quality and consistency standards are met."[55] In particular, Colorcon states that Air Products' procedures and packaging equipment design prevent it from manufacturing PVA in accordance with GMP.[56] In addition, Monsanto argues that not all PVA production facilities are able to produce PVB-grade PVA because of the products' stringent specifications that require additional equipment and processing beyond that required to produce other PVA.[57]

U.S. producers of PVA do not produce products other than PVA with the same equipment and machinery used to produce PVA. ***.[58]

Price

Standard grades of PVA are largely sold within a relatively narrow price range, although PVA prices for the same grade may vary according to the end-use market for which the product is sold. For more information concerning prices, see the section of this report entitled *Pricing and Related Data.*

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[53] PVA items excluded from the scope of these investigations (i.e., PVA less than 85 percent hydrolyzed and certain specialty grades of PVA) most often are produced in a batch process that requires specialized equipment (e.g., special high-intensity mixers, special grinders) not used in the continuous process. Petition, p. 5; and hearing transcript, pp. 59-60.

[54] PVA producers in Japan and Taiwan utilize both batch and continuous processes in manufacturing PVA. Japanese respondents' posthearing brief, app. B, pp. 6-8; and Chang Chun's posthearing brief, p. 37.

[55] Colorcon prehearing brief, pp. 8-9. Colorcon also indicates that GMP refers generally to the process of manufacturing, not to the specific equipment used in that process; therefore, specific equipment is not required to produce GMP PVA, except as necessary to provide adequate protection against contamination. Colorcon's posthearing brief, p. 13.

[56] Hearing transcript, p. 153.

[57] Monsanto's prehearing brief, pp. 12-15; and hearing transcript, p. 179.

[58] ***.

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

MARKET SEGMENTS

PVA is used in a wide variety of end-use products. PVB and textiles are by far the highest volume end uses for PVA. Other high-volume end uses for PVA include paper, adhesives, and emulsion polymerization (EP). PVA is also used in the manufacture of a wide variety of other products including building products, biodegradable health care products, ceramics, film, oil drilling, and PVC polymerization.

Only DuPont and Monsanto produce PVB and these firms have used almost solely U.S.-produced PVA in the production of PVB. All three subject countries supplied PVA for use in the paper and adhesives markets during the period for which data were collected; however, only Japan and Taiwan supplied PVA for the emulsion polymerization market. In fact, the emulsion polymerization market is the largest U.S. market for the Japanese product.

In the textile industry, PVA is sold both directly to textile mills and also to textile compounders. These compounders combine the PVA with water, starch, and other ingredients and sell this blended product to the textile mills. The vast majority of Chinese product is sold for textiles while only a very small proportion of Japanese product is sold for textiles.

The percentage of PVA produced in the United States and in each subject country that was sold in each major U.S. market segment during the first three quarters of 1995 is shown in figure II-1.

Figure II-1
Value of U.S. polyvinyl alcohol shipments of U.S. producers and imports from China, Japan, and Taiwan, by market segments, Jan.-Sept. 1995

* * * * * * *

SUPPLY AND DEMAND CONSIDERATIONS

U.S. Supply

Domestic Production

Based on the available information, staff believes that U.S. producers could not easily respond to price changes with significant changes in the quantity shipped to the U.S. market. Factors restricting supply responsiveness include high levels of capacity utilization and the lack of ability to increase capacity in the short run. The existence of export markets somewhat enhances the ability to increase or decrease shipments to the U.S. market.

Industry capacity

U.S. producers' capacity utilization ***. ***.[1]

* * * * * * *

Inventory levels

As a percentage of total shipments, inventories ***. Inventories were *** percent of annualized shipments in interim 1994 and *** percent in interim 1995. According to petitioner, these inventories do not significantly enhance producers' ability to increase supply to the U.S. market because producers need to hold a minimum level of inventory based on the lag between production and sales and contract requirements. Petitioner stated that in 1994, inventories had declined to this minimum level.[2]

Export markets

Export sales accounted for *** percent of the value of U.S. producer shipments during 1992-94. This provides some flexibility in shifting shipments between the U.S. market and other markets. ***. Petitioner stated that "a firming of U.S. prices in 1995 has resulted in the export market *** of total shipment volume."[3]

Subject Imports

Data provided by the foreign producers' questionnaire suggest that PVA producers in the subject countries are operating at high levels of capacity utilization. This would restrict their ability to increase output to the U.S. market. In 1994, the ratio of importers' inventories to shipments were lower than those held by U.S. producers, although inventories held by importers of Japanese and Taiwanese PVA were significantly higher in January-September 1995. Since foreign producers ship only a small percentage of their production to the United States, they may have the flexibility to shift shipments between other markets (including their home markets) and the U.S. market.

China[4]

Available information suggests that Chinese producers would have some flexibility to shift sales to or from the U.S. market due to the existence of large home and third markets and the existence of some

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[1] ***.

[2] Petitioner's prehearing brief, exh. 10, p. 5.

[3] Petitioner's prehearing brief, exh. 7, p. 5.

[4] The following discussion does not include information provided by Sichuan because Commerce determined that PVA produced and sold by Sichuan is fairly traded in the United States.

inventories. However, Chinese producers reported capacity utilization rates of *** percent in 1994 and *** percent projected for 1995, which could limit the ability to increase shipments to the U.S. market.

The U.S. market accounts for a very small percentage of sales of Chinese product, *** percent in 1994, projected to increase slightly to *** percent in 1995. The vast majority of shipments are to the Chinese home market. The existence of a large home market and third markets suggests that Chinese producers could shift shipments to or from the U.S. market.

Chinese producers held inventories accounting for *** percent of shipments in 1994 and projected 1995. The ratio of U.S. importer inventories of LTFV Chinese PVA to total shipments was somewhat higher. It increased from *** percent in 1992 to *** percent in 1993, but fell to *** percent in 1994. The ratio then increased from *** percent in January-September 1994 to *** percent in January-September 1995.

Japan

Available information suggests that producers and importers of Japanese PVA may have some flexibility to increase or decrease shipments of PVA to the U.S. market. Capacity utilization in the PVA industry in Japan was 86.2 percent in 1994 and was projected to increase to 93.6 percent in 1995.

Shipments to the U.S. market comprise only a small percentage of total shipments, about *** percent in 1994 and 1995 (projected). The existence of significant home and third markets suggests that Japanese producers could alter the amount of PVA shipped to the U.S. market given a change in the relative prices of PVA in the U.S. market and PVA in other markets.

Japanese producer inventories accounted for 11.1 percent of shipments in 1994 and are projected to account for 14.1 percent in 1995. U.S. importer inventories of Japanese PVA increased from *** percent of total shipments of Japanese material in 1992 to *** percent in 1994, and from *** percent in January-September 1994 to *** percent in January-September 1995.

Taiwan

Available information suggests that in the short run suppliers of Taiwan product may have some ability to increase shipments to the U.S. market. This is mainly due to the availability of inventories in the United States during 1995. While inventories ranged from *** percent to *** percent of shipments during 1992-94, they rose to *** percent of shipments during January-September 1995. The ratio of inventories to shipments of Chang Chun, the sole producer of PVA in Taiwan, was *** percent in 1994, and was projected to be *** percent in 1995.

In 1994, *** percent of Chang Chun's shipments were to the United States. This percentage is projected to be *** in 1995 and 1996. The availability of markets other than the United States suggests some flexibility to shift shipments between the U.S. market and other markets.

Chang Chun operated at nearly *** percent of capacity in 1994 and projected *** percent capacity utilization for 1995 and 1996. In addition, Chang Chun ***. This level of capacity utilization and the *** could restrict the ability to increase shipments to the U.S. market.

U.S. Demand

Demand Characteristics

Overall demand for PVA in the United States has increased since 1993. The quantity of apparent consumption decreased slightly by 1.3 percent during 1992-93 and then increased by 9.0 percent during 1993-94. Consumption was higher by 6.6 percent in interim 1995 compared to interim 1994.[5] Much of the increase in demand was driven by growth in the *** market. The quantity of PVA used in *** increased by *** percent during 1992-94 and by *** percent from January-September 1994 to January-September 1995. Based on the available information regarding substitute products and percentage of the cost of the final end-use products accounted for by PVA, it is likely that in the short run, the quantity of PVA demanded will not change significantly with changes in the price level of PVA.

Substitute Products

Nearly 80 percent of purchasers (41 of 52) stated that there were no economically feasible substitutes for PVA.[6] Some textile and adhesive users stated that there were some substitutes for PVA. Substitutes for PVA in textile applications include corn starch, acetates, acrylics, and polyester resin. Substitutes in adhesives applications include animal glues, sodium silicate, and dextrine. Four purchasers, specifically three textile compounders and one adhesives manufacturer, reported that they have increased their use of substitute products due to increases in the price of PVA. A fifth purchaser, a manufacturer of adhesives, stated that its customers can switch to other adhesive products and that therefore it cannot increase its adhesives prices as PVA prices increase.

Cost Share

PVA accounts for a small percentage of the final cost of the wide variety of end-use products in which it is used, although for the intermediate products such as textile or adhesive compounds it may account for a large percentage. For example, textile blenders reported that PVA can account for 20 to 80 percent of the cost of the blended product. However, textile mills estimated that PVA accounts for much less than one percent up to five percent of the final cost of the textile product. Likewise, *** reported that PVA accounts for *** percent of the cost of PVB, although the percentage of the final cost of safety-glass accounted for by PVA is small.

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[5] Apparent consumption of open-market shipments increased by much less, increasing by *** percent during 1992-94. Consumption was higher by *** percent in interim 1995 compared to interim 1994.

[6] ***. Monsanto's posthearing brief, p. 15.

SUBSTITUTABILITY ISSUES

U.S. Purchasers

The Commission received questionnaires from 52 purchasers of PVA. These purchasers can be grouped according to the following end-use applications: textile compounders (9), textile mills (5), adhesive manufacturers (17), paper (10), emulsion polymerization (9), and other (14).[7] Other PVA-containing products manufactured by purchasers include plastics, pharmaceuticals, biodegradable packaging, and paint, as well as many other products.

Factors Affecting Purchasing Decisions

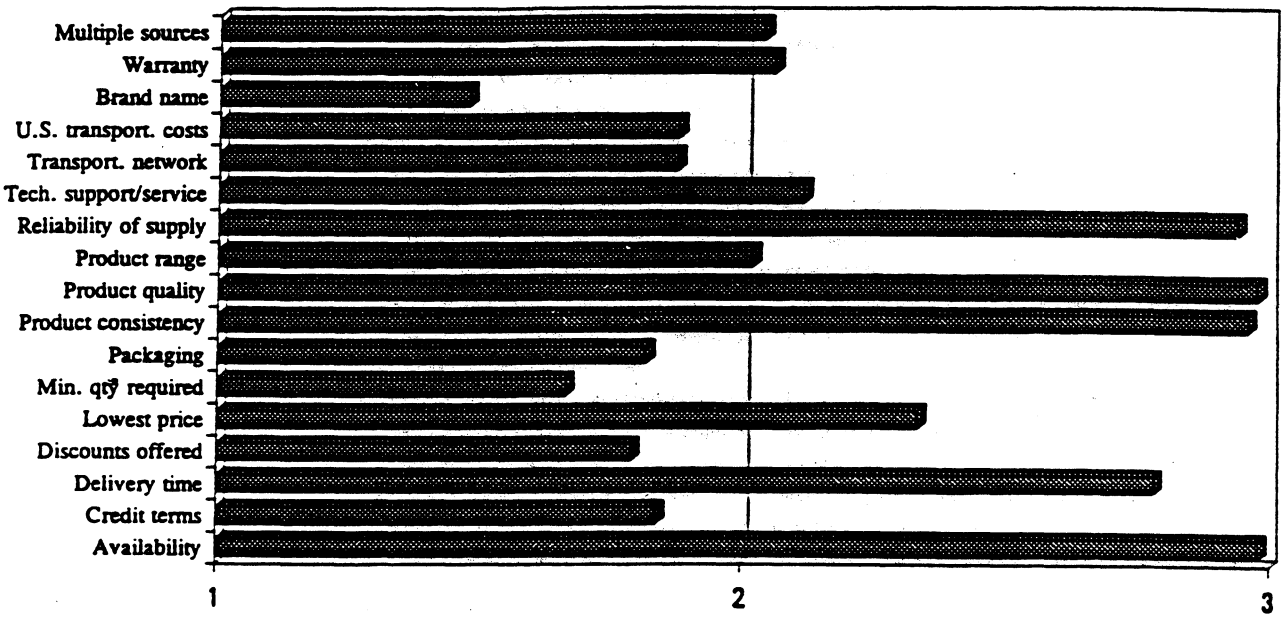
Purchasers were asked to list the three most important factors in their decision to purchase PVA from a particular source. Forty-three purchases rated quality as one of the three most important factors; 29 rated it as the most important factor. Thirty-eight purchasers listed price as one of the top three factors, with 4 listing it as the most important factor. Twenty-five purchasers reported that availability was one of the three most important factors. Other often-cited factors include contracts and service/technical support.

About 80 percent of purchasers reported that they require some sort of prequalification or certification for their purchases of PVA. The length of time reported to qualify a supplier varies. Most purchasers reported that the process takes 1 to 6 months; the average time reported was 4.5 months. However, 25 percent reported that it takes 1 month or less, while 32 percent reported that the process takes 6 months or longer. Nearly half of the purchasers (23 of 50) reported that since 1992, PVA from one or more suppliers failed to qualify with the purchaser. The sources which reportedly failed to qualify and the number of purchasers with which they failed to qualify are as follows: Air Products (11), DuPont (2), China (5), Taiwan (5), and Japan (2). In some cases, only one particular shipment from a supplier did not qualify and the purchaser may have subsequently bought PVA from the same supplier. Most purchasers reported that they do not often change suppliers.

Purchasers were asked to rate 17 different factors in terms of their importance in their decision to purchase PVA from a particular source. The possible ratings were very important (3), somewhat important (2), and not important (1). Nearly all purchasers rated availability, product quality, product consistency, and reliability of supply as very important factors. Four-fifths rated delivery time as very important. Twenty-three of 51 rated lowest price as very important. Average ratings for each factor are shown in figure II-2.

[7] Several purchasers reported that they use PVA for more than one application.

Figure II-2
Purchaser ratings of factors in decision to purchase polyvinyl alcohol from a particular source



Ratings: Very important (3), Somewhat important (2), and Not important (1)

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

Comparison of Domestic Products and Subject Imports

Substitutability between U.S.-produced PVA and imported PVA is limited in some sectors. During the period, the PVB market was for practical purposes closed to imports of PVA ***. ***.[8] ***.[9]

U.S. producers also have an advantage in direct textile mill sales. However, DuPont sells both its U.S.-produced PVA and its *** to textile mills. Of the five textile mills that responded to the purchaser questionnaire, none reported purchases from China or Japan and only one reported a small amount of purchases from suppliers other than Air Products or DuPont. The mills reported that they purchased PVA from Air Products and DuPont for the following reasons: importers cannot supply PVA in bulk,[10] technical

[8] Air Products disputed this, stating that it sells "virtually identical product to a large number of other customers serving a wide variety of other markets." Hearing transcript, p. 40.

[9] ***. Monsanto's posthearing brief, pp. 7-10.

[10] ***.

service provided by U.S. producers,[11] continuous availability of U.S. product, and good solubility of DuPont's product. U.S. producers and importers both sell to textile compounders. However, ***.

Importers' lead times from inventory are generally several days while reported lead times from the foreign producers vary from *** weeks for Japanese product and *** months for imported product from China and Taiwan.[12] *** reported lead times of *** days while *** reported lead times of *** days.

United States Versus China

Quality differences between U.S.-produced PVA and Chinese-produced PVA limit substitutability.[13] While 92 percent of purchasers (45 of 49) said they could use U.S.-produced PVA in their application, only 47 percent of purchasers (18 of 38) responding to the question said that they could use Chinese product for their application. The vast majority of Chinese product is sold for textile applications and there is little or no competition in other areas where domestic PVA is sold, such as PVB and emulsion polymerization.

Figure II-3 shows purchasers' comparisons of U.S.-produced PVA relative to PVA imported from China in the following areas: availability, delivery time, lowest price, product consistency, product quality, and reliability of supply.[14] As shown in the figure, the U.S.-produced product was judged to be superior to the Chinese product by most purchasers in each of these areas except lowest price.

While U.S. producers sell most of their PVA in bulk or in 50-pound bags,[15] over 70 percent of the Chinese product was shipped in 20- or 25-kilogram (44- or 55-pound) bags. ***, a major importer of Chinese product, reported that customer formulations are typically measured in 50-pound bags and, therefore, it must sell its Chinese PVA at a price discount because it is packaged in a different size bag.

* * * * * * *[16] [17] [18]

United States Versus Japan

Most purchasers (85 percent, or 33 of 39) reported that they could use Japanese PVA for their application. However, only about 30 percent actually purchased Japanese PVA during January 1992-September 1995. Figure II-4 shows purchasers' comparisons of domestic PVA relative to PVA imported from Japan for six purchase factors.

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[11] ***.

[12] ***.

[13] ***.

[14] These were the six areas as shown in figure II-2 that purchasers rated as the most important factors in their purchasing decisions.

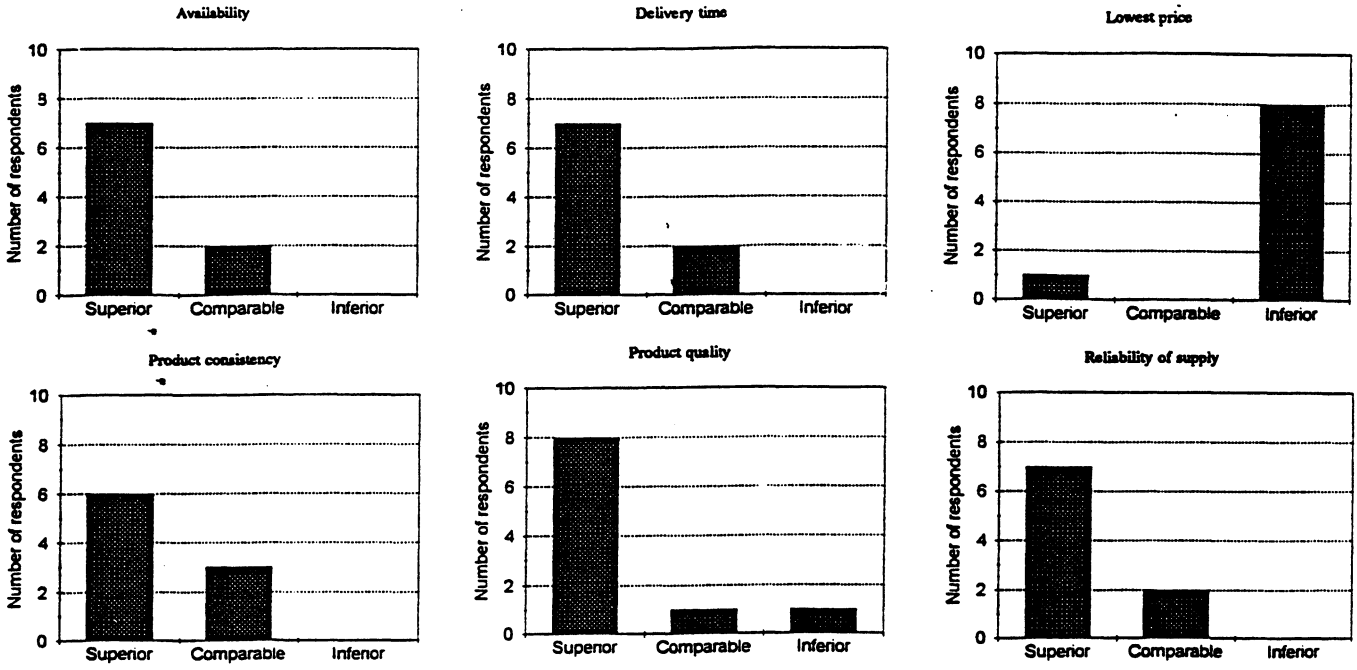
[15] ***.

[16] Petitioner's prehearing brief, p. 69.

[17] ***.

[18] ***.

Figure II-3
Comparisons of U.S.-produced polyvinyl alcohol relative to polyvinyl alcohol imported from China



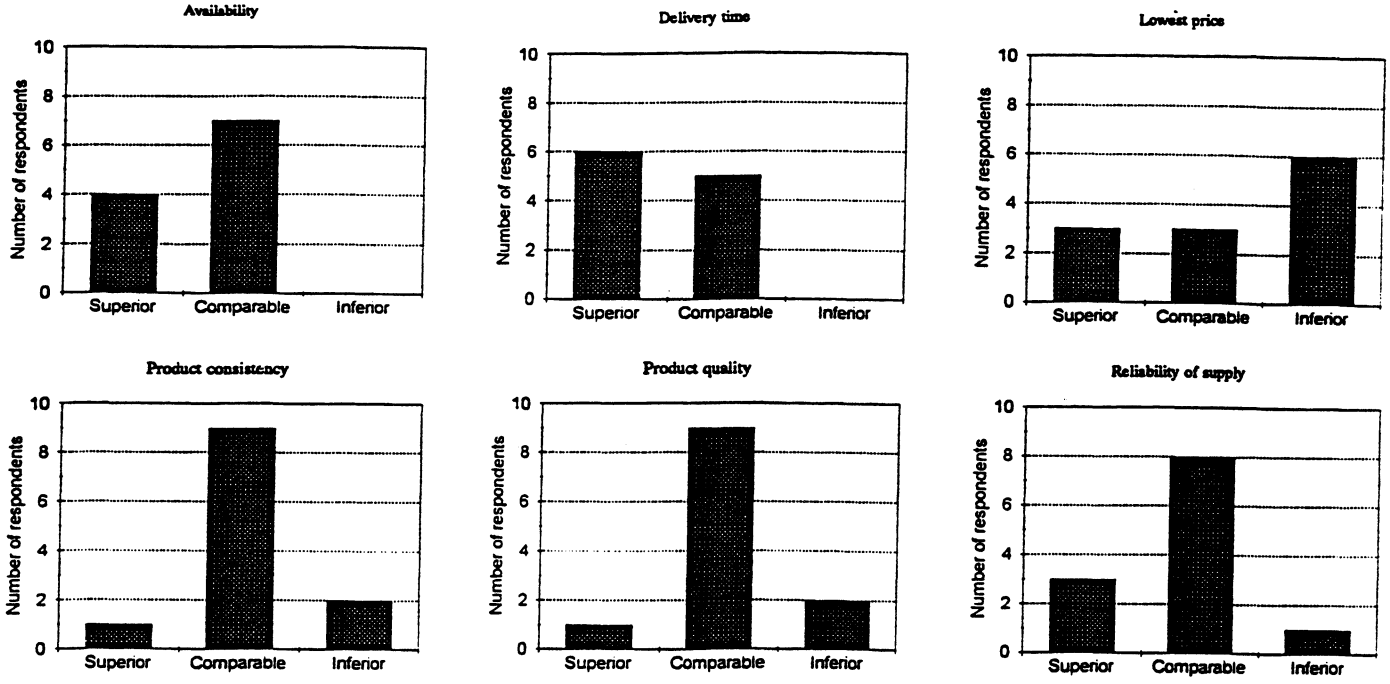
Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

In the areas of availability, product consistency, product quality, and reliability of supply, most purchasers said that both sources were comparable. Six of 11 purchasers reported that U.S. producers were superior in terms of delivery time. Half of the responding firms said that Japanese PVA was priced lower than U.S.-produced PVA, while one-quarter said Japanese PVA was priced higher, and the remaining quarter said that they were priced the same.

Sixteen purchasers reportedly purchased Japanese PVA during January 1992-September 1995. These purchasers accounted for 88 percent of shipments of Japanese PVA in 1994 and January-September 1995. *** was by far the largest, accounting for *** percent of 1995 shipments of Japanese PVA. ***.

* * * * * * *

Figure II-4
Comparisons of U.S.-produced polyvinyl alcohol relative to polyvinyl alcohol imported from Japan



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

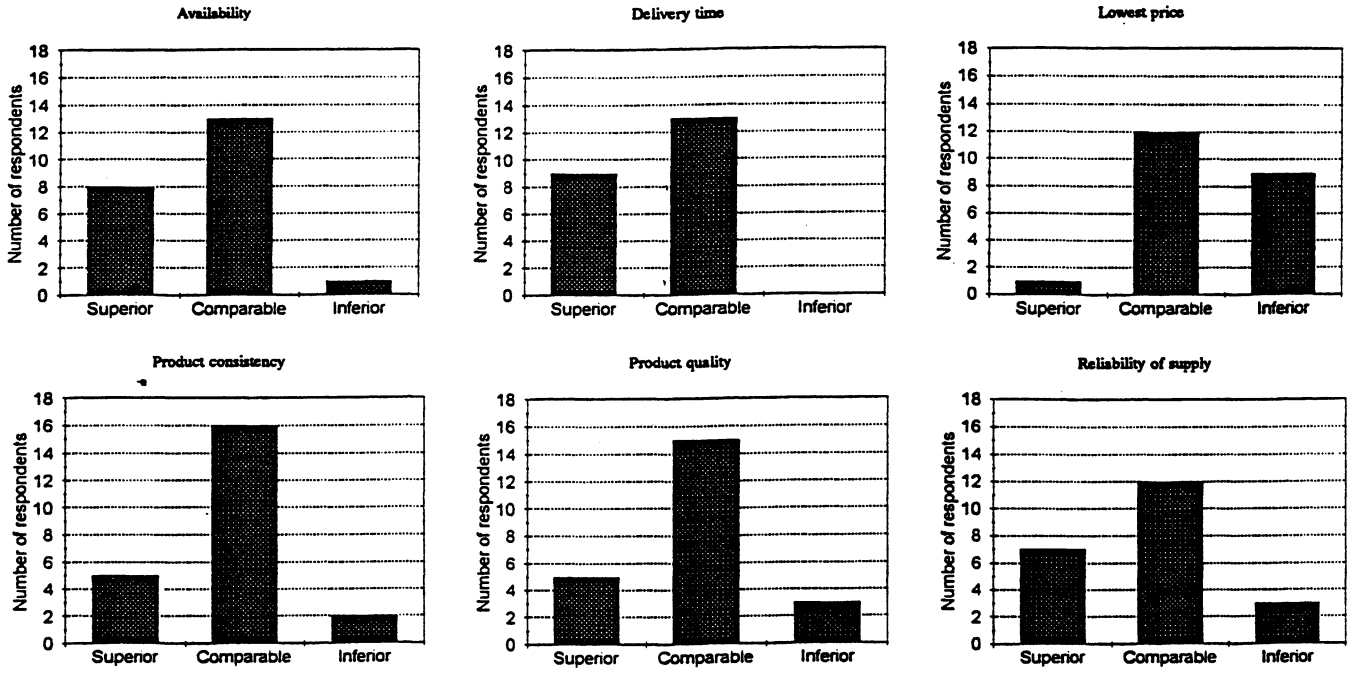
United States Versus Taiwan

Eighty-eight percent of purchasers (36 of 41) reported that they could use Taiwanese PVA in their application. Figure II-5 shows purchasers' comparisons of U.S.-produced PVA relative to PVA imported from Taiwan.

For each of the factors shown, the majority of respondents rated the U.S. product and Taiwan product as comparable. Specifically, 13 of 22 purchasers rated these sources as comparable in terms of availability and delivery time, 12 of 22 rated them as comparable in terms of reliability of supply and price, 16 of 23 rated them as comparable in terms of product consistency, and 15 of 23 rated them as comparable in terms of product quality.

Nevertheless, a sizeable number rated the U.S. product or U.S. suppliers as superior in terms of every factor except lowest price. The number of purchasers which ranked U.S.-produced PVA as superior compared to Taiwanese PVA for each factor is as follows: availability (8 of 22), delivery time (9 of 22), product consistency (5 of 23), product quality (5 of 23), reliability of supply (7 of 22), and price (1 of 22). Nine of 22 purchasers reported that Taiwanese PVA was superior in terms of price (i.e., priced lower than U.S.-produced PVA).

Figure II-5
Comparisons of U.S.-produced polyvinyl alcohol relative to polyvinyl alcohol imported from Taiwan



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

Purchasers of imported PVA were asked how much higher the price of imported PVA would have had to have been before they would have purchased U.S.-produced PVA. Ten purchasers of Taiwanese PVA reported that they would have purchased U.S.-produced PVA if the price of Taiwanese product had been higher. These firms stated that prices would have had to have been between 1 and 10 percent higher, with an average of 5.5 percent reported.

* * * * * * *[19]

Comparison of Subject Products from Different Countries

As discussed previously, differences in the quality, available grades, and markets supplied by PVA imported from China, Japan, and Taiwan serve to limit competition among these sources. Since the Chinese and Japanese products serve different customers in different market segments, there is little competition

[19] ***.

between these two sources.[20] Product from Taiwan covers a much wider range of applications than imports from the other subject sources, and substitutability between PVA produced in China and Taiwan, as well as Japan and Taiwan is probably somewhat higher than between PVA produced in China and Japan.

Comparison of Domestic Products and Subject Imports to NonSubject Imports

Imports from nonsubject countries comprised only about *** percent of the value of total U.S. shipments during 1992-94 and the interim periods. Sources of nonsubject PVA include Germany, Korea, Spain, Canada, and the United Kingdom. According to information collected in the preliminary investigations, ***.

ELASTICITY ESTIMATES

This section discusses the elasticity estimates used in the COMPAS analysis (appendix E).

U.S. Supply Elasticity[21]

The domestic supply elasticity for PVA measures the sensitivity of quantity supplied by U.S. producers to a change in the U.S. market price of PVA. The elasticity of domestic supply depends on several factors including the level of excess capacity, the ease with which producers can alter capacity, producers' ability to shift to production of other products, the existence of inventories, and the availability of alternate markets for U.S.-produced PVA.[22] Analysis of these factors earlier indicates that the U.S. industry is somewhat restricted in its ability to increase or decrease shipments to the U.S. market. Staff has lowered the high end of the range estimated in the prehearing report. Staff estimates that supply elasticity is between 2 and 4.

Petitioner stated that domestic supply "is relatively price inelastic for purposes of COMPAS analysis." It argues that inventory levels do not increase supply elasticity significantly because of the industry's practice of holding a minimum inventory level at all times.[23] Given that the ratios of U.S. producers' inventories to shipments were above *** percent in 1992 and 1993 and fell to *** percent in 1994, staff agrees that inventories may not provide substantial flexibility for U.S. producers to increase supply.

In addition, petitioner argues that "U.S. producers operated at relatively high capacity utilization levels in 1994." However, petitioner also argues that "relatively little export volume would have been expected to have been diverted to the U.S. market absent dumping, as long as producers continued to operate

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[20] Five purchasers reported purchasing both Chinese and Japanese PVA during January 1992-September 1995. ***.

[21] A supply function is not defined in the case of a non-competitive market.

[22] Domestic supply response is assumed to be symmetrical for both an increase and a decrease in demand for the domestic product. Therefore, factors affecting increased quantity supplied to the U.S. market also affect decreased quantity supplied to the same extent.

[23] Petitioner's posthearing brief, exh. 10, p. 5.

below full capacity."[24] These statements appear to be somewhat contradictory. Even if U.S. producers would not divert exports to the U.S. market until they were operating at full capacity, U.S. producers would presumably increase production until capacity was fully utilized and then divert exports.

Japanese respondents used the mid-point of staff's supply elasticity range as an input in their model.[25] Taiwan respondent states that supply is highly elastic but did not provide estimates. It argues that the high level of exports and inventories enhance supply elasticity. It states that Air Products was "dumping massive inventory into the U.S. market in 1994, depressing U.S. prices."[26]

U.S. Demand Elasticity

The U.S. demand elasticity for PVA measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of PVA. This estimate depends on factors discussed earlier such as the existence, availability, and commercial viability of substitute products, as well as the component share of PVA in the production of downstream products. PVA generally accounts for a small percentage of the final cost of the end-use products in which it is used, although it can account for a high percentage of the cost of many of the intermediate goods in which it is used. Most purchasers reported that there are no economically feasible substitutes for PVA, although in the textile and adhesive sectors there are some substitutes for PVA or for the intermediate products which contain PVA. Based on available information, demand for PVA is likely to be inelastic, estimated to be in the range of -0.4 to -0.8.

Petitioner agreed with the elasticity of demand estimate.[27] Japanese respondents used the mid-point of staff's demand elasticity range as an input in their model.[28]

The Taiwan respondent, however, states that "demand is very price elastic." It cites the availability of substitutes for PVA in production of textiles, PVB, adhesives, and paper. In particular, it states that part of the reason that PVA sold to the textile industry is lower-priced than PVA sold in other sectors is because of the availability of substitutes. Also, the Taiwan respondent states that in the PVB market, increases in the price of PVB could cause U.S. PVB producers to lose sales to foreign production of PVB.[29] However, information provided by purchasers indicated that most purchasers have not changed the quantity of PVA purchased in response to changes in the relative prices of PVA and substitute products. However, over the long term, some purchasers may develop alternate products to PVA or shift production to overseas facilities in response to increases in the price of PVA.

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[24] Petitioner's prehearing brief, exh. 7, p. 31.

[25] Japanese respondents' posthearing brief, app. B, p. 14.

[26] Chang Chun's posthearing brief, p. 28; and Chang Chun's prehearing brief, pp. 39-41.

[27] Petitioner's posthearing brief, exh. 10, p. 5.

[28] Japanese respondents' posthearing brief, app. B, p. 14.

[29] Chang Chun's posthearing brief, pp. 31-32.

Substitution Elasticities

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.[30] Product differentiation, in turn depends upon such factors as quality (e.g., hydrolysis, viscosity, adherence to specifications, granular size, consistency, and ability to work in formulation) and conditions of sale (e.g., service and availability). Based on available information, the elasticity of substitution between U.S.-produced PVA and subject imported PVA is likely to be in the range of 1 to 3 for China, 1 to 3 for Japan, and 2 to 4 for Taiwan. Elasticities of substitution are probably in the higher end of these ranges if U.S.-producers' captive consumption of PVB is excluded.

Petitioner estimates the elasticities of substitution between U.S. open-market shipments and subject imports to be as follows: 3 to 5 for China and Taiwan and 2 to 4 for Japan. It further estimates that "the elasticity of substitution for imports from the PRC may be at the lower end of this range, and imports from Taiwan at the higher end" because Chinese PVA was generally ranked as inferior in quality to U.S.-produced PVA while Taiwan PVA was generally ranked as comparable to U.S.-produced PVA.[31]

Japanese respondents used an estimate of 1.83, the weighted-average of the lower end of staff's substitution elasticity estimates for all LTFV imports. Respondents cite the following factors: large share of U.S. production which goes to exports, large share of production which is captively consumed, and the large share which goes to PVB. In addition, they cite differences in physical characteristics and conditions of sale.[32]

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[30] The substitution elasticity measures the responsiveness of the relative U.S. consumption levels of the subject imports and U.S. like products to changes in their relative prices. This reflects how easily purchasers switch from the U.S. product to the subject product (or vice versa) when prices change.

[31] Petitioner's posthearing brief, exh. 10, pp. 3-5.

[32] Japanese respondents' posthearing brief, app. B, p. 14; and hearing transcript, pp. 114-115.

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 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 three firms that accounted for all known U.S. production of PVA during 1994.[1]

U.S. PRODUCERS

Three firms, Air Products, DuPont, and Monsanto, comprise the U.S. industry that produces PVA. Each of these three firms is engaged in the manufacture and worldwide distribution and sale of a diverse range of chemical products. Together, these firms generated consolidated worldwide revenues totaling about $50.8 billion in 1994.

Based on information supplied in response to the Commission's questionnaires, Air Products is the largest of the three domestic PVA producers, accounting for *** percent of total U.S. PVA production in 1994. DuPont and Monsanto accounted for *** percent and *** percent of production, respectively, in the same year.

Air Products and Chemicals, Inc.

Petitioner Air Products' primary business segments include industrial gases, chemicals, environmental and energy systems, and equipment and technology. From these four business segments, Air Products had sales totaling $3.5 billion in 1994, 34 percent of which was attributed to sales of its chemical products.[2] In addition to PVA, other principal chemical products produced by Air Products include emulsions, polyurethane and epoxy additives, surfactants, amines, and polyurethane intermediates.

Air Products produces PVA at two locations in the United States, Calvert City, KY, and Pasadena, TX. The Pasadena facility is the newer of the two plants. It was built in 1991 at a cost of *** and went on line in the latter part of the same year.[3] Both facilities are devoted almost exclusively to the production of PVA.[4]

Air Products produces PVA both for its own internal use and for sales to the merchant market. During 1994, about *** percent of the firm's production of PVA was captively consumed in the production of emulsion polymers of vinyl acetate and/or ethylene, warp size starch blends, and Vinex® thermoplastic resin.

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[1] Unless indicated otherwise, the data presented in this report consist of all PVA (including offgrade material) that meets the definition contained in Commerce's scope of the investigations.

[2] *1994 Annual Report*, Air Products, pp. 2-3.

[3] Petitioner's postconference brief, p. 4; and conference transcript, pp. 21 and 57.

[4] ***.

E.I. DuPont de Nemours and Co.[5]

DuPont is one of the world's largest chemical producers, operating in more than 70 countries worldwide. The company has five principal business segments--chemicals, synthetic fibers, polymers, petroleum, and diversified businesses. Consolidated sales from these primary business groups reached $39 billion in 1994.[6]

DuPont's PVA production facility is located at La Porte, TX. At this facility it produces only fully hydrolyzed PVA and internally consumes a significant portion (*** percent of production in 1994) of it in the manufacture of PVB.

* * * * * * *

Monsanto Co.[7]

Like Air Products and DuPont, Monsanto's diversified businesses are also worldwide in scope. The company is engaged in the manufacture and sale of a wide range of agricultural, chemical, pharmaceutical, and food-related products. Consolidated worldwide sales of these products totaled $8.3 billion in 1994.[8]

Monsanto produces PVA at sites in Springfield, MA, and Trenton, MI. However, all of the firm's production of PVA is internally consumed in the production of PVB. Monsanto produces PVB using a solvent process, which generates PVA as an intermediate product. It also produces PVB from purchased PVA using an aqueous production process.[9] In the early 1980s, Monsanto operated two production facilities in Springfield, MA. At one site it produced PVA for merchant market sales and at the second site it produced PVA for PVB production. In 1985, the company shut down its merchant facilities and sold its PVA technology and customer list to Air Products.[10] In 1986, Monsanto built a new PVB plant (including PVA production) near the old PVB facility.[11]

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

The Commission's producers' questionnaire requested information from U.S. producers on their PVA operations during the period January 1, 1992, through September 30, 1995. In the questionnaire, firms were asked if they had experienced any plant openings, relocations, expansions, acquisitions, consolidations, closures or prolonged shutdowns, or other changes that affected the character of their PVA operations during the period for which information was requested. The responses of the firms are summarized below.

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[5] DuPont indicated in its response to the Commission questionnaire that it ***.

[6] *1994 Annual Report*, DuPont, p. 61.

[7] In its response to the Commission's producers' questionnaire, Monsanto stated: ***.

[8] *1994 Annual Report*, Monsanto, p. 27.

[9] Monsanto's prehearing brief, p. 3.

[10] ***; hearing transcript, p. 26; and Monsanto's prehearing brief, p. 3.

[11] Staff telephone interview, John C. Trube, Monsanto, Apr. 6, 1995.

Air Products' Pasadena, TX, PVA facility came on stream in 1991, the year prior to the beginning of the period for which the Commission requested information. The plant completed its first full year in operation in 1992.[12] In 1994, during the course of regular maintenance, Air Products extended the shutdown of its two production facilities beyond the normal maintenance schedule to permit a reduction in inventory levels. The shutdowns lasted *** beyond the normal maintenance shutdowns at the Calvert City plant and *** beyond the normal maintenance shutdowns at the Pasadena facility. Air Products reported that ***. DuPont reported that ***. DuPont also indicated ***.[13] Monsanto reported that it did not experience any unplanned interruptions in its PVA operations during the period for which information was requested.

Data concerning U.S. producers' PVA capacity, production, and capacity utilization are presented in table III-1.[14] U.S. producers' capacity to produce PVA fell from 1992 to 1993, but increased in 1994 to a level slightly below that reported in 1992. During January-September 1995, U.S. producers' capacity was higher than in January-September 1994. Production of PVA rose from 1992 to 1993, and then dropped in 1994 to a level above that reported in 1992. U.S. producers' PVA production was higher in interim 1995 than in interim 1994. As a consequence of these fluctuating trends in capacity and production, capacity utilization rose from *** percent in 1992 to *** percent in 1993, but declined to *** percent in 1994. Capacity utilization was lower at *** percent during January-September 1994 compared with *** percent during January-September 1995. ***.

Table III-1
Polyvinyl alcohol: U.S. capacity, production, and capacity utilization, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

* * * * * * *

The production data presented in table III-1 do not include ***. These data are presented separately in the following tabulation:

* * * * * * *

U.S. PRODUCERS' SHIPMENTS

Data on U.S. producers' shipments of PVA, by types and producers, are presented in table III-2. In the aggregate, the quantity of U.S. producers' shipments to the domestic open market and exports accounted

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[12] Air Products' producer questionnaire response, p. 5; and conference transcript, pp. 14, 23, and 57.

[13] ***. Field trip, DuPont, Sept. 29, 1995; and Elaine M. Olsen, Trade Specialist, DuPont, letter and staff telephone conversation, Apr. 10, 1996. Petitioner claims ***. It also believes that DuPont's growing internal requirement for PVA to produce PVB will cause it to withdraw from the U.S. PVA merchant market. These statements seem to be supported by the testimony of Perry Chemical Corp. (Perry), a purchaser of PVA. Perry testified that in May 1995, DuPont informed its customers that it would no longer supply Elvanol® high-viscosity material. Hearing transcript, pp. 31, 100, and 197; and petitioner's prehearing brief, p. 24. ***. Elaine M. Olsen, Trade Specialist, DuPont, letter, Apr. 10, 1996.

[14] U.S. producers' data are presented, by firms, in app. F.

Table III-2
Polyvinyl alcohol: U.S. producers' shipments, by types, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995[1]

Item	1992	1993	1994	Jan.-Sept.-- 1994	1995
	Quantity (*1,000 pounds*)				
Company transfers	***	***	***	***	***
Domestic shipments	***	***	***	***	***
U.S. shipments	200,110	211,677	233,526	175,473	190,013
Exports[2]	***	***	***	***	***
All shipments	***	***	***	***	***
	Value (*1,000 dollars*)				
Company transfers	***	***	***	***	***
Domestic shipments	***	***	***	***	***
U.S. shipments	159,287	158,615	175,922	132,305	158,169
Exports[2]	***	***	***	***	***
All shipments	***	***	***	***	***
	Unit value (*per pound*)				
Company transfers	***	***	***	***	***
Domestic shipments	***	***	***	***	***
U.S. shipments	$0.80	$0.75	$0.75	$0.75	$0.83
Exports[2]	***	***	***	***	***
All shipments	***	***	***	***	***

[1] ***.

[2] Principal export markets include Europe, South America, Asia, and Canada.

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

for *** percent and *** percent of U.S. producers' total shipments during the period of investigation, respectively. Internal consumption of PVA by U.S. PVA producers accounted for *** percent of total shipments during the period of investigation. All of Monsanto's production of PVA is internally consumed in the production of PVB. Monsanto's internally transferred PVA accounted for *** percent of the U.S. producers' total shipments during the investigative period. Air Products' and DuPont's internal consumption of PVA accounted for *** percent and *** percent of U.S. producers' total U.S. shipments during the period of investigation, respectively. Figure III-1 illustrates the percentage distribution of total shipments made by Air Products and DuPont, by types, in 1994. As shown, shipments to the domestic open market accounted for *** share of *** total shipments.

Figure III-1
Air Products' and DuPont's shipments of polyvinyl alcohol, by types, as a share (percent) of the quantity of total shipments, 1994

* * * * * * *

Open-Market Shipments

From 1992 to 1994, U.S. producers' domestic open-market shipments and export shipments increased. Domestic open-market shipments were higher in interim 1995 compared with interim 1994, but export shipments were lower. Accompanying these increases, however, was a steady drop in the average unit value of such shipments from 1992 to 1994. In interim 1995, average unit values were higher than in interim 1994. The average unit value of U.S. producers' domestic open-market shipments fell from $*** per pound in 1992 to $*** per pound in 1994, but increased to $*** per pound in January-September 1995. Likewise, the average unit value of exports declined from $*** per pound in 1992 to $*** per pound in 1994, but increased to $*** per pound in January-September 1995.

Producers' exports of PVA, which accounted for *** percent of their total shipments during the period of investigation, were principally destined for the European, South American, Asian, and Canadian markets. Air Products' PVA exports accounted for an even higher percentage (*** percent) of its total PVA shipments during the period of investigation. The petitioner noted in its hearing testimony that the Japanese and Taiwan markets are especially attractive, promising a favorable return with relatively high prices; however, it also noted that its sales to China, Japan, and Taiwan are relatively small and hard won because of certain barriers to entry.[15] It also cites the Chinese duty on PVA of approximately 40 percent as a barrier to entry.[16]

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[15] Hearing transcript, pp. 80-82. Counsel for Taiwan respondents disputes these claims by Air Products in reference to Taiwan. It indicates that there are no restrictions or barriers in shipping PVA to Taiwan beyond a 5-percent import tariff and adds that ***. Hearing transcript, pp. 221-222; and Chang Chun's posthearing brief, pp. 12-13. Likewise, the Japanese respondents argue that Air Products' claim that the Japanese market is "closed" is unfounded. Japanese respondents' posthearing brief, p. 5; and Japanese respondents' prehearing brief, app. A.

[16] Hearing transcript, pp. 80-82.

Captive Shipments

Air Products, DuPont, and Monsanto each internally consume PVA in the production of downstream products. Their shares of total U.S. producers' captive shipments during the period of investigation are as follows: Air Products (*** percent), DuPont (*** percent), and Monsanto (*** percent). The amount of PVA internally consumed by all three U.S. PVA producers *** during the entire period for which data were collected. Air Products' downstream products include emulsion polymers of vinyl acetate and/or ethylene, warp size starch blends for the textiles market, and Vinex® thermoplastic resin for use in packaging films.[17] The production of these downstream products together consumed about *** percent of the firm's 1994 PVA production, and the production of PVA accounted for *** of the raw material cost of producing the various downstream products.[18] DuPont consumed *** percent of its fully hydrolyzed PVA production in the production of PVB in 1994 and reported that its variable cost of PVA represented approximately *** of the total variable cost of its PVB. In these final investigations, however, DuPont confirmed its preliminary questionnaire response ***. It estimated that, on the basis of weight, PVA accounts for approximately *** percent of PVB.[19] Monsanto consumed *** percent of its PVA production in the production of PVB in 1994.[20]

*** indicated that the PVA it captively consumes in the production of downstream products does not differ from the PVA it sells to unrelated customers, but *** reported that the PVA it captively consumes in the production of *** must meet more stringent quality requirements than the PVA it offers for sale on the open market. Although *** reported that currently only its own PVA is qualified to be used in its production of ***, *** reported that PVA from other suppliers can be used in their captive consumption operations. *** currently supplements its production of PVA with that produced by *** and is currently evaluating PVA produced in ***. *** reported that PVA produced in a variety of countries (including those subject to these investigations) can be substituted for its own PVA in its production of downstream products. The producers indicated that the downstream products they manufacture do not compete for sales with PVA and that products other than PVA are not generally substituted for PVA in the production of downstream products.[21]

U.S. PRODUCERS' PURCHASES

Between January 1992 and September 1995, Air Products purchased PVA made in ***, Monsanto purchased PVA *** produced domestically by Air Products, and DuPont ***. Air Products stated that it purchased PVA to supplement its own production during the startup of production at its new Pasadena

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[17] Mark Bye, Global Business Unit Manager, Air Products, telephone conversation with staff, Apr. 10, 1996.

[18] ***.

[19] Letter from Elaine M. Olsen, Trade Specialist, DuPont, Apr. 10, 1996.

[20] Although Monsanto did not provide in its producers' questionnaire response the percentage of the raw material cost of producing PVB accounted for by the PVA it produces, the firm did report in its purchasers' questionnaire response that purchased PVA from Air Products accounted for *** percent of the total cost of its PVB.

[21] *** indicates that although the downstream products do not compete for sales with PVA, U.S. producers' sales of PVA do go to other producers of the downstream products. It adds that although other warp size starch blend producers may attempt to sell their product as a substitute for PVA, customers infrequently switch.

facility ***. Monsanto's purchases of PVA produced in ***[22] and its purchases of PVA produced by Air Products were made to supplement its own PVA production and were captively consumed in the production of PVB.[23] Air Products' shipments of PVA to Monsanto are ***. These merchant market sales of PVA for PVB use accounted for a minor portion (*** percent on the basis of quantity during the period of investigation) of total U.S. producers' U.S. open-market shipments of PVA. The bulk of ***.

Data on U.S. producers' PVA purchases are presented in table III-3. As shown in the table, the total quantity and value of U.S. producers' purchases fell significantly between 1992 and 1993, then increased in 1994, but to a level far below that reported in 1992. The average unit value of purchases fluctuated downward from $*** per pound in 1992 to $*** per pound in January-September 1995.

Table III-3
Polyvinyl alcohol: Purchases of U.S. producers, by sources, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

* * * * * * *

U.S. PRODUCERS' INVENTORIES

U.S. producers' end-of-period inventories of PVA are presented in table III-4. *** held *** pounds of PVA inventory during the period for which data were collected, which accounted for *** percent of the firm's production and total shipments of PVA. *** reported year-end inventories were higher than *** but much lower than ***, ranging from *** pounds to *** pounds.[24] *** inventories of PVA accounted for *** of PVA inventories held by the domestic industry during the investigative period. Its inventories, which ranged from *** pounds to *** pounds, accounted for *** of its total shipments during the investigative period. Year-end inventories of all U.S. producers rose from 1992 to 1993, but fell in 1994 to a level below that reported in 1992. An increase in U.S. producers' inventories was reported from January-September 1994 to January-September 1995. The ratios of inventories to total shipments fell unevenly from 1992 to 1994, but were higher in interim 1995 compared with interim 1994.

Table III-4
Polyvinyl alcohol: End-of-period inventories of U.S. producers, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

* * * * * * *

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[22] Monsanto ***. Monsanto's prehearing brief, p. 8; and Monsanto's posthearing brief, pp. 16 and 18.

[23] ***. ***, Monsanto's purchases of PVA from Air Products were *** throughout the period reviewed by the Commission. In addition, Monsanto claims that Air Products' Pasadena plant was, in large part, designed and constructed to serve the particular requirements of Monsanto's PVB-grade PVA. Monsanto's prehearing brief, pp. 4-5 and 18; hearing transcript, p. 177; Monsanto's posthearing brief, pp. 7 and 23; and petitioner's posthearing brief, p. Q&A-19.

[24] ***.

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

The combined employment data for Air Products, DuPont, and Monsanto are presented in table III-5. ***.

In the aggregate, employment trends for all U.S. producers were mixed. From 1992 to 1994, the number of PRWs producing PVA and the number of hours worked by such workers declined, while wages paid and productivity of those PRWs generally increased. From January-September 1994 to January-September 1995, the number of PRWs, the number of hours worked, and productivity were higher, while wages paid were lower. Unit labor costs remained relatively stable throughout the period for which data were requested.

Table III-5
Average number of production and related workers producing polyvinyl alcohol, hours worked,[1] wages paid to such employees, and hourly wages, productivity, and unit labor costs, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995[2]

Item	1992	1993	1994	Jan.-Sept.-- 1994	1995
Number of production and related workers (PRWs)	489	483	463	463	472
Hours worked by PRWs (*1,000 hours*)	1,154	1,121	1,098	824	827
Wages paid to PRWs (*1,000 dollars*)	23,104	23,019	25,026	18,772	18,762
Hourly wages paid to PRWs	$20.02	$20.53	$22.79	$22.78	$22.69
Productivity (*pounds per hour*)	242.9	276.2	272.3	268.5	300.1
Unit labor costs (*per pound*)	$0.08	$0.07	$0.08	$0.08	$0.08

[1] Includes hours worked plus hours of paid leave time.
[2] Data reported by Air Products are on a fiscal year basis.

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

U.S. PRODUCERS' OFFGRADE PVA

Offgrade PVA is characterized as PVA that may be off-color and/or unable to meet hydrolysis, viscosity, or other chemical specifications.[25] *** Air Products *** produced offgrade PVA during the period for which data were collected in these investigations.[26] Air Products, the largest U.S. producer of offgrade PVA, accounted for *** percent of total U.S. production of offgrade PVA during the period of investigation. Respondents argue that production startup problems at Air Products' Pasadena facility resulted in it producing significant quantities of low-quality offspecification or offgrade PVA.[27] Air Products testified at the hearing that during the startup period for its Pasadena facility, it produced more offgrade PVA than desired, but that sales of offgrade PVA were not the cause of the domestic industry's injury.[28] During the period of investigation, Air Products' offgrade PVA material accounted for *** percent of its total PVA production, *** percent of its total U.S. shipments of PVA, and *** percent of its total PVA inventories; however, U.S. open market shipments of Air Products' offgrade PVA accounted for only *** percent of total U.S. open-market PVA consumption during the period of investigation. Air Products reported in its questionnaire response that although a large portion of offgrade PVA was sold as "off-spec," substantial quantities of offgrade PVA were converted and sold as prime products.[29] In fact, Air Products indicated that its offgrade PVA was sold to "only a few customers in limited market segments."[30] ***.

The Commission requested production, shipments, and inventory data regarding offgrade PVA produced in the United States. As presented in table III-6, a substantial, though sporadic, decline was reported in these data during the period for which they were requested. Production of offgrade PVA declined as a share of total U.S. production of PVA from *** percent in 1992 to *** percent in January-September 1995. The average unit value of total shipments of offgrade PVA fell continuously from $*** per pound in 1992 to $*** per pound in January-September 1995.

Table III-6
Offgrade polyvinyl alcohol: U.S. producers' production, shipments, and inventories, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

* * * * * * *

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[25] Petitioner states that its otherwise acceptable PVA that does not conform to customer specifications is internally labeled "wide-spec" and may be sold to customers that can accept this material at a price that is "only slightly less than prime material." Petitioner's prehearing brief, p. 69. It indicated that the vast majority of its offgrade PVA was "out of spec" on a particular property and that it was able to either "blend it to prime" or sell it to customers for applications that could use the slightly out-of-spec material. Hearing transcript, p. 42.

[26] ***. Monsanto's prehearing brief, p. 21.

[27] Conference transcript, pp. 88-90.

[28] Hearing transcript, pp. 24 and 42.

[29] During the period January 1992 to September 1995, *** percent of offgrade PVA produced by Air Products was *** and *** percent of offgrade PVA produced by Air Products was ***.

[30] Petitioner's prehearing brief, p. 6.

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

U.S. IMPORTERS

In compiling a list of firms that should be sent importers' questionnaires, the Commission relied on the list of firms named in the petition, information provided by the U.S. Customs Service, and information collected in the preliminary investigations. This compilation resulted in a list of 51 firms, all of which were sent questionnaires. Of this number, 48 firms responded.[1] Fourteen of the 48 firms indicated in their responses that they did not import PVA from any source during the period for which information was requested. The remaining 34 firms supplied usable information on their imports of PVA.

Based on the responses received, 8 firms imported PVA from China during the period for which information was requested, 15 firms imported PVA from Japan, 7 firms (***) imported PVA from Taiwan, and 6 imported PVA from other countries. U.S. imports as reported in questionnaire responses represented virtually all of subject imports and almost 80 percent of imports of PVA from other countries during 1994.

*** imported Taiwan PVA during the period for which information was requested. ***.[2] ***.

Of the 29 subject importers that responded to the Commission's questionnaire, 12 reported that they consumed subject imports of PVA in the production of a downstream product. Of the 12 firms that consumed their subject imports, ***. ***. *** reported that the downstream article in which they use subject imported PVA does not compete with the domestic like product sold in the merchant market. The aggregate quantity of *** subject imports which were consumed in the production of downstream products is presented in the following tabulation (*in 1,000 pounds*):

* * * * * * *

In addition, 2 of the 12 importers that reported consumption of subject imports into downstream products (i.e., ***) reported that they were related to foreign exporters of the subject merchandise; however, neither party was related to a foreign producer of PVA. Both of the firms were importers of Japanese PVA. *** used Japanese PVA in the production of *** and *** used it in the production of ***. The aggregate quantity of their subject imports from Japan which were consumed in the production of downstream products are presented in the following tabulation (*in 1,000 pounds*):

* * * * * * *

[1] According to information provided by the U.S. Customs Service, the three firms that did not provide a response to the Commission's importers' questionnaire imported the subject product from Japan during the period for which information was sought in these investigations. During 1994, the aggregate PVA imports by these three firms are estimated to have accounted for approximately 2 percent of total Japanese imports of the subject product.

[2] In its producer questionnaire response submitted in the preliminary investigations, *** stated in part: ***.

U.S. IMPORTS

U.S. imports of PVA as reported in responses to questionnaires of the Commission are presented in table IV-1. The combined LTFV imports from China, Japan, and Taiwan declined in terms of both quantity and value from 1992 to 1994, but were higher in January-September 1995 than in the comparable period in 1994. The average unit value of such imports, which was consistently lower than that of the U.S.-produced product, remained constant from 1992 to 1994, but increased to a much higher level during the first three quarters of 1995.

Table IV-1
Polyvinyl alcohol: U.S. imports, by sources, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

* * * * * * *

U.S. Imports From China

The quantity and value of LTFV imports of PVA from China increased from 1992 to 1993, but fell in 1994 to a level below that reported in 1992. The reported quantity and value were higher in interim 1995 compared with interim 1994. The average unit values of LTFV imports of PVA from China, which were consistently lower than the average unit values of U.S. imports from Japan but comparable to the average unit values of U.S. imports from Taiwan, remained relatively stable at *** per pound during 1992-94, but increased to *** per pound during the first three quarters of 1995. As a share of the total quantity of U.S. imports of PVA from all sources, the share accounted for by LTFV Chinese PVA increased from *** percent in 1992 to *** percent in 1993, but fell to *** percent in 1994. The Chinese LTFV share was slightly higher at *** percent during the interim period in 1995 than their ***-percent share in the comparable period in 1994. Overall, LTFV Chinese imports accounted for *** percent of U.S. PVA imports during the period of investigation.[3]

U.S. Imports From Japan

The quantity and value of U.S. PVA imports from Japan fell overall from 1992 to 1994, but were higher in January-September 1995 than in January-September 1994. When compared with U.S. imports from China and Taiwan, the average unit value of imports from Japan was significantly higher in all periods. As a share of the total quantity of U.S. imports of PVA, U.S. imports from Japan declined from *** percent in 1992 to *** percent in the remaining periods for which data were collected.

U.S. Imports From Taiwan

Taiwan is by far the largest supplier of imported PVA to the U.S. market. As a share of the total quantity of U.S. imports of PVA, U.S. imports from Taiwan declined from *** percent in 1992 to *** percent in 1993, but increased to *** percent in the remaining periods for which data were collected. Approximately

[3] ***.

*** percent of total U.S. PVA imports from Taiwan during the period of investigation is accounted for by ***. The quantity and value of U.S. PVA imports from Taiwan dropped sharply from 1992 to 1993, but rose slightly in 1994 to a level significantly below that reported in 1992. An increase in these indicators was also reported from January-September 1994 to January-September 1995. The average unit values of these imports declined slightly from *** per pound in 1992 to *** per pound in 1993 and 1994, but increased to *** per pound during the first three quarters of 1995.

U.S. Importers' Orders

The Commission requested importing firms to report orders for imports of the subject product that were to be delivered after September 30, 1995. Eight importers' responses revealed that almost *** pounds of PVA from Japan and approximately *** pounds of PVA from Taiwan had been scheduled for delivery in the last quarter of 1995. According to questionnaire responses, no imports of the subject product from China were scheduled for delivery after September 30, 1995.

APPARENT U.S. CONSUMPTION

Data on apparent U.S. consumption of PVA based on U.S. producers' total U.S. shipments are shown in table IV-2, and data on apparent U.S. consumption based on U.S. producers' open-market U.S. shipments are shown in table IV-3. The quantity and value of apparent U.S. consumption of all PVA based on U.S. producers' total U.S. shipments (including internal transfers) fell slightly from 1992 to 1993, but increased during 1994 to a level above that reported in 1992. Apparent U.S. consumption was higher in interim 1995 than in 1994. Similar trends were exhibited for the apparent U.S. consumption of PVA based on U.S. producers' U.S. open-market shipments during the period for which data were collected.

U.S. MARKET SHARES

Market share data are presented in tables IV-4 (total market) and IV-5 (open market) and are illustrated in figure IV-1. As a share of the total PVA market and as a share of open-market consumption, the combined market shares of LTFV PVA imports from China, Japan, and Taiwan declined steadily throughout the entire period for which data were collected in these investigations. Conversely, the share of the market held by U.S. producers increased steadily during the same time period. Remaining within the range of *** percent, China's LTFV share of the quantity and value of total U.S. consumption of PVA, as well as open-market consumption, increased from 1992 to 1993, fell in 1994, and fell again in the first three quarters of 1995. Japan's share of the quantity of the total U.S. market fell from a high of 2.9 percent in 1992 to progressively lower levels through the remaining periods. Similarly, as a share of the quantity of U.S. open-market consumption, Japan's share fell throughout all periods from a high of *** percent in 1992. As a share of total apparent U.S. consumption, based on quantity, U.S. imports of the subject PVA from Taiwan steadily dropped from 16.6 percent in 1992 to 9.8 percent in the first three quarters of 1995. Taiwan's share of U.S. open-market consumption, based on quantity, fell from *** percent in 1992 to *** percent in January-September 1995. Taiwan's market share based on value exhibited similar trends.

Table IV-2
Polyvinyl alcohol: U.S. shipments of domestic product, U.S. shipments of imports, by sources, and apparent U.S. consumption, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

Item	1992	1993	1994	Jan.-Sept.-- 1994	1995
	Quantity (*1,000 pounds*)				
Producers' U.S. shipments	200,110	211,677	233,526	175,473	190,013
Importers' U.S. shipments:					
LTFV material:					
China	***	***	***	***	***
Japan	7,411	4,224	4,030	3,051	2,706
Taiwan	42,546	28,584	30,946	23,269	21,569
Subtotal	***	***	***	***	***
Other material:					
China[1]	***	***	***	***	***
Other sources[2]	1,128	1,305	1,963	1,668	1,384
Subtotal	***	***	***	***	***
Total	56,402	41,610	42,557	31,977	31,164
Apparent consumption	256,512	253,287	276,083	207,450	221,177
	Value (*1,000 dollars*)				
Producers' U.S. shipments	159,287	158,615	175,922	132,305	158,169
Importers' U.S. shipments:					
LTFV material:					
China	***	***	***	***	***
Japan	6,793	4,427	4,434	3,377	3,198
Taiwan	38,419	25,844	27,893	20,906	21,315
Subtotal	***	***	***	***	***
Other material:					
China[1]	***	***	***	***	***
Other sources[2]	1,810	1,901	2,416	1,970	1,812
Subtotal	***	***	***	***	***
Total	51,135	37,811	38,667	28,969	31,126
Apparent consumption	210,422	196,426	214,589	161,274	189,295

[1] Consists of fairly traded PVA produced and sold by Sichuan.
[2] Includes product imported from Germany, Korea, Spain, Canada, and the United Kingdom.

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

Table IV-3
Polyvinyl alcohol: U.S. open-market shipments of domestic product, U.S. shipments of imports, by sources, and apparent U.S. open-market consumption, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

Item	1992	1993	1994	Jan.-Sept.-- 1994	1995
	Quantity (*1,000 pounds*)				
Producers' domestic open-market shipments	***	***	***	***	***
Importers' U.S. shipments:					
LTFV material:					
China	***	***	***	***	***
Japan	7,411	4,224	4,030	3,051	2,706
Taiwan	42,546	28,584	30,946	23,269	21,569
Subtotal	***	***	***	***	***
Other material:					
China[1]	***	***	***	***	***
Other sources[2]	1,128	1,305	1,963	1,668	1,384
Subtotal	***	***	***	***	***
Total	56,402	41,610	42,557	31,977	31,164
Apparent consumption	***	***	***	***	***
	Value (*1,000 dollars*)				
Producers' domestic open-market shipments	***	***	***	***	***
Importers' U.S. shipments:					
LTFV material:					
China	***	***	***	***	***
Japan	6,793	4,427	4,434	3,377	3,198
Taiwan	38,419	25,844	27,893	20,906	21,315
Subtotal	***	***	***	***	***
Other material:					
China[1]	***	***	***	***	***
Other sources[2]	1,810	1,901	2,416	1,970	1,812
Subtotal	***	***	***	***	***
Total	51,135	37,811	38,667	28,969	31,126
Apparent consumption	***	***	***	***	***

[1] Consists of fairly traded PVA produced and sold by Sichuan.
[2] Includes product imported from Germany, Korea, Spain, Canada, and the United Kingdom.

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

Table IV-4
Polyvinyl alcohol: Market shares of total apparent U.S. consumption, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

Item	1992	1993	1994	Jan.-Sept.-- 1994	1995
	Share of the quantity of U.S. consumption (*percent*)				
Producers' U.S. shipments	78.0	83.6	84.6	84.6	85.9
Importers' U.S. shipments:					
LTFV material:					
China	***	***	***	***	***
Japan	2.9	1.7	1.5	1.5	1.2
Taiwan	16.6	11.3	11.2	11.2	9.8
Subtotal	***	***	***	***	***
Other material:					
China[1]	***	***	***	***	***
Other sources[2]	.4	.5	.7	.8	.6
Subtotal	***	***	***	***	***
Total	22.0	16.4	15.4	15.4	14.1
	Share of the value of U.S. consumption (*percent*)				
Producers' U.S. shipments	75.7	80.8	82.0	82.0	83.6
Importers' U.S. shipments:					
LTFV material:					
China	***	***	***	***	***
Japan	3.2	2.3	2.1	2.1	1.7
Taiwan	18.3	13.2	13.0	13.0	11.3
Subtotal	***	***	***	***	***
Other material:					
China[1]	***	***	***	***	***
Other sources[2]	.9	1.0	1.1	1.2	1.0
Subtotal	***	***	***	***	***
Total	24.3	19.2	18.0	18.0	16.4

[1] Consists of fairly traded PVA produced and sold by Sichuan.
[2] Includes product imported from Germany, Korea, Spain, Canada, and the United Kingdom.

Note.--Because of rounding, shares may not add to the totals shown.

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

Table IV-5
Polyvinyl alcohol: Market shares of apparent U.S. open-market consumption, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

* * * * * * *

Figure IV-1
Polyvinyl alcohol: U.S. shipments of domestic product, U.S. shipments of imports, by sources, and apparent U.S. consumption, 1992-94

* * * * * * *

PART V: PRICING AND RELATED DATA

FACTORS AFFECTING PRICING

Raw Material Costs

Air Products reported its quarterly delivered purchase prices for VAM from January 1992 through September 1995.[1] As shown in figure V-1, prices for this input ***.

Figure V-1
Delivered prices paid by Air Products for VAM, by quarters, Jan. 1992-Sept. 1995

* * * * * * *

Transportation Costs to the U.S. Market

Transportation charges from the subject countries to the U.S. market are estimated to be as follows: China--8.3 percent, Japan--9.5 percent, and Taiwan--7.5 percent.[2]

U.S. Inland Transportation Costs

U.S. producers' and importers' U.S. inland transportation costs account for 1 to 5 percent of the total delivered price of PVA.[3]

Importer Markups

During 1995, the percentage difference in unit values between U.S. shipments of the imported subject product and U.S. imports of the subject product were as follows: China--*** percent, Japan--*** percent, and Taiwan--*** percent.

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[1] ***.

[2] These estimates are derived from official U.S. import data (under HTS subheading 3905.20.00) and represent the transportation and other charges included in imports valued on a c.i.f. basis.

[3] DuPont reported that inland transportation costs accounted for *** percent of the total delivered price of PVA. Air Products reported that ***. Suppliers of imported PVA reported that transportation costs accounted for 2 percent or less of the total delivered price of PVA.

Commerce Margin of Dumping

Effective March 29, 1996, Commerce issued its final determinations that imports of PVA from China (with the exception of PVA produced and sold by Sichuan), Japan, and Taiwan are sold at LTFV. The weighted-average dumping margins are shown below.

Country	Margin (percent)
China:	
Guangxi	116.75
Sichuan	0.00
All others	116.75
Japan	77.49
Taiwan	19.21

*** of Guanxi's sales that were examined by Commerce were found to be at LTFV, with margins ranging from *** percent to *** percent. The margin for Japan is the margin in the petition. Commerce examined the sales of Chang Chun and found that *** of sales were at LTFV, with margins ranging from *** percent to *** percent.

Exchange Rates

Quarterly exchange rates reported by the International Monetary Fund for the three subject countries during the period January 1992-September 1995 are shown in figure V-2.

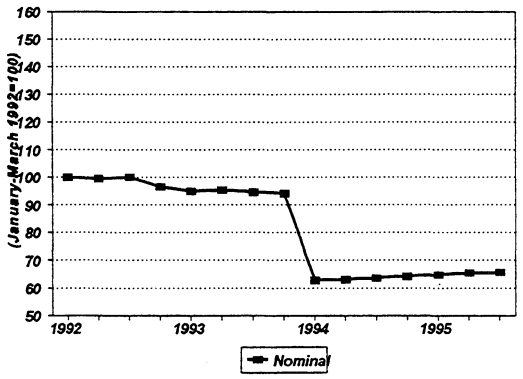
Tariff Rates

Prior to 1996, PVA was provided for in subheading 3905.20.00 of the HTS with a most-favored nation tariff rate of 3.2 percent ad valorem, applicable to imports from China, Japan, and Taiwan.[4]

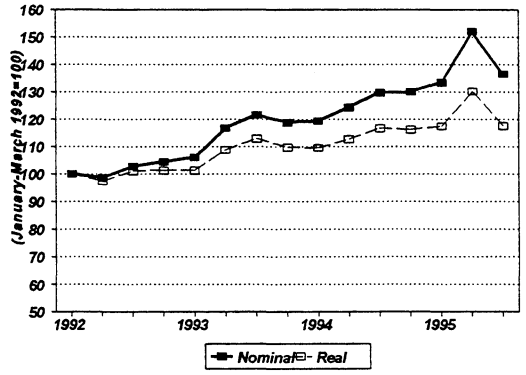
[4] As of January 1996, PVA is provided for in subheading 3905.30.00 of the HTS.

Figure V-2
Exchange rates: Indexes of nominal and real exchange rates of the Chinese yuan, Japanese yen, and Taiwanese NT dollar, relative to the U.S. dollar, by quarters, Jan. 1992-Sept. 1995

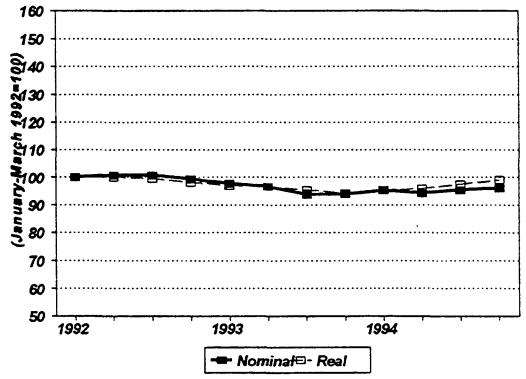
Chinese Yuan



Japanese Yen



Taiwan NT Dollar



Source: International Monetary Fund, *International Financial Statistics*, Jan. 1996. The Central Bank of China, *Financial Statistics*, Oct. 1995.

PRICING PRACTICES

Prices of PVA vary by the degree of hydrolysis and viscosity. Air Products produces PVA classified as super hydrolyzed (more than 99 percent), fully hydrolyzed (98 to 99 percent), intermediate hydrolyzed (90 to 98 percent), and partially hydrolyzed (85 to 89 percent). DuPont refers in its product literature to fully hydrolyzed PVA as 98 percent or higher and partially hydrolyzed as less than 98 percent. ***.

PVA may also differ by percentage of ash, percentage of volatiles, acidity, product clarity in solution, particle type and size, defoamer type and level, boric acid content, iron content, and level of impurities.[5] Air Products produces standard grades and specialty grades including polymerization, fine particle, and tackified. DuPont distinguishes between general purpose grades and specialty and adhesive grades, which provide such characteristics as gel resistance, solubility in cold water, and water resistance.

***.[6] *** reported in its questionnaire response that PVB and paper manufacturers are the most demanding in terms of qualifying new suppliers, while emulsion manufacturers are somewhat rigorous in their qualification and adhesive manufacturers are much less demanding.

In addition, *** reported that "price is not a determining factor in grade selection--it is performance." For example, in adhesives, partially hydrolyzed PVA is most often used because of its water solubility; however, in cases where water resistance is required, a fully hydrolyzed product is used. For emulsion polymerization, partially hydrolyzed is used, while fully hydrolyzed is used for PVB. Paper manufacturers' choice of grade depends on the type of paper produced.

Prices also vary by the quantity purchased and packaging size. *** publish price lists that specify quantity discounts. For example, *** quotes a base price for 50-pound bags shipped by the truckload and an additional ***. In addition, bulk shipments are priced lower than shipments in 50-pound bags.

U.S. producers and importers generally quote prices on a delivered basis with terms of net 30 days. *** are contract sales. ***.

PRICE DATA

The Commission requested U.S. producers, importers, and purchasers to provide quarterly quantity and value data between January 1992 and September 1995 for six products. Products 1 and 5 specified hydrolysis levels of greater than 95 percent. Products 2-4 specified hydrolysis levels of less than 89 percent, with varying degrees of viscosity.[7] Product 6 was defined as off-spec PVA. Producers and importers were instructed to report pricing separately for each of the following end-use applications: paper, adhesives, textiles, and PVB.

Pricing data are presented, by end-use applications, in figures V-3 to V-6 and appendix G.[8] Where possible, Chinese pricing data exclude sales of PVA produced by Sichuan.[9] For each product for which the Commission requested data, the specifications for each supplier vary somewhat. In addition, quantity

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[5] Petition, p. 6.

[6] ***.

[7] ***.

[8] ***.

[9] ***.

Figure V-3
Weighted-average net f.o.b. prices of polyvinyl alcohol sold to the textiles industry, by quarters, Jan. 1992-Sept. 1995

* * * * * * *

Figure V-4
Weighted-average net f.o.b. prices of polyvinyl alcohol sold to the adhesives industry, by quarters, Jan. 1992-Sept. 1995

* * * * * * *

Figure V-5
Weighted-average net f.o.b. prices of polyvinyl alcohol sold to the paper industry, by quarters, Jan. 1992-Sept. 1995

* * * * * * *

Figure V-6
Weighted-average net delivered prices of polyvinyl alcohol sold to the PVB industry, by quarters, Jan. 1992-Sept. 1995

* * * * * * *

discounts may affect price levels. Also, Chinese respondents argue that prices of PVA from China should be compared with prices for U.S.-produced off-spec material, not prime material.[10]

Textiles

Prices of PVA sold to textile users generally declined during 1992-94 and then increased in 1995. ***. The Chinese product was priced lower than prime U.S.-produced product in 33 of 36 quarters, but was priced higher than U.S.-produced off-spec material.[11] Japanese PVA was priced lower than the U.S. product in 10 of 13 possible comparisons. PVA imported from Taiwan was priced lower than the U.S.-produced PVA in 43 instances and was priced higher in 26 instances. Overselling of Taiwan PVA increased and underselling decreased during 1995.

* * * * * * *[12]

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[10] Postconference brief of Beta, Ryan Commerce, Inc. (Ryan Commerce), and Sichuan, p. 10. Air Products reported that "during 1994 U.S. shipments of off-spec PVA ***." Petitioner's posthearing brief, p. Q&A-28.

[11] ***.

[12] ***.

Adhesives

Overall PVA prices to the adhesives industry were stable to declining during 1992-94. Pricing increased beginning in the last part of 1994 and continuing through the first three quarters of 1995.

Chinese product was priced lower than the U.S.-produced prime product in all 10 instances. Japanese PVA was priced lower than the U.S. product in 27 of 48 instances. PVA from Taiwan was priced higher than the U.S. product in 33 of 60 instances.[13] Off-spec PVA produced in the United States was priced lower than imported PVA during 1992-95.

Paper

Prices of PVA sold to the paper industry were generally flat during 1992 and 1993 and then increased during 1994-95. Prices of the Chinese product were lower than U.S. prices in every instance where sales were reported. PVA imported from Taiwan was priced lower than the U.S. product in 33 of 37 instances. Japanese PVA prices were lower than U.S. prices in 30 instances and were higher in 17 instances.

PVB

The vast majority of PVA used in the production of PVB is produced directly by the PVB manufacturers, DuPont and Monsanto. However, Monsanto has purchased significant quantities of PVA on the open market for the production of PVB.[14] ***.

LOST SALES AND LOST REVENUES

***. ***. The total quantity and value of these allegations, by country, are shown in the tabulation below. Specific information on each allegation is presented in appendix H, along with purchasers' comments regarding the allegations.

* * * * * * *[15]

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[13] ***.

[14] Monsanto's quarterly purchase prices and quantities are shown in app. G, table G-18.

[15] ***.

PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

INTRODUCTION

Air Products and DuPont, which together accounted for approximately *** percent of U.S. production of PVA in 1994, supplied financial data. Monsanto, which accounted for the remaining *** percent of production, was unable to provide financial data because all of its production is consumed internally.

Air Products produces PVA at its plants in Calvert City, KY and Pasadena, TX.[1] The Calvert City plant was built in 1970, whereas the Pasadena plant was completed in 1991 and became fully operational in subsequent years. ***. DuPont's PVA operations began in 1972 at its La Porte, TX facility. The plant was originally built in 1946.

OPERATIONS ON PVA

The two producers sell commercially to both the domestic and export markets, and they internally transfer some production in order to produce other products. In the January-September 1995 period, the proportions of sales/transfers attributable to each source, for each producer, were as follows (in percent, based on quantity):

* * * * * * *

Aggregate income-and-loss data are shown in table VI-1.[2]

* * * * * * *

Table VI-1
Income-and-loss experience of Air Products and DuPont on their trade-only operations producing polyvinyl alcohol, fiscal years 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

* * * * * * *

Income-and-loss data for Air Products are shown in table VI-2.

* * * * * * *[3]

[1] Air Products' final questionnaire data were verified by the Commission staff. ***.

[2] The income-and-loss data include both domestic and export trade sales.

[3] In its fiscal year 1995 annual report, the company indicated (referring to fiscal 1994) that its improved profitability margins in its chemical division were "partially offset by significantly lower polyvinyl alcohol margins resulting from excess world capacity, intense competition, and plant shutdowns to control inventory levels." 1995 Financial Review, Management's Discussion and Analysis (Chemicals), p. 4.

Table VI-2
Income-and-loss experience of Air Products on its trade-only operations producing polyvinyl alcohol, fiscal years 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

* * * * * * *

Income-and-loss data for DuPont are shown in table VI-3.

* * * * * * *

Table VI-3
Income-and-loss experience of DuPont on its trade-only operations producing polyvinyl alcohol, fiscal years 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

* * * * * * *

* * * * * * *[4]

Combined income-and-loss data for trade sales and intracompany transfers (with certain adjustments) are shown in appendix K. The adjustments consist of (1) accounting for any known cost differences between product which was sold to unaffiliated customers and product which was transferred, and (2) adjusting for additional G&A expense. ***.

Respondents point out that profitability turned around in the last quarter of 1994, prior to the filing of the petition on March 9, 1995.[5] They cited Air Products' supplementary response to the Commission's preliminary questionnaire and the Form 10-Q statement for the quarter ending Dec. 31, 1994.

Compared to the first nine months of 1994 (table VI-2), the supplemental response of Air Products indicated a *** for the period October 1, 1994 to December 31, 1994, as follows (*in thousands of dollars, except as noted*):

* * * * * * *

Compared to the first nine months of 1994, the last three months had ***. Form 10-Q for Air Products' first quarter of fiscal year 1995 (October 1, 1994 to December 31, 1994) stated the following:[6]

> CHEMICALS - Sales in the first quarter of fiscal 1995 of $323.8 million increased 19% while operating income of $49.0 million increased 54% compared to last year. Approximately half of the profit gain was in the major chemical businesses, including polyvinyl alcohol, where volume-driven profits were moderated somewhat by higher feedstock costs. The balance of the profit growth resulted from higher methanol and ammonia prices compared to last year.

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[4] The cost of production for each producer is shown in app. J.

[5] Prehearing brief of Kuraray and Nippon, pp. 7-8.

[6] Air Products Form 10-Q for the first quarter ended Dec. 31, 1994, Management's Discussion and Analysis, p. 8.

VARIANCE ANALYSIS

The variance analysis, shown in table VI-4, covers the trade sales of the two producers that provided financial data for an assessment of changes in profitability as related to changes in pricing, cost, and volume. Transfers are not included, but export sales are included and were ***. ***. The information for the variance analysis is derived from information presented in table VI-1. The variance analysis revealed that ***.

Table VI-4
Polyvinyl alcohol (trade-only operations): Variances in net sales; cost of goods sold; gross profit; selling, general, and administrative expenses; and operating income due to changes in price, volume, costs, and/or expenses of Air Products and DuPont, between fiscal years 1992-94, 1992-93, and 1993-94, and between the Jan.-Sept. periods of 1994 and 1995

* * * * * * *

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

The value of property, plant, and equipment for Air Products and DuPont is presented in table VI-5. ***.

Table VI-5
Value of assets of Air Products and DuPont in their U.S. production of polyvinyl alcohol, by firms, fiscal years 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

* * * * * * *

***. Capital expenditures and research and development expenses are presented in table VI-6.

Table VI-6
Capital expenditures by and research and development expenses of Air Products and DuPont in their production of polyvinyl alcohol, by firms, fiscal years 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

* * * * * * *

CAPITAL AND INVESTMENT

The Commission requested U.S. producers to describe any actual or potential negative effects of imports of PVA from China, Japan, and/or Taiwan on their firms' growth, investment, ability to raise capital, or development and production efforts (including efforts to develop a derivative or more advanced version of the product). Air Products' and DuPont's responses are shown in appendix L.

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 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.

In these investigations, the Commission received foreign producers' questionnaire responses from the Chinese PVA producers Guangxi, Sichuan,[1] and Shanghai Petrochemical Co. Ltd. (Shanghai); from the Japanese producers Denki Kagaku Kogyo Kabushiki Kaisha (Denki), Kuraray, and Nippon; and from Chang Chun, the only Taiwan producer of PVA. Information gathered in these investigations on the PVA industries in the subject countries is summarized below.

THE INDUSTRY IN CHINA

According to information supplied by the China PVA trade association, 13 factories, Sichuan being the largest, currently produce PVA in China.[2] Aggregate PVA capacity for these factories was estimated to total approximately 422 million pounds during 1992-94; production output was estimated at 428 million pounds in 1992, 457 million pounds in 1993, and 491 million pounds in 1994. Exports to all markets were estimated at 44 million pounds annually in 1992-93 and 40 million pounds in 1994.[3] None of the 13 factories is dedicated solely to the production of PVA.[4] For example, in addition to PVA, Sichuan also produces vinyl fiber, methanol, formaldehyde, vinyl acetate, and polyester filament yarn, to name just a few. In fact, most Chinese PVA is produced as an intermediate step in producing PVA fiber for use in fabrics.[5]

***, a firm that imported Chinese PVA produced by *** during the period of investigation,[6] indicated that prior to 1994, most Chinese PVA factories were equipped to produce only a highly hydrolyzed PVA product that was used in limited amounts in the U.S. textile and paper industries. However, because the highly hydrolyzed product was causing problems related to a very high dissolving temperature, use of this type of PVA in the United States had begun to phase out in early 1994. *** indicates that most of the Chinese PVA producers are equipped to produce only this "obsolete" PVA product. It states further, however, that six Chinese PVA producers (Fujian, Anhui, Beijing, Shanghai, Guangxi, and Sichuan) have the technology to manufacture a "more world acceptable grade of PVA" for use in the United States. Of these

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[1] PVA produced and sold by Sichuan in the United States was determined by Commerce to be fairly traded.

[2] One additional producer has long ceased its PVA production and is currently producing VAM. Sichuan's postconference brief, att. 2.

[3] Ibid.

[4] Shanghai ***.

[5] Letter from ***, Mar. 29, 1996; and Sichuan's postconference brief, att. 2.

[6] *** imports of Chinese PVA accounted for *** percent of total Chinese PVA imports reported during the period of investigation.

six firms, Sichuan is the largest Chinese PVA producer and the dominant Chinese exporter of PVA to the United States. It produces the widest variety of grades and the highest quality PVA product.[7]

Questionnaire data submitted by Guangxi and Shanghai are shown in table VII-1. Because PVA produced and sold by Sichuan was determined by Commerce to be fairly traded in the United States, the data presented and the discussion that follows exclude Sichuan's information. Both aggregate Chinese capacity and production increased during 1992-94, but fell in the first three quarters of 1995 from the comparable period of 1994. The combined capacity utilization rate for Guangxi and Shanghai fell by *** from *** percent in 1992 to *** percent in 1994. Capacity utilization was higher in the first three quarters of 1994 at *** percent than in the first three quarters of 1995 at *** percent.

Table VII-1
Polyvinyl alcohol: China's capacity, production, inventories, capacity utilization, and shipments, for producers found to be selling at LTFV, 1992-94, Jan.-Sept. 1994, Jan.-Sept. 1995, and projected 1995-96

* * * * * * *

Total shipments and home-market shipments increased from 1992 to 1994, but fell from January-September 1994 to January-September 1995. Home market shipments, which include internal company transfers, accounted for the bulk of total shipments, and exports to markets other than the United States accounted for the bulk of the exports. LTFV exports to the United States, which were comprised solely of shipments made by ***, increased throughout the entire period of investigation.

Based on the projections of Guangxi and Shanghai, capacity is expected to fall from 1994 to 1995, but recover somewhat in 1996. Production is expected to slightly exceed capacity during 1995-96. Sichuan explains that the Chinese PVA industry is currently operating at full capacity and that because of a substantial shortage of raw materials and lengthy lead times involved in purchasing, installations, and trial runs of facilities, Chinese production capacity is not likely to increase in the near future.[8] Guangxi and Shanghai expect the production of PVA to fall from 1994 to 1995, but increase in 1996 to a level below that reported in 1994. *** projects that its exports to the United States will drop to zero in 1996. *** reports that it did not make any shipments of the subject product to the United States during the period of the investigations and does not expect to make such shipments during 1996. Sichuan explains that all Chinese PVA producers are facing large increases in demand for PVA in China and "do not have much incentive to export PVA."[9]

THE INDUSTRY IN JAPAN

Based on official statistics of the U.S. Department of Commerce, Japan is the second-largest world supplier of PVA to the United States. It is also considered to be the largest producer of PVA in the world. The petition lists five Japanese producers of PVA. The Commission received responses to its foreign producers' questionnaire from three of the five producers mentioned in the petition. According to

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[7] Letter from ***, Mar. 29, 1996; and Chang Chun's posthearing brief, p. 22.

[8] Sichuan's prehearing brief, pp. 15-16.

[9] Sichuan's prehearing brief, pp. 17-18 and 25.

questionnaire responses, the production of PVA by these three firms is believed to account for approximately 81 percent of all PVA produced in Japan.

Kuraray is the largest of the three firms, accounting for at least *** percent of all PVA produced in Japan, and for at least *** percent of all such product exported to the United States. Kuraray also captively consumes PVA in the production of synthetic fiber, film, and emulsions. Kuraray estimates that PVA accounted for *** percent of its total sales in the most recent fiscal year. Kuraray uses ***.[10] Other products produced on the same equipment and machinery used in the production of PVA include ***, which accounted for *** percent of the firm's total sales in the most recent fiscal year.

Nippon estimates that its production of PVA represents about *** percent of Japan's total production of such product. It further estimates that its exports to the United States of such product account for *** percent of all such exports from Japan. Sales of the subject product accounted for *** percent of Nippon's total sales in the most recent fiscal year. Nippon uses ***.[11] Other products produced on the same equipment and machinery used in the production of PVA include ***, which together accounted for *** percent of the firm's total sales in the most recent fiscal year.

Denki is the smallest of the three Japanese producers that supplied information on PVA operations to the Commission. It estimates that its production accounts for only about *** percent of Japan's total output of PVA and indicates that ***. Denki also indicated in its response that ***. Denki estimates that PVA accounted for *** percent of its total sales in 1994. Other products produced on the same equipment and machinery used in the production of PVA include ***.

Aggregate capacity, production, shipments, and inventory data for Kuraray, Nippon, and Denki are shown in table VII-2. As the data show, Japan's capacity to produce PVA was unchanged from 1992 to 1993 at 390 million pounds, but dropped to 380 million pounds in 1994. The capacity to produce during the partial-year periods was the same. Japan's production dropped steadily from 1992 to 1994, but was higher in January-September 1995 than in the comparable period in 1994. Exports to the United States, which accounted for a minor share of total shipments, dropped sharply from 1992 to 1994, but were higher in the first three quarters of 1995 than in the similar period of 1994. Inventories fluctuated downward from 50 million pounds in December 1992 to 38 million pounds in December 1994, but were higher at 43 million pounds in September 1995 than the level of 38 million pounds in September 1994.

Generally, the Japanese PVA producers project increases in capacity, production, and total shipments from 1994 to 1995-96. However, they project that inventories and exports to the United States will fall in 1996.

THE INDUSTRY IN TAIWAN

Respondent Chang Chun is the sole Taiwan producer of PVA. It produces PVA using ***.[12] PVA accounted for *** percent of its total establishment sales in its most recent fiscal year; ***. Chang Chun also produces ***, using the same machinery and equipment used to produce PVA. This *** accounted for *** percent of the firm's total sales in the most recent fiscal year. Chang Chun indicates that its practical capacity

[10] Japanese respondents' posthearing brief, app. B, pp. 6-8.

[11] Ibid.

[12] Chang Chun's posthearing brief, p. 37.

Table VII-2
Polyvinyl alcohol: Japan's capacity, production, inventories, capacity utilization, and shipments, 1992-94, Jan.-Sept. 1994, Jan.-Sept. 1995, and projected 1995-96

Item	1992	1993	1994	Jan.-Sept.-- 1994	1995	Projected-- 1995	1996
	Quantity (*1,000 pounds*)						
Capacity	389,950	389,950	380,471	285,394	285,394	381,793	381,793
Production	350,349	332,216	328,027	248,265	279,622	357,533	351,533
End-of-period inventories	49,964	50,891	37,961	38,302	43,222	49,087	42,466
Shipments:							
Home market	231,734	218,326	222,860	174,448	175,130	219,384	228,023
Exports to--							
The United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	117,391	115,077	120,360	87,941	101,241	129,623	132,731
Total shipments	349,125	333,403	343,220	262,389	276,371	349,007	360,754
	Ratios and shares (*percent*)						
Capacity utilization	89.8	85.2	86.2	87.0	98.0	93.6	92.1
Inventories to production	14.3	15.3	11.6	11.6	11.6	13.7	12.1
Inventories to all shipments	14.3	15.3	11.1	10.9	11.7	14.1	11.8
Share of total quantity of shipments:							
Home market	66.4	65.5	64.9	66.5	63.4	62.9	63.2
Exports to--							
The United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***

Note.--Because of rounding, quantity figures may not add to the totals shown.

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

to produce the subject merchandise is declining as it shifts its capacity toward production of nonsubject merchandise.[13] In its Commission questionnaire response, Chang Chun stated that ***.[14] Chang Chun asserts that ***.

Data supplied by Chang Chun on its PVA operations are shown in table VII-3. The data reveal that Chang Chun's production volumes were ***. Exports to the United States, which accounted for a substantial share of the firm's total shipments, *** overall from 1992 to 1994, but *** from January-September 1994 to the same period in 1995. Conversely, the firm's total shipments *** overall from 1992 to 1994, but *** in the partial-year periods. Chang Chun ***. Although Chang Chun projected ***.

Table VII-3
Polyvinyl alcohol: Taiwan's capacity, production, inventories, capacity utilization, and shipments, 1992-94, Jan.-Sept. 1994, Jan.-Sept. 1995, and projected 1995-96

* * * * * * *

[13] Chang Chun's prehearing brief, p. 30, and Chang Chun's posthearing brief, p. 5.

[14] Chang Chun produces *** grades of PVA on *** PVA production lines.

U.S. IMPORTERS' INVENTORIES

From 1992 to 1994, U.S. importers' inventories of PVA were generally consistent with the level of demand in the United States. Coinciding with the decline in consumption from 1992 to 1993, inventories rose (table VII-4). The drop in inventory volume in 1994 similarly coincided with the increase in apparent consumption. However, from the partial-year period in 1994 to the comparable period in 1995, U.S. importers' inventories more than doubled while U.S. consumption also increased. The ratio of inventories to total shipments sporadically increased throughout the period for which data were collected in these investigations.

U.S. importers' inventories of the LTFV product imported from China accounted for *** percent of total inventories of imported PVA held in the United States during the period for which data were collected. These inventories of LTFV Chinese PVA increased from *** pounds in December 1992 to *** pounds in December 1993, but fell to *** pounds in December 1994. Inventories held in September 1995 were higher than those held in September 1994. The ratio of inventories to total shipments increased from *** percent in 1992 to *** percent in 1993, but fell to *** percent in 1994. The ratio was much higher during January-September 1995 at *** percent than during January-September 1994 at *** percent.

Inventories of subject PVA imported from Japan increased from *** pounds in December 1992 to *** pounds in September 1995. These inventories of Japanese PVA accounted for *** percent of total inventories of imported PVA held in the United States during the period for which data were collected. The ratio of inventories to total shipments of PVA imported from Japan more than doubled from 1992 to 1994, and more than tripled from the first three quarters of 1994 to the same period of 1995.

Imported PVA from Taiwan accounted for the bulk of U.S. importers' total inventories.[15] These end-of-period inventories rose from *** pounds in 1992 to *** pounds in 1993, but dropped in 1994 to a level slightly higher than that reported in 1992. Inventories of PVA imported from Taiwan more than doubled in September 1995 over the levels reported in the same month of 1994. The ratio of inventories to total shipments fluctuated between *** percent and *** percent between 1992 and 1994, and jumped to *** percent in September 1995.

Table VII-4
Polyvinyl alcohol: End-of-period inventories of U.S. importers, by sources, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

* * * * * * *

[15] ***.

APPENDIX A

FEDERAL REGISTER NOTICES

INTERNATIONAL TRADE COMMISSION

[Investigations Nos. 731–TA–726, 727, and 729 (Final)]

Polyvinyl Alcohol From China, Japan, and Taiwan

AGENCY: International Trade Commission.

ACTION: Institution and scheduling of final antidumping investigations.

SUMMARY: The Commission hereby gives notice of the institution of final antidumping investigations Nos. 731–TA–726, 727, and 729 (Final) under section 735(b) of the Tariff Act of 1930 (19 U.S.C. § 1673d(b)) (the Act) to determine whether an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from China, Japan, and Taiwan of polyvinyl alcohol,[1] provided for in subheading 3905.20.00

[1] Polyvinyl alcohol is a dry, white to cream-colored, water-soluble synthetic polymer usually prepared by hydrolysis of polyvinyl acetate. This product includes polyvinyl alcohols hydrolyzed in excess of 85 percent, whether or not mixed or diluted with defoamer or boric acid, except for polyvinyl alcohols covalently bonded with acetoacetylate, carboxylic acid, or sulfonic acid uniformly present on all polymer chains in a concentration equal to or greater than two mole percent, or polyvinyl alcohols covalently bonded with silane uniformly present on all polymer chains in a concentration equal to or greater than one-tenth of one mole percent, which are excluded.

Participation in the Investigations and Public Service List

Persons wishing to participate in the investigations as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11 of the Commission's rules, not later than twenty-one (21) days after publication of this notice in the **Federal Register**. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to these investigations upon the expiration of the period for filing entries of appearance.

Limited Disclosure of Business Proprietary Information (BPI) Under an Administrative Protective Order (APO) and BPI Service List

Pursuant to section 207.7(a) of the Commission's rules, the Secretary will make BPI gathered in these final investigations available to authorized applicants under the APO issued in the investigations, provided that the application is made not later than twenty-one (21) days after the publication of this notice in the **Federal Register**. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Staff Report

The prehearing staff report in these investigations will be placed in the nonpublic record on February 13, 1996, and a public version will be issued thereafter, pursuant to section 207.21 of the Commission's rules.

Hearing

The Commission will hold a hearing in connection with these investigations beginning at 9:30 a.m. on February 27, 1996, at the U.S. International Trade Commission Building. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission on or before February 20, 1996. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the hearing. All parties and nonparties desiring to appear at the hearing and make oral presentations should attend a prehearing conference to be held at 9:30 a.m. on February 22, 1996, at the U.S. International Trade Commission Building. Oral testimony and written materials to be submitted at the public hearing are governed by sections 201.6(b)(2), 201.13(f), and 207.23(b) of the Commission's rules. Parties are strongly encouraged to submit as early in the investigations as possible, but not later than February 20, 1996, any requests to present a portion of their hearing testimony *in camera*.

Written Submissions

Each party is encouraged to submit a prehearing brief to the Commission. Prehearing briefs must conform with the provisions of section 207.22 of the Commission's rules; the deadline for filing is February 21, 1996. Parties may also file written testimony in connection with their presentation at the hearing, as provided in section 207.23(b) of the Commission's rules, and posthearing briefs, which must conform with the provisions of section 207.24 of the Commission's rules. The deadline for filing posthearing briefs is March 4, 1996; witness testimony must be filed no later than three (3) days before the hearing. In addition, any person who has not entered an appearance as a party to the investigations may submit a written statement of information pertinent to the subject of the investigations on or before March 4, 1996. On March 22, 1996, the Commission will make available to parties all information on which they have not had an opportunity to comment. Parties may submit final comments on this information on or before March 27, 1996, but such final comments must not contain new factual information, or comment on information disclosed prior to the filing of posthearing briefs, and must otherwise comply with section 207.29 of the Commission's rules. All written submissions must conform with the provisions of section 201.8 of the Commission's rules; any submissions that contain BPI must also conform with the requirements of sections 201.6, 207.3, and 207.7 of the Commission's rules.

In accordance with sections 201.16(c) and 207.3 of the rules, each document filed by a party to the investigations must be served on all other parties to the investigations (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Authority: These investigations are being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to section 207.20 of the Commission's rules.

By order of the Commission.

Issued: November 6, 1995.

Donna R. Koehnke,

Secretary.

[FR Doc. 95–27828 Filed 11–8–95; 8:45 am]

BILLING CODE 7020–02–P

Closure of Commission Offices Due to Furlough

AGENCY: U.S. International Trade Commission.

ACTION: Notice of closure of Commission offices due to furlough.

SUMMARY: The Commission is providing notice to the public that its offices will be closed on Thursday, November 9, 1995, because agency personnel will be on furlough. All filings due on that date will be due on Monday, November 13, 1995.

FOR FURTHER INFORMATION CONTACT: Donna R. Koehnke, Secretary, U.S. International Trade Commission, telephone 202–205–2000. Hearing-impaired persons are advised that information on the matter can be obtained by contacting the Commission's TDD terminal on 202–205–1810. By order of the Chairman:

Issued: November 7, 1995.

Donna R. Koehnke,

Secretary.

[FR Doc. 95–27994 Filed 11–7–95; 8:45 am]

BILLING CODE 7020–02–M

[A-570-842]

Notice of Final Determination of Sales at Less Than Fair Value; Polyvinyl Alcohol From the People's Republic of China

AGENCY: Import Administration, International Trade Administration, Commerce.

EFFECTIVE DATE: March 29, 1996.

FOR FURTHER INFORMATION CONTACT: Everett Kelly or David J. Goldberger, Office of Antidumping Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, N.W., Washington, D.C. 20230; telephone: (202) 482-4194 or (202) 482-4136, respectively.

Applicable Statute and Regulations

Unless otherwise indicated, all citations to the statute are references to the provisions effective January 1, 1995, the effective date of the amendments made to the Tariff Act of 1930 (the Act)

by the Uruguay Rounds Agreements Act (URAA).

Final Determination

As explained in the memoranda from the Assistant Secretary for Import Administration dated November 22, 1995, and January 11, 1996, the Department of Commerce (the Department) has exercised its discretion to toll all deadlines for the duration of the partial shutdowns of the Federal Government from November 15 through November 21, 1995, and December 16, 1995, through January 6, 1996. Thus, the deadline for the final determination in this investigation has been extended by 28 days, i.e., one day for each day (or partial day) the Department was closed. As such, the deadline for this final determination is no later than March 21, 1996.

We determine that polyvinyl alcohol (PVA) from the People's Republic of China (PRC) is being sold in the United States at less than fair value (LTFV), as provided in section 735 of the Tariff Act of 1930, as amended (the Act). The estimated margins are shown in the "Suspension of Liquidation" section of this notice.

Case History

Since the preliminary determination on October 2, 1995 (60 FR 52647, October 10, 1995), the following events have occurred:

On October 13 and 17, 1995, Guangxi GITIC Import and Export Corporation (Guangxi), Guangxi Vinylon Plant (Guangxi Vinylon) and Sinopec Sichuan Vinylon Works (Sichuan), respectively, requested a postponement of the final determination pursuant to 19 CFR 353.20. The Department has determined that such requests contain an implied request to extend the provisional measures period, during which liquidation is suspended, to six months (*see Extension of Provisional Measures* memorandum dated February 7, 1996). Accordingly, on October 19, 1995, the Department postponed the final determination until February 22, 1996. (*Postponement of Final Antidumping Duty Determinations: Polyvinyl Alcohol from Japan, Taiwan, and the People's Republic of China* 60 FR 54667, October 25, 1995).

On November 3, 1995, Isolyser Co., Inc. (Isolyser), an importer of the subject merchandise, entered an appearance in this investigation, and submitted a request for clarification to the scope of this investigation, to exclude PVA fiber.

On November 20, 1995, in response to concerns of Isolyser, petitioner clarified that the scope does not include polyvinyl alcohol fiber.

In October and November, we verified the respondents' questionnaire responses. Additional publicly available published information (PAPI) on surrogate values was submitted by petitioner and respondents on January 19, 1996. Petitioner, respondents, and Isolyser submitted case briefs on January 30, 1996. Petitioner and respondents filed rebuttal briefs on February 6, 1996. A public hearing was held on February 14, 1996.

Scope of Investigation

The merchandise under investigation is polyvinyl alcohol. Polyvinyl alcohol is a dry, white to cream-colored, water-soluble synthetic polymer. Excluded from this investigation are polyvinyl alcohols covalently bonded with acetoacetylate, carboxylic acid, or sulfonic acid uniformly present on all polymer chains in a concentration equal to or greater than two mole percent, and polyvinyl alcohols covalently bonded with silane uniformly present on all polymer chains in a concentration equal to or greater than one-tenth of one mole percent. Polyvinyl alcohol in fiber form is not included in the scope of this investigation.

The merchandise under investigation is currently classifiable under subheading 3905.30.00 of the *Harmonized Tariff Schedule of the United States* (HTSUS). Although the HTSUS subheading is provided for convenience and customs purposes, the written description of the merchandise under investigation is dispositive.

Period of Investigation

The period of investigation is October 1, 1994, through March 31, 1995.

Separate Rates

As stated in our preliminary determination, the PRC is a non-market economy (NME). Each of the responding PRC exporters, Sichuan and Guangxi, has requested a separate, company-specific rate. According to both respondents' business licenses, each is "owned by all the people". As stated in the *Final Determination of Sales at Less than Fair Value: Silicon Carbide from the People's Republic of China* 59 FR 22585, (May 2, 1994) (*Silicon Carbide*), and the *Final Determination of Sales at Less than Fair Value: Furfuryl Alcohol from the People's Republic of China* 60 FR 22545 (May 8, 1995) (*Furfuryl Alcohol*), ownership of a company by all the people does not, in itself, require the application of a single PRC-wide rate. Accordingly, both respondents are eligible for consideration for a separate rate.

To establish whether a firm is sufficiently independent from government control to be entitled to a separate rate, the Department analyzes each exporting entity under a test arising out of the *Final Determination of Sales at Less Than Fair Value: Sparklers from the People's Republic of China* 56 FR 20588 (May 6, 1991) (*Sparklers*) and amplified in *Silicon Carbide*. Under the separate rates criteria, the Department assigns separate rates in nonmarket economy cases only if respondents can demonstrate the absence of both *de jure* and *de facto* governmental control over export activities.

1. Absence of De Jure Control

The respondents have placed on the administrative record a number of documents to demonstrate absence of *de jure* control, including laws, regulations and provisions enacted by the State Council of the central government of the PRC. Respondents have also submitted documents which establish that PVA is not included on the list of products that may be subject to central government export constraints (*Export Provisions*). The Department has reviewed these and other enactments in prior cases and has previously determined that these laws indicate that the responsibility for managing state-owned enterprises has been shifted from the government to the enterprise itself (See *Silicon Carbide* and *Furfuryl Alcohol*).

However, as stated in previous cases, there is some evidence that the PRC central government enactments have not been implemented uniformly among different sectors and/or jurisdictions in the PRC (See *Silicon Carbide* and *Furfuryl Alcohol*). Therefore, the Department has determined that an analysis of *de facto* control is critical in determining whether respondents are, in fact, subject to a degree of governmental control which would preclude the Department from assigning separate rates.

2. Absence of De Facto Control

The Department typically considers four factors in evaluating whether each respondent is subject to *de facto* governmental control of its export functions: (1) whether the export prices are set by or subject to the approval of a governmental authority; (2) whether the respondent has authority to negotiate and sign contracts and other agreements; (3) whether the respondent has autonomy from the government in making decisions regarding the selection of management; and (4) whether the respondent retains the proceeds of its export sales and makes independent decisions regarding

disposition of profits or financing of losses (*see Silicon Carbide* and *Furfuryl Alcohol*).

Each respondent has asserted the following: (1) it establishes its own export prices; (2) it negotiates contracts, without guidance from any governmental entities or organizations; (3) it makes its own personnel decisions; and (4) it retains the proceeds of its export sales, uses profits according to its business needs and has the authority to sell its assets and to obtain loans. In addition, respondents' questionnaire responses indicate that company-specific pricing during the POI does not suggest coordination among exporters. During verification proceedings, Department officials viewed such evidence as sales documents, company correspondence, and bank statements. This information supports a finding that there is a *de facto* absence of governmental control of export functions. Consequently, we have determined that Sichuan and Guangxi have met the criteria for the application of separate rates (*see*, also Comment 1 under *Interested Party Comments* section below).

Fair Value Comparisons

To determine whether sales of PVA from the PRC to the United States by Guangxi and Sichuan were made at less than fair value, we compared Export Price (EP) to the Normal Value (NV), as specified in the "Export Price" and "Normal Value" sections of this notice.

Export Price

For both Guangxi and Sichuan, we calculated EP in accordance with section 772(a) of the Act, because the subject merchandise was sold directly to the first unaffiliated purchaser in the United States prior to importation and because constructed export price under section 772(b) is not otherwise warranted on the basis of the facts of this investigation.

Petitioner has claimed that certain U.S. customers of the respondents are affiliated with respondents, pursuant to section 771(33) of the Act, through common PRC government control. However, there is no information on the record that supports the claim that the U.S. customers are affiliated with the PRC government. Further, respondents have been deemed free of government control. Therefore, we find no basis to consider these customers as affiliated with respondents.

We calculated EP based on packed, FOB PRC port or CIF U.S. port prices to unaffiliated purchasers in the United States, as appropriate, based on the same methodologies in the preliminary determination with the following exceptions:

We excluded all U.S. sales by Sichuan and Guangxi that were reported as having been made through third country resellers, as we determined that, at the time of sale, respondents were unaware of the final destination of the subject merchandise (*see* Comment 6). For Guangxi, we valued ocean freight based on the actual price paid for this expense, as we determined at verification that Guangxi used market economy carriers and paid with market economy currencies. We also included in the final determination a sale by Guangxi that was excluded from our preliminary determination, because we verified that this sale was, in fact, made during the POI.

Normal Value

As in our preliminary determination, we are relying on India as the surrogate country in accordance with section 773(c)(4) of the Act. Accordingly, we have continued to calculate normal value (NV) using Indian prices for the PRC producers' factors of production. We have obtained and relied on published, publicly-available information wherever possible.

In accordance with section 773(c) of the Act, we calculated NV based on factors of production reported by Sichuan, and by Guangxi Vinylon, which produced the PVA for Guangxi. To calculate NV, the reported unit factor quantities were multiplied by Indian values. Except as noted below, we applied surrogate values to the factors of production in the same manner as in our preliminary determination. For a complete discussion of surrogate values, *see Valuation Memorandum*, dated March 21, 1996. We then added amounts for overhead, general expenses (including interest) and profit, based on the experience of two Indian PVA producers (*see* also Comment 3), and packing expenses.

For both Sichuan and Guangxi, we have corrected the affected factors of consumption to reflect verification results. For Sichuan, these revisions include changes to PVA production stage based on actual PVA production levels, rather than the standards of the industry, (*see* Comment 8), and changes to the acetic acid consumption factors to net out regained acetic acid. For Guangxi, we revised calcium carbide factors to reflect actual rather than standard consumption (*see* Comment 7).

All-Others Rate

The Department requested the PRC Ministry of Foreign Trade and Economic Corporation (MOFTEC) to identify all exporters of subject merchandise. MOFTEC identified two PRC companies as the only known PRC exporters of PVA to the United States during the POI. Both of these identified exporters have responded in this investigation, and both were found to meet the criteria for application of separate rates. We compared the respondents' sales data with U.S. import statistics for time periods including the POI, and found no indication of unreported sales, with the possible exception of re-sales made by a third country reseller. This reseller was not investigated as a respondent in this proceeding because it was not identified as a potential respondent until after the preliminary determination. All known PRC exporters responded to our questionnaires and qualified for separate rates. We have no evidence that there are any other PRC exporters that may be subject to common government control. Therefore, we have not calculated a PRC-Wide rate in this investigation. We have calculated an all-others rate in accordance with section 735 (c)(5) of the Act.

Verification

As provided in section 776(b) of the Act, we verified the information submitted by respondents for use in our final determination. We used standard verification procedures, including examination of relevant accounting and production records and original source documents provided by respondents.

Interested Party Comments

Comment 1: Separate Rate for Sichuan Vinylon

Petitioner states that Sichuan did not demonstrate the absence of *de jure* or *de facto* governmental control and thus should not be granted a separate rate. Petitioner claims the Department found evidence at verification to indicate a relationship between Sichuan and China National Petrochemical Corporation (Sinopec), which petitioner identifies as a state-owned petroleum company. According to the petitioner, as Sichuan is a subsidiary of Sinopec, the Department's analysis of *de jure* and *de facto* governmental control should have been at the Sinopec level. Further, petitioner contends that Sichuan's questionnaire response should be considered incomplete and incorrect, since it did not disclose its business relationship with Sinopec. Therefore, petitioner asserts that the Department should rely on the facts available for calculating a margin for Sichuan, Sinopec and all other PRC entities except Guangxi.

Sichuan argues that, at the outset of this investigation, it fully disclosed its past relationship with Sinopec. Sichuan argues that, under recent PRC law, Sichuan is an independent legal person with its own management and is not related to any level of government or to Sinopec. Additionally, Sichuan states that, in past cases, the Department recognized the 1988 laws and the 1992 regulations as sufficient evidence of the absence of *de jure* government control. Further, Sichuan asserts that verification revealed no evidence of affiliation with Sinopec or *de facto* governmental control. Additionally, Sichuan contends that the name Sinopec is attached to Sichuan Vinylon Works only as a trademark used for international business recognition, a practice used by other PRC companies, and not as an indication of a continued business relationship.

DOC Position

We have calculated a separate margin rate for Sichuan. All evidence on the record supports Sichuan's assertion that there is no current relationship between Sichuan and Sinopec. Accordingly, examination of whether Sinopec was subject to government control was not necessary in considering whether to give Sichuan a separate rate. At verification, we reviewed a wide variety of sales documents including contracts, invoices, records of payments, and correspondence and found that Sichuan acted independently from Sinopec and any other entities in its day to day business activities. We found that Sichuan officials made all decisions regarding sales pricing and contracting, appointment of management personnel, and disposition of profits, and that these decisions were neither reviewed nor approved by Sinopec or any other entity. Accordingly, we determine that Sichuan has satisfactorily met the Department's criteria for showing an absence of *de jure* and *de facto* governmental control.

Comment 2: Separate Like Product for Certain PVA Grades

Isolyser, an importer of the subject merchandise, asserts that PVA hydrolyzed at a level of 98% should be considered a separate domestic like product. Thus, Isolyser contends that the Department should calculate a separate antidumping margin for PVA with a hydrolysis level of at least 98% in order for the International Trade Commission (ITC) to analyze the magnitude of the domestic margin on the domestic producers for each specific like product.

DOC Position

There is no evidence on the record to show that PVA hydrolyzed at a 98% level has physical characteristics and uses different from the subject merchandise for separate consideration as a domestic like product pursuant to section 771(10) of the Act. Therefore, we are rejecting Isolyser's request.

Comment 3: Application of Factory Overhead

Petitioner claims that the Department understated NV for both Sichuan and Guangxi in the preliminary determination by applying factory overhead only at the final stage of production, rather than to the upstream stages of the vertically integrated production processes. Petitioner argues that both respondents incur overhead costs throughout the production process, rather than simply at the final stage, because both are involved in processing and producing many of the inputs used in PVA production. Petitioner contends that the Indian PVA manufacturers are not as vertically integrated as the PRC respondents and thus the factory overhead percentage derived from the Indian companies' financial statements does not fully capture the factory overhead incurred by the PRC producers. In order to fully account for the overhead incurred, petitioners claim that an appropriate surrogate factory overhead percentage must be applied to both respondents at each upstream stage of production.

Sichuan and Guangxi argue that if factory overhead were applied to each stage of production, the Department would engage in "double counting." Each respondent states that its production processes are continuous and although overhead costs are incurred throughout, by applying the overhead percentage to the factors of production at the final stage, the Department captures the total overhead cost for the entire production process.

DOC Position

We disagree with the petitioner. Our analysis of the information on the record, including the financial statements of the Indian PVA producers, does not support the assumptions made by petitioner regarding the level of vertical integration of the Indian surrogate PVA producers. There is no evidence on the record to indicate that the Indian producers are any less vertically integrated than the PRC PVA producers.

To support its claim, petitioner states that the Indian producers must purchase such inputs as acetylene gas, oxygen, nitrogen, and treated water, while the PRC producers manufacture or process these materials themselves. However, the Indian financial statements state only that the Indian producers consume such inputs, but contain no information as to whether or not such consumption is derived from internal manufacture or outside manufacture. Further analysis of these documents indicates that the Indian producers have considerable investment in PVA production facilities. Such investment may, in fact, represent vertical integration at the same level or close to that of the PRC producers.

There is no basis to assume that applying factory overhead percentage once, at the final stage of production of the PRC producers, undervalues factory overhead. By applying the factory overhead to the final stage of production we have captured all appropriate factory overhead expenses incurred in the manufacture of PVA. Therefore, we have continued our preliminary determination methodology for calculating overhead expenses.

Comment 4: Surrogate Value Source for Factory Overhead, General Expenses and Profit

Petitioner contends that the Department should continue to rely on the Annual Report of VAM Organic Chemicals Ltd. (VAM Organic), an Indian producer of VAM and PVA, as the sole source to calculate factory overhead, general expenses, and profit. Petitioner argues that VAM Organic produces mostly VAM and PVA, and its experience is the most comparable among available sources to that of the PRC producers. Petitioner argues further that the VAM Organic report is more representative of the PRC industry experience than the financial statement of a second Indian producer, Polychem Limited (Polychem), because PVA related production is a relatively smaller part of Polychem's business. If, however, the Department were to consider using both VAM Organic and Polychem data, petitioner contends that the data should be weight-averaged based on the production of VAM and PVA at each company.

Sichuan contends that the surrogate value used for factory overhead, general expenses and profit should be based on the experience of India's chemical industry as a whole, using aggregate data compiled by the Reserve Bank of India (RBI), as applied in past Department cases (*see, e.g., Saccharin*). Sichuan contends that this data is more representative than the data from VAM Organic, which Sichuan claims is aberrational. Sichuan's next preferred methodology is to base these surrogate

values on Polychem's experience as Polychem's total PVA sales and VAM sales are greater than the total sales of VAM Organic's PVA and VAM sales, and thus Polychem's experience is more representative of the Indian experience. Finally, Sichuan contends that if the Department chooses to use both VAM Organic and Polychem data, the data should be weight-averaged based on each company's total sales volume of PVA.

DOC Position

For valuing such factors as factory overhead, general and administrative expenses and profit, the Department seeks to base surrogate values on industry experience closest to the product under investigation. In this case, we have information from two producers of the subject merchandise. Thus, there is no need to rely on the experience of the chemical industry as a whole. Between the two Indian producers, we found no significant difference in the quality and representativeness of the data contained in the financial statements. Thus we find both Polychem and VAM Organic to be equally representative of the PVA industry in India. Because there is nothing in this case to indicate that one factor (*i.e.* sales volume or production volume) is more important than the other in valuing factory overhead, general and administrative expenses and profit, we determine that weight-averaging the data from both companies on the basis of either factor is inappropriate. Accordingly, we have weighted the data equally between each company and calculated factory overhead, general and administrative expenses and profit percentages using a simple average of the percentages derived from each producer, and applied these percentages to the factors of production.

Comment 5: Classification of Certain Labor and Overhead Expenses

Petitioner states that the Department should follow the methodology outlined in *Final Determination of Sales at Less than Fair Value: Manganese Metal from the People's Republic of China* (60 FR 56045, November 6, 1995) (*Manganese Metal*), where the Department determined that the surrogate value for labor did not include contributions to the provident fund and employee welfare expenses and thus these contributions and expenses were added to the factory overhead calculation. Petitioner also contends that the data used to derive the value for overhead should be re-allocated to properly include research and development expenses.

Sichuan and Guangxi argue that the Department's past practice has been to include provident fund and employee welfare expenses as components of total labor cost (*see, e.g. Saccharin*) and not as part of overhead expenses. Sichuan states that the example in *Manganese Metal* was an aberration and should not be a precedent for this investigation. Sichuan asserts that the International Labor Organization (ILO) data, used by the Department in the preliminary determination, is fully loaded to include employee benefits such as provident fund contributions and employee welfare expenses. In addition, Sichuan argues that there is insufficient evidence to support petitioner's re-allocation of research and development in the factory overhead calculation. Sichuan maintains that if VAM Organic data is used, no adjustment for research and development is warranted.

DOC Position

We agree with Sichuan. As in the cases cited by Sichuan, we consider the ILO statistics to be fully loaded with respect to all labor expenses, incorporating such costs as contributions to the provident fund and employee welfare expenses. In contrast, the labor value used in *Manganese Metal* was from a different source, and did not include these expenses. We also agree there is insufficient evidence to support petitioner's assumptions for basing re-allocation of research and development expenses.

Comment 6: Sales to Non-PRC Trading Company

Petitioner contends that at the time of sale, Sichuan and Guangxi were unaware of the final destination for sales made to a third country trading company. Petitioner states these sales should be excluded from the calculation of the PRC producer's export price and assigned an antidumping rate separate from that of the respondents.

While Sichuan states the exclusion of these sales would have minimal effect on the final margin calculations, Sichuan states it knew at the time of sale that the sales to the trading company were destined to the United States. Sichuan contends that it had numerous sales documents that would have supported its claim that it knew at the time of sale the final destination of the sales made to trading companies. Guangxi agrees that it did not know the final destination of the sales made through the trading companies.

DOC Position

We reviewed numerous sales documents at the verification of Sichuan and in no instance did we find that *at the time of sale*, Sichuan knew or had any reason to believe the destination of the subject merchandise was the United States. There is no further information on the record that supports Sichuan's claim that, at the time of sale, it knew the destination of the subject merchandise. Although each respondent may have had some indication of the destination prior to the time of shipment, all of the sales documents reviewed at each company showed no information identifying the United States as the ultimate destination of the subject merchandise. We have therefore excluded the trading company sales from each company's margin calculation.

Comment 7: Guangxi Vinylon Reporting of Calcium Carbide Factor

Petitioner argues the Department should revise Guangxi's reported calcium carbide factors based on information discovered at verification, which revealed that Guangxi Vinylon had reported this factor based on an industrial standard, rather than the actual consumption of calcium carbide for PVA production.

Guangxi argues that it reported its calcium carbide factor consumption consistent with the legally required PRC industry standard for production of PVA and its production accounting system.

DOC Position

We agree with the petitioner. We have revised the calcium carbide consumption factors to reflect actual consumption, based on information discovered at verification. Actual consumption in a production process is more accurate than a standard figure.

Comment 8: Sichuan Reporting of PVA Production

Petitioner claims that the Department should reject as new information verification findings that Sichuan's reported concentration percentage of PVA used to calculate consumption factors of inputs used at the PVA production stage was inaccurate. Additionally, petitioner argues that Sichuan has not demonstrated that such an adjustment is appropriate.

Sichuan argues it provided numerous submissions and complete accurate and timely responses to the Department. Further, Sichuan states the Department was able to verify, within the time specified, the completeness of this factual information. Therefore, Sichuan argues that the Department should use

the verified evidence on record to calculate an antidumping margin for Sichuan.

DOC Position

The information discovered at verification, regarding the concentration percentages of PVA production, represents a relatively minor correction of data already provided by Sichuan, rather than new information not previously provided. Moreover, we find that using the actual concentration percentages of PVA production will yield more accurate results. Therefore, we have revised affected input factors based on the actual PVA production data.

Comment 9: Surrogate Value for Electricity

Petitioner argues that the Department should use data on electricity prices issued by the Centre for Monitoring the Indian Economy (CMIE), from March 1, 1995, for the electricity surrogate value. In applying the rates, petitioner suggests the surrogate value should be calculated as the weighted-average of rates from the Indian states where the Indian chemical industry is located.

Sichuan and Guangxi argue that the electricity prices submitted by the petitioner are effective beginning with the last month of the POI, while all of their PVA production during the POI occurred earlier. Therefore, they claim that the petitioners proposed value is inappropriate for use as a surrogate value because it reflects prices in effect subsequent to their PVA production. Sichuan suggests that the Department use either data on an electricity rate for India issued by the International Energy Agency (IEA), or the CMIE value from June 1994 used in the preliminary determination. Sichuan contends that the IEA figure, when adjusted to the POI, is an appropriate measure of the cost of electricity.

DOC Position

We agree in part with the petitioner that the March 1995 CMIE data is the most contemporaneous value relative to the POI and is the appropriate source for deriving the electricity surrogate value. Petitioners and respondents are both incorrect in stating that these rates are "effective" on March 1, 1995. Rather, the source shows that these were the rates "as of" March 1, 1995, and thus represent Indian price levels contemporaneous with the POI. However, we disagree with the petitioner's weighted average methodology. There is insufficient basis to assume that the electricity rates from the Indian states selected by petitioner are more appropriate for surrogate value than electricity rates in other states. Other factors beside chemical production levels, such as methods of generation and transmission as well as overall demand, are determinants of price. Since there is not sufficient information on the record to weigh the appropriateness of using one Indian state's electricity rates over those in another, we have based the surrogate value on the simple average of all Indian state rates found in the 1995 CMIE source.

Comment 10: Surrogate Value for Natural Gas

Petitioner contends that the Department should use the data on natural gas costs derived from 1994–1995 Gujarat Narmada Valley Fertilizer Co. Ltd (Gujarat) Annual Report as a surrogate for valuing natural gas because this value reflects the actual POI cost to an Indian chemical producer of this input.

Sichuan maintains that the value submitted by petitioner is not sufficiently representative of Indian prices as it is taken from a single Indian company's experience. Sichuan supports the use of an India-wide price rate obtained for 1994–1995 from *Hydrocarbon Perspective: 2010*, as used in the preliminary determination.

DOC Position

We agree with Sichuan and have used a rate obtained from *Hydrocarbon Perspective: 2010* as the surrogate value for natural gas. In determining the most appropriate surrogate value to apply to an input factor, the Department considers such elements as the specificity of the value as compared to the factor used, the contemporaneity of the value with respect to the POI, and the representativeness of the value for the industry in the surrogate country. In this instance, both values are equally specific with respect to the natural gas input, and equally contemporaneous with respect to the POI. For this factor, we consider the *Hydrocarbon Perspective: 2010* value to be more representative than a value from an annual report of a single company.

Comment 11: Surrogate Value for Coal

Petitioner states that the Department should use a surrogate value for steam coal derived from the annual report of Sukhjit Starch & Chemical Ltd (Sukhjit), an Indian chemical manufacturer. Petitioner contends that this value is specifically for steam coal, an input used by the respondents, and the value is contemporaneous with the POI.

Sichuan contends that the Department should derive a surrogate value for steam coal using average numbers for the Indian chemical industry as a whole rather than use a price quote from specific companies whose primary production is not PVA.

DOC Position

We valued steam coal inputs using an average price derived from the Sukhjit annual report and the 1994–95 annual report for Gujarat report, identified in Comment 10, which also is on the record. Both of these sources are equally contemporaneous with the POI and are publicly available. Although the fertilizer company's annual report does not specifically classify the coal consumed as "steam coal", it is clear from its inclusion in a table relating to power and fuel consumption that the coal consumed is for generating steam, and thus can be considered steam coal. Therefore both values are equally specific with regard to the input. As we have no basis to determine that one of these sources is superior to the other, we have weighted them equally in calculating a surrogate value.

We agree with Sichuan that where surrogate values cannot be based on the experiences of Indian producers of subject merchandise, a surrogate value based on a broader sample of Indian experience would be preferable, where all other relevant factors are equal. However, we consider the contemporaneity to the POI of the two annual reports to be more important for valuing this factor. While Sukjhit and Gujarat are not producers of PVA, we do not consider that fact to be relevant for considering surrogate values of commodity inputs such as coal, where the prices from PAPI typically represent the overall price level for that input in the surrogate country. Further, in comparing the average of the two companies to other, non-contemporaneous values on the record, we find that our average is reasonably comparable with respect to the other inflation-adjusted coal values, including those derived from the annual reports of the Indian PVA producers.

Comment 12: Sichuan Indirect Labor Factors

Petitioner claims that Sichuan significantly underreported its indirect labor cost by reporting indirect labor only for the final stage of the production process. Petitioner contends that the Department must apply a value for indirect labor to all upstream production stages, as in *Manganese Metal*.

Sichuan contends that it reported, and the Department verified, all of its indirect labor factors and no further adjustment is warranted.

DOC Position

We agree with Sichuan. We verified Sichuan's indirect labor reporting and found no basis to add additional factors for this input. Petitioner's reliance on the *Manganese Metal* case is misplaced. In *Manganese Metal*, the respondent did not report any separate factors for indirect labor, and the factory overhead value did not include indirect labor factors. Thus, an adjustment was warranted. In this case, both Sichuan and Guangxi reported all indirect labor factors and no further accounting for this input is needed.

Comment 13: Valuation of Guangxi Vinylon's Water Consumption

Petitioner argues that Guangxi Vinylon's water factor should be considered as a direct manufacturing cost. Petitioner states that Guangxi's water factor is distinguishable from the Department's treatment of water in past cases. Petitioner argues that, in past cases, water was considered an overhead item, since there was no information in the Reserve Bank of India Bulletin data to indicate otherwise. In this case, petitioner contends that water is a direct manufacturing cost of producing PVA. Further, Petitioner argues that the Indian producers of PVA treat water as a component of power and fuel, thus identifying water as a direct manufacturing cost. Therefore, water should be calculated separately from factory overhead.

Guangxi Vinylon states that the Department's treatment of water as a factory overhead item is consistent with past practice (*see, e.g. Saccharin*) and should continue in this investigation.

DOC Position

We agree with Guangxi Vinylon. There is no information on the record that supports petitioners claim that water must be treated as a direct manufacturing cost. Consistent with our practice in such cases as *Saccharin*, which involved a chemical product and relied on a similar type of factory overhead data, we have considered Guangxi's Vinylon's water consumption factor to be part of factory overhead.

Continuation of Suspension of Liquidation

For Sichuan, we calculated a zero margin. Consistent the with *Notice of Final Determination of Sales at Less Than Fair Value: Certain Cased Pencils from the People's Republic of China* (59 FR 55625, November 8, 1994), merchandise that is sold by Sichuan but manufactured by other producers will not receive the zero margin. Instead, such entries will be subject to the "All-Others" rate.

In accordance with section 733(d)(1) and 735(c)(4)(B) of the Act, we are directing the Customs Service to continue to suspend liquidation of all entries of polyvinyl alcohol (except those entries that represent U.S. sales by Sichuan of PVA that Sichuan has manufactured) from the PRC, that are entered, or withdrawn from warehouse for consumption, on or after the date of publication of this notice in the Federal Register. The Customs Service shall require a cash deposit or posting of a bond equal to the estimated amount by which the normal value exceeds the export price as shown below. These suspension of liquidation instructions will remain in effect until April 7, 1996.

The weighted-average dumping margins are as follows:

Manufacturer/Producer/Exporter	Weighted-average margin percentage
Guangxi GITIC Import and Export Corp	116.75
Sichuan Vinylon Works	0.00
All-Others Rate	116.75

The All-Others rate applies to all entries of subject merchandise except for entries from Guangxi and entries of merchandise manufactured by Sichuan.

ITC Notification

In accordance with section 735(d) of the Act, we have notified the ITC of our determination. As our final determination is affirmative, the ITC will, within 45 days, determine whether these imports are materially injuring, or threaten material injury to, the U.S. industry. If the ITC determines that material injury, or threat of material injury does not exist, the proceeding will be terminated and all securities posted will be refunded or canceled. If the ITC determines that such injury does exist, the Department will issue an antidumping duty order directing Customs officials to assess antidumping duties on all imports of the subject merchandise entered for consumption on or after the effective date of the suspension of liquidation.

This determination is published pursuant to section 735(d) of the Act.

Dated: March 21, 1996.

Susan G. Esserman,

Assistant Secretary for Import Administration.

[FR Doc. 96-7634 Filed 3-28-96; 8:45 am]

BILLING CODE 3510-DS-P

[A-588-836]

Notice of Final Determination of Sales at Less Than Fair Value; Polyvinyl Alcohol From Japan

AGENCY: Import Administration, International Trade Administration, Commerce.

EFFECTIVE DATE: March 29, 1996.

FOR FURTHER INFORMATION CONTACT: Ellen Grebasch or Erik Warga, Office of Antidumping Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, D.C. 20230; telephone: (202) 482-3773 or (202) 482-0922, respectively.

The Applicable Statute

Unless otherwise indicated, all citations to the statute are references to the provisions effective January 1, 1995, the effective date of the amendments made to the Tariff Act of 1930 (the Act) by the Uruguay Round Agreements Act (URAA).

Final Determination

As explained in the memoranda from the Assistant Secretary for Import Administration dated November 22, 1995, and January 11, 1996, the Department of Commerce (the Department) has exercised its discretion to toll all deadlines for the duration of the partial shutdowns of the Federal Government from November 15 through November 21, 1995, and December 16, 1995, through January 6, 1996. Thus, the deadline for the final determination in this investigation has been extended by 28 days, *i.e.*, one day for each day (or partial day) the Department was closed. As such, the deadline for this final determination is no later than March 21, 1996.

We determine that polyvinyl alcohol (PVA) from Japan is being sold in the United States at less than fair value (LTFV), as provided in section 735 of the Tariff Act of 1930, as amended (the Act). The estimated margins are shown in the "Suspension of Liquidation" section of this notice.

Case History

Since the preliminary determination of sales at less than fair value in this investigation on October 2, 1995, (60 FR

52651, October 10, 1995), the following events have occurred:

On October 17, 1995, respondent, Kuraray Co., Ltd. requested that the final determination be postponed until March 21, 1996. The Department has determined that such requests contain an implied request to extend the provisional measures period, during which liquidation is suspended, to six months (see, *Extension of Provisional Measures* memorandum dated February 7, 1996).

On November 20, 1995, the petitioner, Air Products and Chemicals, Inc., clarified its position that polyvinyl alcohol fiber was not intended to be within the scope of this investigation.

On February 2, 1996, respondent, Kuraray Co., expressly requested extension of the four month provisional measures period.

No hearing was requested or held, and no party filed a case brief.

Scope of Investigation

The merchandise under investigation is polyvinyl alcohol. Polyvinyl alcohol is a dry, white to cream-colored, water-soluble synthetic polymer. This product consists of polyvinyl alcohols hydrolyzed in excess of 85 percent, whether or not mixed or diluted with defoamer or boric acid. Excluded from this investigation are polyvinyl alcohols covalently bonded with acetoacetylate, carboxylic acid, or sulfonic acid uniformly present on all polymer chains in a concentration equal to or greater than two mole percent, or polyvinyl alcohols covalently bonded with silane uniformly present on all polymer chains in a concentration equal to or greater than one-tenth of one mole percent. Polyvinyl alcohol in fiber form is not included in the scope of this investigation.

The merchandise under investigation is currently classifiable under subheading 3905.30.00 of the *Harmonized Tariff Schedule of the United States* (HTSUS). Although the HTSUS subheading is provided for convenience and customs purposes, the written description of the merchandise under investigation is dispositive.

Period of Investigation

The period of investigation (POI) is April 1, 1994, through March 31, 1995.

Facts Available

For reasons discussed in the preliminary determination, the Department has, pursuant to section 776 of the Act, used the facts available. As discussed in the preliminary determination, the Department used as the facts available the margin in the petition. For a discussion of the reasons for application of the facts available, and the selection of the petition margin as the facts available, see *Notice of Preliminary Determination of Sales at Less Than Fair Value: Polyvinyl Alcohol from Japan*, 60 FR 52649, 52650 (October 10, 1995). The Department has not received any comments since the preliminary determination on its application of facts available.

Fair Value Comparisons

As noted above, as in our preliminary determination, this final determination has been made using the margin in the petition as the facts available.

All-Others Rate

Under section 735(c)(5) of the Act, the "all-others rate" will normally be a weighted average of the weighted-average dumping margins established for all exporters and producers, but excluding any zero or *de minimis* margins, or any margins based entirely on the facts available. However, this provision also states that if all weighted-average margins are zero, *de minimis*, or based on the facts available, the Department may use other reasonable methods to calculate the all-others rate, including a weighted-average of such margins. In this case, as discussed above, the margin assigned to all companies is 77.49 percent, based on the facts available. Therefore, also based on the facts available, the Department determines the all-others rate to be 77.49 percent.

Continuation of Suspension of Liquidation

In accordance with section 733(d) of the Act, we are directing the Customs Service to continue to suspend liquidation of all entries of polyvinyl alcohol from Japan, that are entered, or withdrawn from warehouse for consumption, on or after October 10, 1995, the date of publication of our preliminary determination in the Federal Register. The Customs Service shall require a cash deposit or posting of a bond equal to the estimated amount by which the normal value exceeds the export price as shown below. These suspension of liquidation instructions will remain in effect until April 7, 1996, in accordance with section 733(d) of the Act.

The dumping margins are as follows:

Exporter/Manufacturer	Margin percentage
Kuraray	77.49
Nippon Goshei	77.49
Unitika	77.49
Shin-Etsu	77.49
All others	77.49

The all others rate applies to all entries of subject merchandise except for entries from exporters that are identified above.

ITC Notification

In accordance with section 735(d) of the Act, we have notified the ITC of our determination. As our final determination is affirmative, the ITC will within 45 days determine whether these imports are materially injuring, or threaten material injury to, the U.S. industry. If the ITC determines that material injury, or threat of material injury does not exist, the proceeding will be terminated and all securities posted will be refunded or canceled. If the ITC determines that such injury does exist, the Department will issue an antidumping duty order directing Customs officials to assess antidumping duties on all imports of the subject merchandise entered, for consumption on or after the effective date of the suspension of liquidation.

This determination is published pursuant to section 735(d) of the Act and 19 CFR 353.20(a)(4).

Dated: March 21, 1996.

Susan G. Esserman,

Assistant Secretary for Import Administration.

[FR Doc. 96-7635 Filed 3-28-96; 8:45 am]

BILLING CODE 3510-DS-P

[A-583-824]

Notice of Final Determination of Sales at Less Than Fair Value: Polyvinyl Alcohol From Taiwan

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

EFFECTIVE DATE: March 29, 1996.

FOR FURTHER INFORMATION CONTACT: Barbara Wojcik-Betancourt or David J. Goldberger, Office of Antidumping Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, D.C. 20230; telephone: (202) 482-0629 or (202) 482-4136, respectively.

THE APPLICABLE STATUTE: Unless otherwise indicated, all citations to the statute are references to the provisions effective January 1, 1995, the effective date of the amendments made to the

Tariff Act of 1930 (the Act) by the Uruguay Round Agreements Act (URAA).

FINAL DETERMINATION: As explained in the memoranda from the Assistant Secretary for Import Administration dated November 22, 1995, and January 11, 1996, the Department of Commerce (the Department) has exercised its discretion to toll all deadlines for the duration of the partial shutdowns of the Federal Government from November 15 through November 21, 1995, and December 16, 1995, through January 6, 1996. Thus, the deadline for the final determination in this investigation has been extended by 28 days, *i.e.*, one day for each day (or partial day) the Department was closed. As such, the deadline for this final determination is no later than March 21, 1996.

We determine that polyvinyl alcohol (PVA) from Taiwan is being sold in the United States at less than fair value (LTFV), as provided in section 735 of the Act. The estimated margins are shown in the "Suspension of Liquidation" section of this notice.

Case History

Since the preliminary determination of sales at less than fair value in this investigation on October 2, 1995, (60 FR 52651, October 10, 1995), the following events have occurred:

On October 10, 1995, Chang Chun Petrochemical Co., Ltd. (Chang Chun), the sole Taiwan producer of the subject merchandise, and the respondent in this investigation, timely requested a postponement of the final determination until not later than 135 days after publication of the preliminary determination in the Federal Register. The notice postponing the final determination was published on October 25, 1995 (60 FR 54667). The Department has determined that such requests contain an implied request to extend the provisional measures period, during which liquidation is suspended, to six months (*see Extension of Provisional Measures* memorandum dated February 7, 1996.).

We conducted verification of Chang Chun's sales and cost questionnaire responses in Taiwan during October.

On November 20, 1995, the petitioner, Air Products and Chemicals, Inc., stated that polyvinyl alcohol fiber was not intended to be within the scope of this investigation.

Monsanto Company (Monsanto), a party to the proceeding in this investigation, submitted comments on the cost of production verification report on December 18, 1995. National Starch and Chemical Company, Perry Chemical Corp., and Rhône-Poulenc, importers of the subject merchandise, submitted comments on the sales verification report on January 11, 1996.

Chang Chun and the petitioner, Air Products and Chemicals, Inc., submitted case briefs on January 16, 1996, and rebuttal briefs on January 24, 1996. Monsanto also submitted a rebuttal brief on January 24, 1996. At the request of both the petitioner and Chang Chun, a public hearing was held on February 26, 1996.

Scope of Investigation

The merchandise under investigation is polyvinyl alcohol. Polyvinyl alcohol is a dry, white to cream-colored, water-soluble synthetic polymer. This product consists of polyvinyl alcohols hydrolyzed in excess of 85 percent, whether or not mixed or diluted with defoamer or boric acid. Excluded from this investigation are polyvinyl alcohols covalently bonded with acetoacetylate, carboxylic acid, or sulfonic acid uniformly present on all polymer chains in a concentration equal to or greater than two mole percent, and polyvinyl alcohols covalently bonded with silane uniformly present on all polymer chains in a concentration equal to or greater than one-tenth of one mole percent. Polyvinyl alcohol in fiber form is not included in the scope of this investigation.

The merchandise under investigation is currently classifiable under subheading 3905.30.00 of the *Harmonized Tariff Schedule of the United States* (HTSUS). Although the HTSUS subheading is provided for convenience and customs purposes, the written description of the merchandise under investigation is dispositive.

Period of Investigation

The period of investigation (POI) is April 1, 1994, through March 31, 1995.

Product Comparisons

For purposes of determining appropriate product comparisons to U.S. sales, we compared identical merchandise, or where there were no sales of identical merchandise in the home market to compare to U.S. sales, we made comparisons based on the characteristics listed in the Department's antidumping questionnaire, as had been applied in the preliminary determination, and in accordance with section 771(16) of the Act.

In its case brief, petitioner claimed that the Department should determine that "targeted dumping" exists under section 777A(d)(1)(B) because of a pattern of export prices, which petitioner alleged differed significantly across time. Pursuant to section 777A(d)(1)(B), the Department may compare weighted-average normal values (NV) to transaction-specific export prices, if there is a pattern of *export prices* (EP) for comparable merchandise that differ significantly among purchases, regions, or periods of time (*see* section 777A(d)(1)(B)(i)) (emphasis added) when these differences cannot be taken into account by using an average to average or transaction to transaction comparison (*see* section 777A(d)(1)(B)(ii)). Petitioner requested that the Department compare monthly average NV to monthly EP averages to alleviate the significant price distortions occurring in the *home market* at the end of the POI. Petitioner, however, failed to provide any evidence or argument as to why the alleged pattern of *export prices* constitute targeted dumping. Consequently, we have rejected petitioner's allegation of targeted dumping. However, the Department has found significant differences over time in home market pricing. Those differences have been taken into account in price averaging. For discussion of the price averaging issue, *see* Comment 3 in the *Interested Party Comments* section of this notice below.

Level of Trade

As set forth in section 773(a)(1)(B)(i) of the Act and in the Statement of Administrative Action (SAA) accompanying the URAA, to the extent practicable, the Department will calculate normal values based on sales at the same level of trade as U.S. sales.

Pursuant to 773(a)(7)(A)(i), level of trade involves the performance of different selling activities by the producer/exporter. On September 22, 1995, we sent Chang Chun supplemental questions requesting that Chang Chun establish any claimed levels of trade based on selling functions performed and services offered by Chang Chun to each customer or customer class, and to document and explain any claims for a level of trade adjustment. Chang Chun provided no additional information regarding its selling functions and continued to claim that, pursuant to section 773(a)(7) (A) and (B), levels of trade are based on customer classification.

We examined the record evidence on the selling functions performed by Chang Chun on sales in each market and found that Chang Chun provides nearly all of the same or very similar selling functions to all customers including: packing and freight services, warranty claims, advertising, technical services, and inventory maintenance. As a result,

we rejected the level of trade claim because, pursuant to section 773(a)(7)(A)(i), differences in level of trade must involve the performance of different selling activities by the seller (*i.e.* the respondent producer/exporter) (*see* Comment 4). Therefore, we determine that the selling functions performed among home market sales are sufficiently similar for us to consider the home market to be one level of trade.

For the U.S. market, Chang Chun reported payment of commissions on certain U.S. sales. It reported, and we verified, that the commissions paid did not reflect payments for any services provided by the commissionaire. Apart from tolled sales, which are not used in our final determination (*see* Comment 7), we also found that the selling functions performed by the respondent in the U.S. are sufficiently similar for all sales for us to consider the U.S. market to be one level of trade.

Fair Value Comparisons

In accordance with section 772(a) of the Act, to determine whether Chang Chun's sales of PVA to the United States were made at less than fair value, we used EP because the subject merchandise was sold to the first unaffiliated purchaser in the United States prior to importation and because constructed export price (CEP) under section 772(b) is not otherwise warranted based on the facts of this investigation.

Export Price

We calculated EP based on the same methodology used in the preliminary determination. Furthermore, as in the preliminary determination, we did not include tolled sales.

Normal Value

In accordance with section 773(a)(1)(B) of the Act, we have based NV on sales in Taiwan, or, where appropriate, on constructed value (CV). We compared all home market sales to the cost of production (COP), as described below. Where home market prices were above COP, we calculated NV based on the same methodology used in the preliminary determination, with the following exceptions: (1) we recalculated reported quantity discounts and special discounts on certain sales (*see* Comment 5); and (2) we made an additional circumstance of sale adjustment for bank charges made on certain U.S.sales, based on information obtained at verification.

Cost of Production Analysis

As discussed in the preliminary determination notice, the Department conducted an investigation to determine whether Chang Chun made home market sales during the POI at prices below COP within the meaning of section 773(b) of the Act. Before making any fair value comparisons, we conducted the COP analysis described below.

A. Calculation of COP

We calculated the COP based on the sum of Chang Chun's cost of materials and fabrication for the foreign like product, plus amounts for home market general, and administrative expenses (G&A) and packing costs in accordance with section 773(b)(3) of the Act. We relied on the reported COP amounts with the following exceptions: (1) we allocated joint production costs to PVA and acetic acid (AA) based upon relative sales values (*see* comment 8); (2) we adjusted the reported cost of manufacturing (COM) to account for the difference in the COM per Chang Chun's internal records examined at the verification; (3) we adjusted the COM to include PVA's share of the difference between Chang Chun's depreciation expense for tax purposes (the amount that Chang Chun reported in its response to section D of our questionnaire), and its depreciation expense for financial statement purposes; and (4) we recalculated general and administrative expenses based on the revised COM.

B. Test of Home Market Prices

We compared the adjusted weighted-average COP figures to home market sales of the foreign like product on a product-specific basis, in order to determine whether these sales had been made at below-cost prices within an extended period of time in substantial quantities, and at prices that did not permit recovery of all costs within a reasonable period of time. The home market prices compared were exclusive of any applicable movement charges, discounts, rebates, packing, and direct and indirect selling expenses.

C. Results of COP Test

Pursuant to section 773(b)(2)(c), where less than 20 percent of sales during the POI of a given product are at prices less than the COP, we do not disregard any below-cost sales of that product because the below-cost sales are not made in substantial quantities within an extended period of time. Where 20 percent or more of sales of a given product are at prices less than the COP, we disregard only the below-cost sales because such sales are found to be made within an extended period of time, in accordance with section 773(b)(2)(B) of the Act, and at prices which would not permit recovery of all costs within a reasonable period of time, in accordance with section 773(b)(2)(D) of the Act. Where all sales of a specific product are at prices below the COP, we disregard all sales of that product, and calculate NV based on CV, in accordance with section 773(a)(4) of the Act.

We found that, for certain PVA products, more than 20 percent of Chang Chun's home market sales were sold at below COP prices within the POI. Further, no evidence was presented indicating that these sales provided for the recovery of costs within a reasonable period of time. We therefore determined that these below cost sales were made in substantial quantities within an extended period of time and we excluded these sales and considered the remaining above-cost sales in determining NV, if such sales existed, in accordance with section 773(b). For those U.S. sales of PVA products for which there were no above-cost sales, we compared export prices to CV.

D. Calculation of CV

In accordance with section 773(e)(1) of the Act, we calculated CV based on the sum of Chang Chun's cost of materials, fabrication, selling, general and administrative expenses (SG&A) and U.S. packing costs as reported in the U.S. sales database. In accordance with sections 773(e)(2)(A), we based SG&A and profit on the amounts incurred and realized by the respondent in connection with the production and sale of the foreign like product in the ordinary course of trade for consumption in the foreign country. Where appropriate, we calculated CV based on the methodology described above in the calculation of COP and added an amount for profit. For selling expenses, we used the weighted-average home market selling expenses.

Comparison Methodology

In accordance with section 777A(d)(1)(A)(i) of the Act, we calculated weighted-average EPs for comparison to weighted average NVs or, as discussed above, to CV, where appropriate. The weighted averages were calculated and compared by the time period of the sale, product characteristics, and the class of the customer involved.

Chang Chun classified one of its U.S. customers as both an end-user and a distributor. Based on information in the questionnaire response, we considered

this customer as an end-user for purposes of price averaging because Chang Chun reported that it sold the majority of its PVA sales to this customer for the customer's internal consumption.

The bases for establishing averaging groups according to time period and class of customer are discussed in detail below under Comments 3 and 4, respectively.

Currency Conversion

We made currency conversions into U.S. dollars based on the official exchange rates in effect on the dates of the U.S. sales as certified by the Federal Reserve Bank. Section 773A(a) of the Act directs the Department to use a daily exchange rate in order to convert foreign currencies into U.S. dollars. Further, section 773A(b) directs the Department to allow a 60-day adjustment period when a currency has undergone a sustained movement. A sustained movement has occurred when the weekly average of actual daily rates exceeds the weekly average of benchmark rates by more than five percent for eight consecutive weeks. The benchmark is defined as the moving average of rates for the past 40 business days. (For an explanation of this method, *see Policy Bulletin 96–1: Currency Conversions*, 61 FR 9434, March 8, 1996). Such an adjustment period is required only when a foreign currency is appreciating against the U.S. dollar. The use of an adjustment period was not warranted in this case because the Taiwan dollar did not undergo a sustained movement, nor were there currency fluctuations during the POI.

Verification

As provided in section 788(i) of the Act, we verified information provided by Chang Chun using standard verification procedures, including the examination of relevant sales and financial records, and selection of original source documentation containing relevant information.

Interested Party Comments

Comment: Date of Sale for Home Market Long-Term Purchase Orders.

Petitioner argues that the date of sale for home market sales made according to long-term purchase orders should not be the purchase order date, but rather the purchase order log date as used for other home market sales. Petitioner claims that the verification demonstrated that the long-term purchase orders did not constitute a binding agreement on quantity. Thus, petitioner contends, these purchase orders failed to satisfy the requirement that both price and quantity be agreed upon by the buyer and the seller for purposes of establishing date of sale. Petitioner alleges that: (1) significant amounts of purchase order quantities were unfulfilled as of the time of the Department's verification; (2) the purchase orders resemble "blanket purchase orders", which set sales terms and conditions over a time period for a maximum quantity of merchandise, but involve no commitment to purchase a fixed quantity and still require further communication to specify the quantity to be delivered; and (3) the purchase orders did not set quantities because Chang Chun did not meet the specified delivery period.

Chang Chun argues that the long-term purchase orders set the key terms of sale—price and quantity—and, therefore, the date of sale for these transactions should be the purchase order date. Chang Chun states that delivery terms are material only if the parties treat them as such—which the parties did not in this case. Further, Chang Chun maintains that even if purchase order quantities were not fully shipped in accordance with the delivery schedule, it does not mean that the terms of the purchase order were not met. Chang Chun cites *Final Determination of Sales at Less Than Fair Value: Stainless Steel Bar from India* (59 FR 66915, December 28, 1994), where the purchase order date was used as the date of sale even though part of the purchase order quantity was canceled; and *Final Determination of Sales at Less Than Fair Value: Crankshafts from Germany* (52 FR 28170, July 28, 1987) (*Crankshafts*), where price and quantity changes after the POI did not affect the sale date for those sales shipped under the original terms.

Monsanto and U.S. importers Rhône-Poulenc, Perry Chemical, and National Starch also contend that the delivery date is not an essential term of sale, and that delays in meeting delivery date do not affect the establishment of price and quantity as of the purchase order date.

DOC Position: We agree with respondent Chang Chun that the sales made under what Chang Chun describes as "long term purchase orders" were made pursuant to valid contracts, and thus we are treating the date of the purchase order as the date of sale.

Neither the statute nor the Department's regulations detail how the Department is to determine the date of sale of a transaction. Therefore, under principles of administrative law, the agency is obliged to fill in the statutory gaps, either by regulation or through developing a practice. In determining the date of sale, the Department has a well-established and long-standing practice that a sale is completed within the meaning of the Act when the essential terms, *i.e.*, usually price and quantity, are definite and firm (*see ,e.g., Final Results of Antidumping Administrative Review: Antifriction Bearings (Other Than Tapered Roller Bearings) and Parts Thereof from the Federal Republic of Germany*, (56 FR 31692, July 11, 1991) (Department's established practice to use date when price and quantity terms are set as the date of sale); *see* also *Mitsubishi Elec. Corp.* v. *United States*, 700 F. Supp. 538, 561 (CIT 1988), aff'd. 898 F.2d 1577 (Fed. Cir. 1990)). The essential terms of price and quantity are firm when they are no longer within the control of the parties to alter (*see, e.g., Final Determination of Sales at Less Than Fair Value: Brass Sheet and Strip From France*, (52 FR 812, January 9, 1987) (price term pegged to publicly quoted metal prices considered definite and fixed); *Voss International* v. *United States*, 628 F.2d 1328 (CCPA 1980) (price set in dollars was definite despite provision for adjustment for currency fluctuations because the parties had nothing more to negotiate regarding price); *Final Results of Antidumping Administrative Review: Titanium Sponge From Japan*, (54 FR 13403, April 3, 1989) (absolute quantity was fixed and definite because contract required customer to purchase all that customer required)). Additionally, the Department often looks to the course of conduct between the parties in evaluating whether a written document represents a binding agreement (*see, e.g., Final Determination of Sales at Less Than Fair Value: Grey Portland Cement and Clinker from Mexico*, 55 FR 29244, July 18, 1990) (parties had begun performance pursuant to a letter agreement that Department found established a definite price and quantity); *Crankshafts*, at 28175 (the parties clearly acted in a manner consistent with a meeting of the minds that there was a binding agreement because production, acceptance of delivery and payment were in accord with the price and quantity of the written purchase order)).

Evidence on the record demonstrates that each of the contracts Chang Chun entered into during mid-February 1995 were binding agreements for purposes of establishing date of sale. Each of these written agreements, referred to by respondent as long-term purchase orders, set definite price and quantity terms and were signed by the seller Chang Chun and by each purchaser.

Moreover, for each agreement, the parties' later course of conduct evidenced that there was a meeting of the minds as to the essential terms, the price and quantity, because neither price nor quantity were altered in the course of performance.

Petitioner argues that Chang Chun had not fully delivered all of the quantity to any of the purchasers within the stated delivery period, and points to this fact as evidence that none of the long-term contracts had set firm quantities, hence, none were binding agreements. However, each long-term contract merely set out a delivery schedule wherein deliveries were to be made in installments which Chang Chun was to deliver when inventory was sufficient and its capacity to transport was available. Such language demonstrates that delivery was not intended by either party to be an essential term in the agreement. Unlike a circumstance where the parties intentionally make time of the essence, these long-term contracts did not provide that delivery within a date certain was material (*see, e.g., Final Determination of Sales at Less Than Fair Value: Oil Country Tubular Goods From Argentina*, 60 FR 33539, June 28, 1995)(*OCTG from Argentina*) (where the Department found that a change in delivery terms did not alter the date of sale because the parties themselves did not treat the delivery terms as material to the long-term contract)). The fact that at the end of the delivery time period Chang Chun sent out written extensions of delivery to each purchaser, and that each purchaser accepted deliveries of PVA pursuant to the delivery extension, is consistent with the conclusion that delivery terms were not essential to the contract. The Department has often found that changes in non-essential terms do not alter the date of sale. *See Final Determination of Sales at Less Than Fair Value: Aramid Fiber Formed of Poly-Phenylene Terephthalamide From the Netherlands*, (59 FR 23684, May 6, 1994); *see* also *General Electric Co.* v. *United States*, Slip. Op. 93–55 (CIT 1993)).

Moreover, record evidence demonstrates that Chang Chun had substantially performed on each long-term contract within the time set out in the delivery schedule and that every purchaser had accepted late delivery of remaining quantities at the price set out in the contracts. This course of conduct indicates that the parties acted in a manner consistent with their respective obligations under these agreements, even though all quantities were not delivered in strict accordance with the delivery schedule.

Lastly, we do not view the fact that respondent continued to record shipments made pursuant to the long-term contracts as it had recorded shipments made pursuant to spot sales as evidence that the long-term contracts were not binding agreements. The record-keeping was not inconsistent with the long-term contracts. For these reasons, we find that the purchase orders at issue are binding contracts. Therefore, we have used the date of the purchase orders as the date of sale.

Comment 2: Long-term Purchase Orders in the Ordinary Course of Trade.

Petitioner argues that, if the Department accepts the home market long-term purchase orders as POI sales, shipments made pursuant to these orders should be considered outside the ordinary course of trade. According to petitioner, these sales represent a significant deviation from Chang Chun's prior sales practice in terms of the manner in which sales are negotiated, and in the large volume covered. In addition, petitioner notes that these long-term orders are the first and only ones in the home market during the POI.

Chang Chun, supported by Monsanto, contends that the sales are in the ordinary course of trade because: (1) the purchase orders covered all standard grades of PVA and involved a large percentage of POI sales; (2) additional purchase orders were issued subsequent to the original ones; (3) the products were sold through Chang Chun's major channel of distribution; and (4) the sales were not unrepresentative or aberrational in nature. Furthermore, Chang Chun states that, although these purchase orders were part of a new sales and marketing strategy in response to growing competition, they are not uncommon in this industry.

DOC Position: We disagree with petitioner. It is the Department's established practice to include home market sales of such or similar merchandise unless it can be established that such sales were not made in the ordinary course of trade (*see Final Determination of Sales at Less Than Fair Value: Stainless Steel Angles from Japan*, 60 FR 16608, March 31, 1995). Section 773(a)(1)(B)(i) of the Act provides that NV shall be based on the price at which the foreign like product is sold in the exporting country in the ordinary course of trade for home market consumption. Section 771(15) of the Act states that "* * * 'ordinary course of trade' means the conditions and practices which, for a reasonable time prior to the exportation of the subject merchandise, have been normal in the trade under consideration with respect to the merchandise of the same class or kind * * *".

In determining whether sales are made outside the ordinary course of trade, the Department typically examines several factors taken together with no one factor dispositive. Further, the SAA at 842–843 states that sales are outside the ordinary course of trade when the "* * * sales or transactions have characteristics that are not ordinary as compared to sales or transactions generally made in the same market." This statement also provides guidance to the Department in considering unusual product specifications, aberrational prices, unusual terms of sale, or other factors that may make sales extraordinary for the market in question. None of these sales involved unusual product specifications, rather, the contracts covered all standard grades of PVA. The purchasers were established PVA customers that Chang Chun had dealt with in the past. Although the prices under these contracts differed from spot-sale prices offered previously, we do not consider such prices to be unusual given the nature of a long-term contract.

Although the long-term purchase orders may have been new to Chang Chun, there is no evidence that such long-term contracts are unusual or extraordinary for the Taiwan PVA market. Further, we found that, following the institution of the purchase order system, Chang Chun consistently conducted business according to this system.

While the volume of these long-term contract sales was much greater than what Chang Chun had been selling previously on a spot sale basis, there is no evidence on the record that indicates that high volume sales were not part of the normal course of trade in the Taiwan market for a reasonble time prior to the exportation of the subject merchandise. In the past, the Department has said that the number of sales or the volume sold are not, in and of themselves, dispositive (*see Final Results of Antidumping Administrative Review: Certain Welded Carbon Steel Standard Pipes and Tubes From India*, 56 FR 64753, December 12, 1991). Therefore, we have determined that these sales were made in the ordinary course of trade and included these sales in our normal value calculation.

Comment 3: Price Averaging and Time Periods.

Petitioner argues that calculating a single POI weighted- average price for each product results in distortive comparisons between EP and NV due to the high volume of home market sales

at the end of the POI pursuant to the long-term purchase orders. Petitioner submitted a number of statistical analyses to demonstrate the relationship between time and U.S. prices. Based on these analyses, petitioner contends that the price changes over the POI are significant and warrant the use of monthly, rather than POI, weighted-averages for price comparisions. In support of its position, petitioner argues that there is no statutory preference for using POI price averages, and that the monthly average methodology will satisfy the requirement of the URAA regarding contemporaneous sales comparisons.

Chang Chun, supported by Monsanto, responds that POI averages should be used in this case. Both parties contend that the Department was correct in the preliminary determination by establishing POI averages as the normal methodology for investigations. Based on its own statistical analyses, Monsanto asserts that the petitioner's analyses are faulty and that the relationship between time and price is relatively weak. Monsanto also contends that the petitioner's application of a statistical analysis methodology used in adminstrative reviews is inappropriate for this investigation, because petitioner limited the analysis to certain sales and based its results on criteria applicable to administrative reviews, but not investigations. Based on all of these factors, Monsanto contends that there is no basis to conclude that the price changes over the POI are significant, and thus no reason for the Department to abandon POI averages in favor of monthly averages.

DOC Position: Section 777A(d)(1)(A) gives the Department the explicit authority to use certain methods for comparing prices in determining whether sales at less than fair value exist. The Department may employ an average-to-average comparison of U.S. sales to the relevant home market or third country sales or rely on individual sales transactions for comparisons in both markets (*see* section 777A(d)(1)(A)(i) & (ii)). In applying an averaging approach, the SAA states that, in determining sales comparability for purposes of inclusion in a particular average, time is a factor which may affect the comparability of sales (SAA at 842–843).

As stated in our *Notice of Proposed Rulemaking and Requests for Public Comment*, 61 FR 7308, 7349 (February 27, 1996) (*Proposed Regulations*), the Department proposes that normally we will calculate an average to average comparison by weight-averaging sales during the entire POI. However, the Deparment may resort to shorter time periods where the normal values, export prices, or constructed export prices for sales included in an averaging group differ significantly over the course of the POI.

We agree with petitioner that time significantly influences price comparability in this case. An analysis of the record evidence indicates that price trends in the United States and Taiwan were essentially moving in tandem, *i.e.*, steadily rising over the POI, as were cost trends (*see Price Analysis Memorandum* dated March 20, 1996). This data tends to support the fact that prices of PVA and costs for its main input, vinyl acetate monomer (VAM), were influenced to a significant extent by world market prices. Notwithstanding this fact, and in the face of an upwardly moving cost trend during the POI, in the last six weeks of the POI Chang Chun departed from its normal spot sale selling practice and entered into several long-term contracts at prices which diverged significantly from the price trends in the first ten and a half months, and for considerably different quantities than what respondent had been selling previously through spot sales over a comparable time period.

The record evidence shows a distinct dividing line between price trends in the home market prior to February 15, 1995, when the first of the long-term contracts was entered into. While the price trend in the United States did not significantly differ in the last month and a half from the price trend evident throughout the first ten and a half months of the POI, the price trend in Taiwan in the last month and a half of the POI changed significantly from that of the first ten and a half months. Therefore, we find that price trends for NV differed significantly over time. This approach is consistent with the Department's past practice in such cases as *Final Determination of Sales at Less Than Fair Value: Nitrocellulose From Brazil*, 55 FR 23120 (June 6, 1990) (influence of time on home market sales in hyperinflationary economy), and *Final Determination of Sales at Less Than Fair Value: Fresh Kiwi Fruit From New Zealand*, 57 FR 13695 (April 17, 1992) (influence of time on home market sales of perishable agricultural products).

Moreover, the change in the home market price trends was accompanied by a change in selling practice from selling PVA on a spot sale basis to entering into long-term contracts for quantities to be delivered over a substantially longer time period. Thus, the change in selling practice enhanced the effect of time on price comparability. Because time affects price comparability, we have used two averaging periods: period 1, encompassing sales from April 1, 1994 to February 14, 1995, and period 2, covering sales from February 15, 1995 to March 31, 1995. These averages calculated by the Department effectively take into account the effect of time on price comparability.

The monthly averaging proposed by petitioner is unnecessary. Because price trends in both markets closely tracked each other except in the last 6 weeks of the POI, as described above, the evidence indicates that price comparability is unaffected by time in the first ten and half months of the POI. We reviewed the data submitted by petitioner and found insufficient information concerning the assumptions petitiioner relied upon to perform its statistical tests. As a result, we have concluded that the monthly averages proposed by petitioner are unwarranted (*see Price Analysis Memorandum*).

Comment 4: Level of Trade.

Chang Chun and Monsanto argue that comparisons should be made at the same level of trade, which they define as the position of the customer within the channels of distribution. Both parties contend that, pursuant to section 773(a)(7)(A), the "functions of the seller" analysis is only relevant when examining whether a level of trade adjustment should be applied. Accordingly, these parties contend that comparisons should be made at the same level of trade, defining "distributors", "end-users", and "retailers" as distinct levels of trade. These parties further assert that a "retailer" level of trade exists as a separate level of trade in the home market. In support of this argument, Monsanto adds that a pattern of consistent price differences supports consideration of customer groups as a separate level of trade and, in this regard, sales to retailers qualify as a distinct level of trade.

Petitioner claims that a "retail" level of trade does not exist for this industry and therefore sales to such customers should not be considered to be at a separate level of trade.

DOC Position: Levels of trade are defined by the functions of the seller, not the class of customer. Level of trade is defined as the ". . . difference between the actual functions performed by the sellers at the different levels of trade in the two markets" (section 773(a)(7)(A)(i) of the Act; *see* also *Preliminary Determination of Sales at Less Than Fair Value: Certain Pasta from Italy* (61 FR 7472, February 28,

1996) and *Preliminary Results of Antidumping Administrative Review: Stainless Steel Wire Rod from France* (61 FR 8915, March 6, 1996). As discussed above, we found no differences in selling functions between the customer categories defined by Chang Chun, nor did Chang Chun claim any differences in selling functions between these categories.

Accordingly, we find no basis for considering any of these categories to be separate levels of trade.

Although we have rejected the contention that the class of the customer forms the basis for level of trade, in composing an averaging group, customer classification is a factor the Department may take into account (*see SAA*). The record establishes that there are distinct customer classifications in both markets, and that Chang Chun offered significantly different prices, depending on the customer category (including different prices to home market retailers). Therefore, we have made comparisons of average prices within the same customer class wherever possible. Where such comparisons were not possible, we made comparisons without regard to customer class.

Comment 5: Discounts and Rebates on Home Market Sales.

Petitioner contends that, because the Department was unable to verify reported per-unit amounts of "quantity discounts" and "special discounts" on home market sales, all such discount claims should be rejected. Further, petitioner notes that some of these "discounts", which we considered as rebates in the preliminary determination, were granted after the filing of the petition and therefore should be rejected in accordance with Department practice (*see Final Determination of Sales at Less Than Fair Value: Color Negative Photographic Paper and Chemical Components Thereof from Japan*, 59 FR 16177, April 6, 1994).

Chang Chun responds that, although the classification of a discount as a "quantity" or "special" discount may have been incorrect, the Department was able to verify that the customer received discounts equal to the amount claimed on each transaction. Chang Chun adds that its discount policy was consistent between the period prior to the filing of the petition, and the period subsequent to it. Thus, Chang Chun contends that there is no relationship between its discount programs and the filing of the petition and, therefore, Chang Chun's discount claims should be accepted as claimed.

DOC Position: We were unable to verify the specific discount amounts claimed for individual home market transactions. Therefore, we cannot accept the transaction-specific amounts claimed for these transactions. We were able to verify, however, that certain customers received credits after sales that equalled the total amounts of "quantity" or "special" discounts claimed for sales to that customer. Further, we verified that Chang Chun's normal practice was to grant its customers periodic discounts in the form of credits, or rebates, based on the volume of PVA purchases (*see* Chang Chun Sales Verification Report at pages 10 and 11).

While Chang Chun may have granted some of these discounts after the filing of the petition, in most cases, the discounts were granted for sales made prior to the petition filing on the same basis, and in the same manner as such payments had been made, and credits had been granted prior to the filing of the petition. We found no evidence to conclude that post-petition discounts were granted for programs established after the filing of the petition. Thus, we find no basis to reject these discount claims solely because the customer received them after the petition was filed.

Because Chang Chun's revenues from PVA sales were reduced by these discounts amounts, we have revised the "quantity" and "special" discount amounts in the calculation of normal value by allocating the total of these discounts equally among eligible sales to each eligible customer on the basis of the respective total discount amounts and sales value to that customer.

Comment 6: Quantity Discount Claim.

Chang Chun argues that, because it granted quantity discounts on at least 20% of its sales, NV should be calculated based on sales with quantity discounts, as provided for under 19 CFR 353.55(b)(1) of the Department's pre-URAA regulations. Accordingly, Chang Chun states that EP should be adjusted to reflect the quantity discount granted to comparable sales in the home market.

Petitioner contends that the quantity discounts claimed on home market sales should be rejected because the Department was unable to verify that quantity discounts were actually granted on a unified basis to substantially all of Chang Chun's home market customers. Petitioner also argues that the Department was unable to verify that such discounts actually applied to 20% of home market sales.

DOC Position: We agree with petitioner. To be eligible for a quantity-based discount, a respondent must demonstrate that the discounts reflect savings specifically attributable to the production of the different quantities, or that the respondent granted quantity discounts of at least the same magnitude on 20% or more of sales of such or similar merchandise (*see* 19 CFR 353.55(b)). If either of these tests is met, the Department applies a discount adjustment equal to the minimum discount given.

As discussed in Comment 5, Chang Chun could not demonstrate that the specific amounts claimed as "quantity discounts" on specific transactions had any connection to the quantity sold, but rather, as described above, these discounts were in the nature of volume rebates. Moreover, the Department also requires a respondent to establish that it gave discounts on a uniform basis, which were made available to substantially all home market customers (*see, e.g., Final Determination of Sales at Less Than Fair Value: Brass Sheet and Strip from the Netherlands*, 53 FR 23431, June 22, 1988). This requirement was expressed in the Department's antidumping questionnaire at pages B–15 and B–16. However, Chang Chun made no attempt to demonstrate this; indeed, Chang Chun specifically stated that only customers classified as "distributors" were eligible for the "home market quantity discount program" (*see, e.g.*, letter from Ablondi, Foster, Sobin & Davidow to Ronald Brown of September 19, 1995, at page 3). Accordingly, we have disallowed this claimed adjustment.

Comment 7: Treatment of U.S. Tolled Sales.

Chang Chun argues that the Department should follow its "long established past practice" and estimate a separate dumping margin for its tolled sales (*i.e.*, vinyl acetate monomer owned by a U.S. customer but further processed into PVA by Chang Chun) by comparing Chang Chun's price for tolling to Chang Chun's tolling cost.

Petitioner states that the Department should not analyze these tolled transactions because the U.S. customer withdrew its request that a separate margin be calculated for these sales, and the Department has already determined not to analyze these sales (*See* Memorandum to Barbara Stafford dated August 8, 1995).

DOC Position: We agree with petitioner. As stated in the memorandum cited by the petitioner, as a result of the customer's withdrawal of its request for a separate rate in the investigation, and that the customer's participation is not otherwise essential to this investigation, we have not included tolled transactions in our

investigation. We note that our past practice of analyzing tolling transactions has changed. The party contracting for the tolling, rather than the processor, will be considered the producer/exporter of the merchandise (*see Proposed Regulations*, section 353.401(h) at 7381, as well as discussion at 7330).

Comment 8: Allocation of Acetic Acid Costs for COP Analysis.

Petitioner does not object to Chang Chun's treatment of PVA and acetic acid as coproducts of a joint production process. Petitioner does, however, object to the respondent's allocation of the joint production costs on the basis of the two product's relative production volumes. Petitioner asserts that because PVA has a significantly higher per-unit value than acetic acid, production costs should be allocated to the coproducts based upon their relative sales values. Petitioner adds, however, that if the Department determines not to apply a value-based allocation methodology in computing the costs of PVA and acetic acid, then it should treat acetic acid as a byproduct by allocating all costs to PVA and offsetting such costs by revenues earned from acetic acid sales.

Chang Chun defends its treatment of acetic acid as a coproduct as well as its volume-based cost allocation methodology and urges the Department to rely on these methodologies in order to compute PVA costs for the final determination. According to Chang Chun, acetic acid is a coproduct of PVA because it meets each of the Department's criteria for identifying and accounting for jointly-produced merchandise as either byproducts or coproducts. Chang Chun also maintains that the production volume allocation methodology it used to compute PVA costs for COP and CV is the same method used by the company to compute both PVA and acetic acid costs in its normal books and records. Chang Chun adds that its volume-based cost allocation method is acceptable under Taiwan's generally accepted accounting principles (GAAP), and it was in place at the company for several months prior to the filing of the petition.

Monsanto supports Chang Chun's accounting treatment of PVA and acetic acid as coproducts, and agrees with the respondent that its volume-based allocation methodology is appropriate in this case.

DOC Position: We agree with both petitioner and Chang Chun that acetic acid should be treated as a coproduct of PVA production. As discussed in our preliminary determination, we analyzed four of the five specific factors that the Department relies on in determining whether a product should be treated as a coproduct (*see* Memorandum from Art Stein to Chris Marsh, September 29, 1995). Based on our analysis and our verification findings, we have now examined all of these factors and have concluded that acetic acid is a coproduct in the production process of polyvinyl alcohol (*see, also, Elemental Sulphur from Canada: Final Results of Antidumping Finding Administrative Review*, 61 FR 8239, March 4, 1996). Having made that determination, however, we disagree with Chang Chun's contention that its volume-based cost allocation methodology is appropriate in this instance.

Like other joint production processes, PVA production is characterized by certain joint costs which cannot readily be identified or traced to the individual products resulting from the joint processing performed in the manufacture of PVA. In PVA production, chemical inputs are mixed together in a process that results in two distinct products: PVA and acetic acid. These products are produced simultaneously up to a point, the split-off point, after which they become physically separated from one another. This situation presents a unique cost allocation issue because prior to the physical split-off point, the production costs, like the joint products themselves, are commingled. We note that this situation differs from cost allocations found in a batch production process which yields two or more grades of a single product (*e.g.*, steel bar). In such situations, the individual units of production can be identified, apart from one another, throughout the production process, thus presenting a readily identifiable basis upon which to allocate costs. In contrast, where a single process commingles inputs up to a split-off point, allocating joint costs to the distinct products becomes more difficult.

While there are several acceptable methods of allocating joint costs among simultaneously produced coproducts, in general, each of these acceptable methods is based on either some measure of relative value or on the physical units produced (*e.g.*, number of units, weight, etc.) (*See Cost Accounting: A Managerial Emphasis*, Charles T. Horngren, 5th edition, Prentice-Hall Inc., pp. 531–539). The choice of allocation method can have a profound impact on the outcome of relative costs, depending on the significance of the joint costs involved and the nature of the products resulting from the process.

This case presents an additional complication because of the involvement of Dairen, an affiliated supplier, which produces VAM and sells it to Chang Chun. VAM is the major raw material input in PVA production. Chang Chun, in turn, uses the VAM (from Dairen) to produce PVA and acetic acid. Chang Chun then sells much of its acetic acid production back to Dairen which, in turn, uses it as a major input in its production of VAM. Because of the nature of this cycle and the affiliation between Chang Chun and Dairen, it is important that the method used to allocate joint costs not distort the cost of PVA and acetic acid.

Section 773(f)(1)(A) of the Act provides that the Department will calculate costs based on the records of the producer of the merchandise, if such records are kept in accordance with the GAAP of the exporting country and reasonably reflect the costs associated with the production and sale of the merchandise (*see also Final Determination of Sales at Less Than Fair Value: Canned Pineapple Fruit From Thailand, (Canned Pineapple)*, 60 FR 29559, June 5, 1995, where we stated that the Department's practice is to adhere to an individual firm's recording of costs in accordance with GAAP of its home country if the Department is satisfied that such principles reasonably reflect the costs of producing the subject merchandise). The Department's practice has been sustained by the Court of International Trade (CIT) (*see, e.g., Laclede Steel Co.* v. *United States, Slip Op.* 94–160 at 21–25 (CIT October 12, 1994), where the CIT upheld the Department's decision to reject respondent's reported depreciation expenses in favor of verified information obtained directly from the company's financial statements that was consistent with Korean GAAP). In addition, pursuant to section 773(f)(1)(A), the Department may only consider evidence from an exporter or producer regarding the proper allocation of costs if such allocations have been used historically by the exporter or producer (emphasis added).

Under its current accounting system, Chang Chun allocates joint production costs based on the relative production volumes of PVA and acetic acid. According to the company's financial statements, the current allocation methodology is accepted under Taiwan's GAAP. Although the company's financial statements indicate that this allocation methodology is in accordance with its home country GAAP, we note that Taiwan's GAAP does not endorse this methodology as the only acceptable cost allocation methodology. In fact, during verification, company officials stated

that they did not know how costs had been allocated under the earlier method (see Cost Verification Report at page 2), however, they stated that the company's previous allocation methodology was also in accordance with Taiwan's GAAP.

Chang Chun's current cost allocation methodology was adopted in 1994. Prior to 1994, the company relied upon a different methodology to allocate costs between PVA and acetic acid. As noted above, company officials could not explain the basis for the earlier methodology. Accordingly, based on our verification findings, we cannot conclude that a volume-based allocation has been used historically by Chang Chun.

Moreover, we find that in this case, the allocation of costs equally to each kilogram produced results in an unreasonable division of joint production costs between PVA and acetic acid. Basing the allocation of costs solely on production volume ignores the vastly different revenue-producing powers of the joint products at issue in this case. Specifically, while the relative volumes of Chang Chun's PVA and acetic acid output are almost equal, the price commanded by PVA is much greater than that of acetic acid. Thus, the company's volume-based cost allocation results in large profits accruing to PVA, while significant losses result from the sale of acetic acid. The Department, therefore, has determined that it is appropriate to reject Chang Chun's volume-based allocation methodology because it does not reasonably reflect the costs associated with the production and sale of PVA, as required by statute (see also *Canned Pineapple*, where the Department rejected respondent's argument for a weight-based joint cost allocation for pineapple and used a value-based cost allocation, citing as one of its reasons the relationship of the revenue-producing powers of the joint products that resulted from the pineapple production process).

As noted above, the need for an appropriate allocation method for joint costs is made all the more important in this case because of the unique nature of the transactions between Chang Chun and its affiliated supplier, Dairen. Because costs are over-allocated to acetic acid as a result of Chang Chun's volume-based methodology, such costs may not be fully recovered when the acetic acid is sold to Dairen. In turn, the cost of VAM produced from acetic acid may be understated when it is resold to Chang Chun for PVA production.

Given the fact that we cannot rely upon Chang Chun's own allocation methodology, the vastly different revenue-producing powers of the two joint products, and the fact that the affiliation between Chang Chun and Dairen has the potential to result in understatement of certain PVA costs, we believe a value-based allocation methodology produces a more reasonable and accurate reflection of costs in this case.

Therefore, we are allocating joint production costs between PVA and acetic acid using the relative value of each product calculated on the basis of a two-year period prior to the POI (see *Canned Pineapple*). We believe that by using sales of both products over an extended period prior to this investigation, prices can reasonably be relied upon to form the basis for allocating joint production costs, particularly in this case where acetic acid and PVA are commodity products, and their selling prices are influenced by world market forces of supply and demand.

Comment 9: Chang Chun's VAM Cost.

Petitioner claims that Chang Chun incorrectly valued VAM that it purchased from Dairen, an affiliated supplier of VAM, at the transfer price for those months in which the transfer price was less than Dairen's COP. Accordingly, petitioner contends that the Department should adjust Chang Chun's VAM cost for the specific purchases of VAM that were made at less than Dairen's monthly COP.

DOC Position: We disagree with petitioner. We verified that, for each month of the POI, the transfer price paid by Chang Chun for its VAM purchases from Dairen exceeded Dairen's COP. We therefore relied on the transfer price between the two affiliated companies as the basis for valuing VAM in our calculation of Chang Chun's COP.

Comment 10: Unreconciled Differences Between Chang Chun's Records and Questionnaire Response.

Petitioner notes that during verification, the Department found unreconciled differences in PVA costs between Chang Chun's internal books and the costs as submitted to the Department in its questionnaire response. Most of these discrepancies related to the cost of material inputs for PVA production. Petitioner maintains that the Department should increase Chang Chun's reported PVA costs to reflect the additional costs that result from these discrepancies.

DOC Position: We agree with petitioner. At verification, Chang Chun informed the Department that it had detected a clerical error in its submission which underreported its material costs. For the final determination, we increased material costs to account for this error. Our correction of this error resolves the discrepancies noted by petitioner.

Comment 11: Depreciation.

Petitioner claims that the Department should adjust depreciation expense incurred for PVA production to reflect the amount reported in Chang Chun's financial statements, rather than the amount reported for tax purposes (which Chang Chun reported in its questionnaire response). Petitioner contends that the Department's normal methodology is to rely on costs recorded for financial statement purposes unless there is reason to believe that such costs are distortive.

Chang Chun claims that petitioner's suggested depreciation adjustment relates to the boiler department's cogeneration equipment, which produces power and steam used by not only the PVA/acetic acid cost center, but also by non-subject product cost centers. Therefore, Chang Chun asserts that any depreciation adjustment should be limited to PVA/acetic acid's percentage share of the costs of the boiler department.

DOC Position: We agree with petitioner that Chang Chun underreported its submitted depreciation expense. The Department normally requires that a respondent report depreciation expense calculated based on the methods it normally uses for financial statement purposes, unless such methods distort production costs. We also agree with Chang Chun that PVA/acetic acid production should only be allocated with its share of the costs associated with the co-generation equipment. Based on our review of Chang Chun's fixed asset and depreciation records during verification, we found no reason to believe that Chang Chun's method of computing depreciation expense for financial statement purposes distorts the company's PVA production costs. We therefore adjusted the company's submitted tax basis depreciation expense to reflect depreciation computed for PVA/acetic acid production assets based on Chang Chun's normal financial statement depreciation method.

Comment 12: Over-packing.

Petitioner asserts that because Chang Chun systematically over-packs PVA above the nominal weight and the customer pays for only the nominal weight, PVA's COP should be adjusted in order to equate the cost of the product as packed with the price of the product as sold.

Chang Chun claims that because sales are recorded on the basis of nominal

quantities rather than the over-packed quantities, in order to be consistent, Chang Chun records production based on nominal quantities. Thus, Chang Chun asserts that there is no need for the Department to adjust the company's costs to reflect the over-packed quantities.

DOC Position: We verified that both production and sales were reported based on nominal weight, therefore, no further adjustment is necessary.

Comment 13: Dairen's VAM Costing Issues.

Petitioner notes that Dairen shut down its plant in January 1994 and asserts that the costs of the shutdown should be included as part of Dairen's 1994 VAM production costs. Petitioner also claims that Dairen's VAM COP should be increased to account for the cost of purchased liquid nitrogen. Furthermore, petitioner contends that the Department should reject Dairen's allocation of engineering and indirect labor costs to non-subject merchandise because it represents a deviation from Dairen's 1994 audited financial statements and is merely an internal management estimate founded upon no verifiable, objective criteria.

Chang Chun maintains that, since Dairen's plant maintenance shutdown occurred prior to the POI, no adjustment to include any portion of these costs is necessary. Chang Chun also claims that Dairen's purchased nitrogen was sold at a profit and that the cost of the nitrogen should not be charged to VAM production because the sales revenue was not deducted from the production costs. Furthermore, Chang Chun asserts that, because both its engineering and indirect labor costs benefit VAM and PVA emulsions production, its allocation of these costs to both products is appropriate.

DOC Position: We agree with petitioner that a portion of Dairen's plant shutdown costs should be added to Dairen's reported cost of producing VAM because we consider the shutdown costs a form of major maintenance which benefits production over the entire POI. Accordingly, a *pro rata* share of the shutdown costs incurred in the one month of 1994 that is part of the POI should be allocated to the cost of producing VAM during the POI.

Because the cost of VAM used in the production of PVA is based upon the transfer price, no adjustment is required. Dairen's transfer price to Chang Chun exceeds its COP for VAM (including the cost of purchased liquid nitrogen). Therefore there would be no impact on Chang Chun's COP for PVA.

Lastly, we disagree with petitioner that Dairen's allocation of engineering and indirect labor costs to non-subject merchandise should be rejected. During verification, we found that these engineering and indirect labor costs do benefit certain non-subject products. Accordingly, we consider it reasonable to allocate these costs to non-subject merchandise.

Continuation of Suspension of Liquidation

In accordance with section 733(d) of the Act, we are directing the Customs Service to continue to suspend liquidation of all entries of PVA from Taiwan, as defined in the "Scope of Investigation" section of this notice, that are entered, or withdrawn from warehouse for consumption, on or after October 10, 1995, the date of publication of our preliminary determination in the Federal Register. The Customs Service shall require a cash deposit or posting of a bond equal to the estimated amount by which the normal value exceeds the export price, as shown below. This suspension of liquidation will remain in effect until April 7, 1996 (i.e., six months after the effective date of these instructions), in accordance with section 733(d) of the Act.

The weighted-average dumping margins are as follows:

Exporter/manufacturer	Weighted-average margin percentage
Chang Chun Petrochemical Co., Ltd	19.21
All others	19.21

The all others rate applies to all entries of subject merchandise except for entries of merchandise produced by Chang Chun.

ITC Notification

In accordance with section 735(d) of the Act, we have notified the ITC of our determination. As our final determination is affirmative, the ITC will determine whether these imports are causing material injury, or threat of material injury, to the industry within 45 days. If the ITC determines that material injury, or threat of material injury, does not exist, the proceeding will be terminated and all securities posted will be refunded or cancelled. If the ITC determines that such injury does exist, the Department will issue an antidumping duty order directing Customs officials to assess antidumping duties on all imports of the subject merchandise entered, or withdrawn from warehouse, for consumption on or after the effective date of the suspension of liquidation.

This determination is published pursuant to section 735(d) of the Act.

Dated: March 21, 1996.

Susan G. Esserman,

Assistant Secretary for Import Administration.

[FR Doc. 96-7636 Filed 3-28-96; 8:45 am]

BILLING CODE 3510-DS-P

APPENDIX B

CALENDAR OF THE HEARING

CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject	:	POLYVINYL ALCOHOL FROM CHINA, JAPAN, AND TAIWAN
Investigation Nos.	:	731-TA-726, 727, and 729 (Final)
Date and Time	:	March 26, 1996 - 9:30 a.m.

Sessions were held in connection with the investigation in the Main hearing room 101, 500 E Street, SW, Washington, D.C.

In Support of Imposition of Antidumping Duties:

Wickens and Lebow
Washington, D.C.
and
Ellis and Aeschilman
Columbus, Ohio
on behalf of

Air Products and Chemicals, Inc.

Allan H. Meltzer, University Professor of Economics and Political Economy, Carnegie Mellon University

Deborah Wildonger, Manager, Analysis and Accounting, Polymer and Chemicals Group, Air Products and Chemicals, Inc.

Clifford A. Bridges, General Manager, Commercial Operations (Former), General Manager, Latin America (Current), Polymer Chemicals Division, Air Products and Chemicals, Inc.

Mark L. Bye, Global Business Director, Polyvinyl Alcohol, Polymer Chemicals Division, Air Products and Chemicals, Inc.

Frank Robertson, Vice President, Business Director (Retired 12/31/95) Polymers and Resins, Rohm and Haas Co.

Robert Stempel, President, Ajax Adhesives Industries, Inc.

Daniel W. Klett, Principal, Capital Trade Inc.

In Support of Imposition of Antidumping Duties:--Continued

Edward M. Lebow)
Mitchell W. Dale) -- OF COUNSEL (Wickens and Lebow)
and
David R. Busam)--OF COUNSEL (Ellis and Aeschilman)

In Opposition to the Imposition of Antidumping Duties:

PANEL 1

Graham and James
Washington, D.C.
on behalf of

Kuraray Co., Ltd.
and
Nippon Synthetic Chemical Industry Co., Ltd.

Richard Boltuck, Economist, Trade Resources

James Rossman, President, Chris Craft Industrial Products, Inc.

Lawrence R. Walders--OF COUNSEL

Ober, Kaler, Grimes and Shriver
Washington, D.C.
on behalf of

Sichuan Vinylon Works

Joseph Rabaglia, Product Manager of PVA of Wego Chemical and Mineral Corp.

William E. Perry--OF COUNSEL

Ablondi, Foster, Sobin and Davidow, P.C.
Washington, D.C.
on behalf of

Chang Chun Petrochemical Company, Ltd.

Irving Laub, President, Perry Chemical Corp.

Peter J. Koenig--OF COUNSEL

In Opposition to the Imposition of Antidumping Duties:--Continued

PANEL 1--Continued

Baker and McKenzie
Washington, D.C.
on behalf of

Isolyser Co., Inc.

Kevin M. O'Brien--OF COUNSEL

PANEL 2

Akin, Gump, Strauss, Hauer and Feld, L.L.P.
Washington, D.C.
on behalf of

Colorcon

David R. Schoneker, Director of Global Regulatory Affairs

Patrick F.J. Macrory)
Robert S. Collins) --OF COUNSEL

PANEL 3

Stewart and Stewart
Washington, D.C.
on behalf of

Monsanto Co.

Mark P. Gold, Manager, Saflex Technology

R. Frank Helle, Director and Team Leader, Strategic Change

James R. Cannon, Jr.--OF COUNSEL

APPENDIX C

SUMMARY DATA

Table C-1
Polyvinyl alcohol: Summary data concerning the U.S. market, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

(Quantity=*1,000 pounds*; value=*1,000 dollars*; unit values and unit labor costs are *per pound*; period changes=*percent, except where noted*)

Item	Reported data			Jan.-Sept.--		Period changes			Jan.-Sept.
	1992	1993	1994	1994	1995	1992-94	1992-93	1993-94	1994-95
U.S. consumption quantity:									
Amount	256,512	253,287	276,083	207,450	221,177	+7.6	-1.3	+9.0	+6.6
Producers' share[1]	78.0	83.6	84.6	84.6	85.9	+6.6	+5.6	+1.0	+1.3
Importers' share:[1]									
LTFV material:									
China	***	***	***	***	***	***	***	***	***
Japan	2.9	1.7	1.5	1.5	1.2	-1.4	-1.2	-0.2	-0.2
Taiwan	16.6	11.3	11.2	11.2	9.8	-5.4	-5.3	-0.1	-1.5
Subtotal	***	***	***	***	***	***	***	***	***
Other material	***	***	***	***	***	***	***	***	***
Total	22.0	16.4	15.4	15.4	14.1	-6.6	-5.6	-1.0	-1.3
U.S. consumption value:									
Amount	210,422	196,426	214,589	161,274	189,295	+2.0	-6.7	+9.2	+17.4
Producers' share[1]	75.7	80.8	82.0	82.0	83.6	+6.3	+5.1	+1.2	+1.5
Importers' share:[1]									
LTFV material:									
China	***	***	***	***	***	***	***	***	***
Japan	3.2	2.3	2.1	2.1	1.7	-1.2	-1.0	-0.2	-0.4
Taiwan	18.3	13.2	13.0	13.0	11.3	-5.3	-5.1	-0.2	-1.7
Subtotal	***	***	***	***	***	***	***	***	***
Other material	***	***	***	***	***	***	***	***	***
Total	24.3	19.2	18.0	18.0	16.4	-6.3	-5.1	-1.2	-1.5
LTFV imports from--									
China:									
U.S. shipments quantity	***	***	***	***	***	***	***	***	***
U.S. shipments value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Japan:									
U.S. shipments quantity	7,411	4,224	4,030	3,051	2,706	-45.6	-43.0	-4.6	-11.3
U.S. shipments value	6,793	4,427	4,434	3,377	3,198	-34.7	-34.8	+0.2	-5.3
Unit value	$0.92	$1.05	$1.10	$1.11	$1.18	+20.0	+14.3	+5.0	+6.8
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Taiwan:									
U.S. shipments quantity	42,546	28,584	30,946	23,269	21,569	-27.3	-32.8	+8.3	-7.3
U.S. shipments value	38,419	25,844	27,893	20,906	21,315	-27.4	-32.7	+7.9	+2.0
Unit value	$0.90	$0.90	$0.90	$0.90	$0.99	-0.2	+0.1	-0.3	+10.0
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Subject sources:									
U.S. shipments quantity	***	***	***	***	***	***	***	***	***
U.S. shipments value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Imports from other sources:									
U.S. shipments quantity	***	***	***	***	***	***	***	***	***
U.S. shipments value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***

Table continued on following page.

Table C-1--Continued
Polyvinyl alcohol: Summary data concerning the U.S. market, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

(Quantity=*1,000 pounds*; value=*1,000 dollars*; unit values and unit labor costs are *per pound*; period changes=*percent, except where noted*)

	Reported data					Period changes			
				Jan.-Sept.--					Jan.-Sept.
Item	1992	1993	1994	1994	1995	1992-94	1992-93	1993-94	1994-95
U.S. imports from--									
All sources:									
U.S. shipments quantity	56,402	41,610	42,557	31,977	31,164	-24.5	-26.2	+2.3	-2.5
U.S. shipments value	51,135	37,811	38,667	28,969	31,126	-24.4	-26.1	+2.3	+7.4
Unit value	$0.91	$0.91	$0.91	$0.91	$1.00	+0.2	+0.2	(2)	+10.2
U.S. producers'--									
Average capacity quantity	***	***	***	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***	***	***	***
Capacity utilization[1]	***	***	***	***	***	***	***	***	***
U.S. shipments:									
Quantity	200,110	211,677	233,526	175,473	190,013	+16.7	+5.8	+10.3	+8.3
Value	159,287	158,615	175,922	132,305	158,169	+10.4	-0.4	+10.9	+19.5
Unit value	$0.80	$0.75	$0.75	$0.75	$0.83	-5.4	-5.9	+0.5	+10.4
Export shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Exports/shipments[1]	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Inventory/shipments[1]	***	***	***	***	***	***	***	***	***
Production workers	489	483	463	463	472	-5.3	-1.2	-4.1	+1.9
Hours worked (*1,000s*)	1,154	1,121	1,098	824	827	-4.9	-2.9	-2.1	+0.4
Wages paid (*$1,000*)	23,104	23,019	25,026	18,772	18,762	+8.3	-0.4	+8.7	-0.1
Hourly wages	$20.02	$20.53	$22.79	$22.78	$22.69	+13.8	+2.6	+11.0	-0.4
Productivity (*pounds per hour*)	242.9	276.2	272.3	268.5	300.1	+12.1	+13.7	-1.4	+11.8
Unit labor costs	$0.08	$0.07	$0.08	$0.08	$0.08	+1.6	-9.8	+12.6	-10.9
Net sales--									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit sales value	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS)	***	***	***	***	***	***	***	***	***
Gross profit (loss)	***	***	***	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***	***	***	***
Capital expenditures	***	***	***	***	***	***	***	***	***
Unit COGS	***	***	***	***	***	***	***	***	***
Unit SG&A expenses	***	***	***	***	***	***	***	***	***
Unit operating income or (loss)	***	***	***	***	***	***	***	***	***
COGS/sales[1]	***	***	***	***	***	***	***	***	***
Operating income or (loss)/sales[1]	***	***	***	***	***	***	***	***	***

[1] "Reported data" are in percent and "period changes" are in percentage points.
[2] A decrease of less than 0.05 percent.

Note.--Period changes are derived from the unrounded data. Because of rounding, figures may not add to the totals shown. Part-year inventory ratios are annualized.

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

Table C-2
Polyvinyl alcohol: Summary data concerning the U.S. open market, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

* * * * * * *

Figure C-1
Polyvinyl alcohol: Salient data for the U.S. market, 1992-94

* * * * * * *

APPENDIX D

U.S. SHIPMENTS, BY END-USE APPLICATIONS

Table D-1
Polyvinyl alcohol: U.S. shipments, by end-use applications and by sources, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

* * * * * * *

APPENDIX E

COMPAS PRESENTATION

ASSUMPTIONS

The COMPAS model is a supply and demand model that assumes that domestic and imported products are less than perfect substitutes. Such models, also known as Armington models, are relatively standard in applied trade policy analysis and are used extensively for the analysis of trade policy changes both in partial and general equilibrium. Based on the discussion contained in Part II of this report, the staff selects a range of estimates that represent price-supply, price-demand, and product-substitution relationships (i.e., supply elasticity, demand elasticity, and substitution elasticity) in the U.S. PVA market. The model uses these estimates with data on market shares, Commerce's estimated margin of dumping, transportation costs, and current tariffs to analyze the likely effect of unfair pricing of subject imports on the U.S. like product industry.

In the Japanese respondents' prehearing brief, it was correctly pointed out that the COMPAS model provides estimates of the effect of dumping or subsidies on U.S. like product revenue, volume, and price for U.S. sales alone. That is, it does not estimate the effects on that portion of domestic production of the like product destined for non-U.S. markets (i.e., U.S. exports). Given the normal COMPAS results, however, it is fairly straightforward to estimate the effects of dumping or subsidies on the entire domestic like product industry, including exports. We begin with the assumption that the domestic quantity supplied for the U.S. market is the total domestic production minus the quantity demanded of the product in the export market.[1] Substituting the functional forms used for supply and demand employed in COMPAS, $P_d^{\epsilon_d}$ and $P_x^{\eta_x}$, respectively, we have

$$P_d^{\epsilon_d} = Q - P_x^{\eta_x} \qquad (1)$$

where Q is total domestic production, P_d and P_x are the prices of domestic like products in the U.S. and export markets, respectively, ϵ_d is the price elasticity of U.S. domestic supply (used in COMPAS), and η_x is the price elasticity of demand for U.S. exports. Totally differentiating equation (1) and rearranging, we get the percentage change in total U.S. production ($\hat{Q}$) as follows

$$\hat{Q} = (1-\lambda_x)\epsilon_d\hat{P}_d + \lambda_x\eta_x\hat{P}_x \qquad (2)$$

where λ_x is the proportion of total U.S. production currently exported and hats (^) denote percentage changes. Note that $\hat{P}_d$ (the percentage change in domestic price resulting from LTFV pricing) is simply part of the COMPAS output and ϵ_d (the price elasticity of domestic supply) is a COMPAS input, λ_x (the proportion of domestic production currently exported) must be calculated, and we must make some assumptions to estimate η_x (the price elasticity of demand for U.S. exports) and $\hat{P}_x$ (the percentage change in U.S. export price resulting from LTFV pricing).

We will employ two different methodologies to estimate the latter two parameters. Method 1 assumes that the price of U.S. exports was unaffected by the LTFV pricing of imports (that is, we assume that $\hat{P}_x = 0$). In this case, the percentage change in total U.S. production is calculated as

---

[1] This is the same assumption used in the COMPAS model. Note that export markets are discussed in the Conditions of Competition section of investigation reports and used to characterize the U.S. domestic supply elasticity.

$$\hat{Q} = (1-\lambda_x)\epsilon_d \hat{P}_d. \quad (2.1)$$

Method 2 assumes that the price of U.S. exports changed by the same percentage as the domestic U.S. price (that is, we assume that $\hat{P}_x = \hat{P}_d$). In this case, the percentage change in total U.S. production is calculated as

$$\hat{Q} = \left((1-\lambda_x)\epsilon_d + \lambda_x \eta_x\right)\hat{P}_d. \quad (2.2)$$

Here we make the additional assumption that U.S. exports have the same price elasticity of demand as domestic products sold in the U.S. market (that is, we assume that $\eta_x = \eta_d$, where η_d is calculated within the COMPAS spreadsheet).

FINDINGS[2]

As discussed in the previous section, the estimates depend on the assumptions about the effect of LTFV pricing of imports on the price of U.S. exports. If LTFV pricing of imports does not affect the price of U.S. exports (method 1), estimated effects are as follows:

	Revenue	Price	Volume
China.....	-0.1 to -0.7	-0.0 to -0.2	-0.0 to -0.4
Japan.....	-0.2 to -2.1	-0.0 to -0.7	-0.1 to -1.4
Taiwan.....	-1.7 to -5.2	-0.5 to -2.5	-1.2 to -4.2
Total.....	-2.0 to -8.0	-0.5 to -3.4	-1.3 to -6.0

If the price of U.S. exports changes by the same percentage as the price of U.S. producers' domestic sales (method 2), estimated effects are as follows:

	Revenue	Price	Volume
China.....	-0.0 to -0.7	-0.0 to -0.2	-0.0 to -0.3
Japan.....	-0.2 to -2.1	-0.0 to -0.7	-0.1 to -1.4
Taiwan.....	-1.7 to -5.2	-0.5 to -2.5	-0.9 to -3.7
Total.....	-2.0 to -7.7	-0.5 to -3.4	-1.0 to -6.0

[2] Estimates are based on 1994 data, the year which corresponds closest with Commerce's period of investigation for Taiwan (Apr. 1, 1994 to Mar. 31, 1995).

These findings are based on the effects of the dumping on all U.S. production of PVA, whether sold on the merchant market, captively consumed, or exported. The effect of the dumping is mostly on the U.S. merchant market sales.[3] More detailed effects of the dumping and the modeling assumptions used for the full range of scenarios are shown in tables E-1 to E-3.

Table E-1
The effects of LTFV pricing of imports from China

* * * * * * *

Table E-2
The effects of LTFV pricing of imports from Japan

* * * * * * *

Table E-3
The effects of LTFV pricing of imports from Taiwan

* * * * * * *

[3] Petitioner argues that the Commission should apply the COMPAS model in the context of the merchant market. In 1994, captively consumed PVA accounted for *** percent of the value of U.S. producers' shipments. U.S. producers' value share of the U.S. open market was *** percent in 1994, while LTFV imports from China comprised *** percent, imports from Japan comprised *** percent, and imports from Taiwan comprised *** percent. Supply elasticity, substitution elasticity, and demand elasticity are all higher if only the open-market is examined.

APPENDIX F

U.S. PRODUCERS' DATA, BY FIRMS

Table F-1
Polyvinyl alcohol: U.S. capacity, production, and capacity utilization, by firms, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

* * * * * * *

Table F-2
Polyvinyl alcohol: U.S. producers' shipments, by types and by firms, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

Item	1992	1993	1994	Jan.-Sept.-- 1994	1995
	Quantity (*1,000 pounds*)				
Company transfers:					
Air Products	***	***	***	***	***
DuPont	***	***	***	***	***
Monsanto	***	***	***	***	***
Total	***	***	***	***	***
Domestic shipments:					
Air Products	***	***	***	***	***
DuPont	***	***	***	***	***
Monsanto	***	***	***	***	***
Total	***	***	***	***	***
U.S. shipments:					
Air Products	***	***	***	***	***
DuPont	***	***	***	***	***
Monsanto	***	***	***	***	***
Total	200,110	211,677	233,526	175,473	190,013
Exports:					
Air Products	***	***	***	***	***
DuPont	***	***	***	***	***
Monsanto	***	***	***	***	***
Total	***	***	***	***	***
All shipments:					
Air Products	***	***	***	***	***
DuPont	***	***	***	***	***
Monsanto	***	***	***	***	***
Total	***	***	***	***	***
	Value (*1,000 dollars*)				
Company transfers:					
Air Products	***	***	***	***	***
DuPont	***	***	***	***	***
Monsanto	***	***	***	***	***
Total	***	***	***	***	***

Table continued on the following page.

Table F-2--Continued
Polyvinyl alcohol: U.S. producers' shipments, by types and by firms, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

Item	1992	1993	1994	Jan.-Sept.-- 1994	1995
	Value (*1,000 dollars*)				
Domestic shipments:					
Air Products	***	***	***	***	***
DuPont	***	***	***	***	***
Monsanto	***	***	***	***	***
Total	***	***	***	***	***
U.S. shipments:					
Air Products	***	***	***	***	***
DuPont	***	***	***	***	***
Monsanto	***	***	***	***	***
Total	159,287	158,615	175,922	132,305	158,169
Exports:					
Air Products	***	***	***	***	***
DuPont	***	***	***	***	***
Monsanto	***	***	***	***	***
Total	***	***	***	***	***
All shipments:					
Air Products	***	***	***	***	***
DuPont	***	***	***	***	***
Monsanto	***	***	***	***	***
Total	***	***	***	***	***
	Unit value (*per pound*)				
Company transfers:					
Air Products	***	***	***	***	***
DuPont	***	***	***	***	***
Monsanto	***	***	***	***	***
Average	***	***	***	***	***
Domestic shipments:					
Air Products	***	***	***	***	***
DuPont	***	***	***	***	***
Monsanto	***	***	***	***	***
Average	***	***	***	***	***

Table continued on the following page.

Table F-2--Continued
Polyvinyl alcohol: U.S. producers' shipments, by types and by firms, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

Item	1992	1993	1994	Jan.-Sept.-- 1994	1995
	Unit value (*per pound*)				
U.S. shipments:					
Air Products	***	***	***	***	***
DuPont	***	***	***	***	***
Monsanto	***	***	***	***	***
Average	$0.80	$0.75	$0.75	$0.75	$0.83
Exports:					
Air Products	***	***	***	***	***
DuPont	***	***	***	***	***
Monsanto	***	***	***	***	***
Average	***	***	***	***	***
All shipments:					
Air Products	***	***	***	***	***
DuPont	***	***	***	***	***
Monsanto	***	***	***	***	***
Average	***	***	***	***	***

[1] Not applicable.

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

Table F-3
Polyvinyl alcohol: End-of-period inventories of U.S. producers, by firms, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

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Table F-4
Average number of production and related workers producing polyvinyl alcohol, hours worked,[1] wages paid to such employees, and hourly wages, productivity, and unit production costs, by firms, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

Item	1992	1993	1994	Jan.-Sept.-- 1994	1995
	Number of production and related workers (PRWs)				
Air Products	***	***	***	***	***
DuPont	***	***	***	***	***
Monsanto	***	***	***	***	***
Total	489	483	463	463	472
	Hours worked by PRWs (*1,000 hours*)				
Air Products	***	***	***	***	***
DuPont	***	***	***	***	***
Monsanto	***	***	***	***	***
Total	1,154	1,121	1,098	824	827
	Wages paid to PRWs (*1,000 dollars*)				
Air Products	***	***	***	***	***
DuPont	***	***	***	***	***
Monsanto	***	***	***	***	***
Total	23,104	23,019	25,026	18,772	18,762
	Hourly wages paid to PRWs				
Air Products	***	***	***	***	***
DuPont	***	***	***	***	***
Monsanto	***	***	***	***	***
Average	$20.02	$20.53	$22.79	$22.78	$22.69

Table continued on the following page.

Table F-4--Continued
Average number of production and related workers producing polyvinyl alcohol, hours worked,[1] wages paid to such employees, and hourly wages, productivity, and unit production costs, by firms, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

Item	1992	1993	1994	Jan.-Sept.-- 1994	1995
	Productivity (*pounds per hour*)				
Air Products	***	***	***	***	***
DuPont	***	***	***	***	***
Monsanto	***	***	***	***	***
Average	242.9	276.2	272.3	268.5	300.1
	Unit labor costs (*per pound*)				
Air Products	***	***	***	***	***
DuPont	***	***	***	***	***
Monsanto	***	***	***	***	***
Average	$0.08	$0.07	$0.08	$0.08	$0.08

[1] Includes hours worked plus hours of paid leave time.

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

Table F-5
Polyvinyl alcohol: U.S. producers' market shares of total U.S. consumption, by firms, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

Item	1992	1993	1994	Jan.-Sept.-- 1994	1995
	Share of the quantity of U.S. consumption (*percent*)				
Producers' U.S. shipments:					
Air Products	***	***	***	***	***
DuPont	***	***	***	***	***
Monsanto	***	***	***	***	***
Total	78.0	83.6	84.6	84.6	85.9
	Share of the value of U.S. consumption (*percent*)				
Producers' U.S. shipments:					
Air Products	***	***	***	***	***
DuPont	***	***	***	***	***
Monsanto	***	***	***	***	***
Total	75.7	80.8	82.0	82.0	83.6

Note.--Because of rounding, shares may not add to the totals shown.

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

Table F-6
Polyvinyl alcohol: U.S. producers' market shares of U.S. open-market consumption, by firms, 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

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APPENDIX G

PRICING TABLES

Table G-1
Weighted-average net f.o.b.prices and total quantities of product 1 sold for paper applications, reported by U.S. producers and importers, and margins of underselling/ (overselling), by quarters, Jan. 1992-Sept. 1995

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Table G-2
Weighted-average net f.o.b. prices and total quantities of product 2 sold for paper applications, reported by U.S. producers and importers, and margins of underselling/ (overselling), by quarters, Jan. 1992-Sept. 1995

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Table G-3
Weighted-average net f.o.b. prices and total quantities of product 3 sold for paper applications, reported by U.S. producers and importers, and margins of underselling/ (overselling), by quarters, Jan. 1992-Sept. 1995

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Table G-4
Weighted-average net f.o.b. prices and total quantities of product 4 sold for paper applications, reported by U.S. producers and importers, and margins of underselling/ (overselling), by quarters, Jan. 1992-Sept. 1995

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Table G-5
Weighted-average net f.o.b. prices and total quantities of product 5 sold for paper applications, reported by U.S. producers and importers, and margins of underselling/ (overselling), by quarters, Jan. 1992-Sept. 1995

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Table G-6
Weighted-average net f.o.b. prices and total quantities of product 1 sold for textile applications, reported by U.S. producers and importers, and margins of underselling (overselling), by quarters, Jan. 1992-Sept. 1995

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Table G-7
Weighted-average net f.o.b. prices and total quantities of product 2 sold for textile applications, reported by U.S. producers and importers, and margins of underselling/ (overselling), by quarters, Jan. 1992-Sept. 1995

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Table G-8
Weighted-average net f.o.b. prices and total quantities of product 3 sold for textile applications, reported by U.S. producers and importers, and margins of underselling/ (overselling), by quarters, Jan. 1992-Sept. 1995

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Table G-9
Weighted-average net f.o.b. prices and total quantities of product 4 sold for textile applications, reported by U.S. producers and importers, and margins of underselling/ (overselling), by quarters, Jan. 1992-Sept. 1995

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Table G-10
Weighted-average net f.o.b. prices and total quantities of product 5 sold for textile applications, reported by U.S. producers and importers, and margins of underselling/ (overselling), by quarters, Jan. 1992-Sept. 1995

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Table G-11
Weighted-average net f.o.b. prices and total quantities of off-spec polyvinyl alcohol sold for textile applications, reported by U.S. producers, Jan. 1992-Sept. 1995

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Table G-12
Weighted-average net f.o.b. prices and total quantities of product 1 sold for adhesives applications, reported by U.S. producers and importers, and margins of underselling/ (overselling), by quarters, Jan. 1992-Sept. 1995

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Table G-13
Weighted-average net f.o.b. prices and total quantities of product 2 sold for adhesives applications, reported by U.S. producers and importers, and margins of underselling/ (overselling), by quarters, Jan. 1992-Sept. 1995

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Table G-14
Weighted-average net f.o.b. prices and total quantities of product 3 sold for adhesives applications, reported by U.S. producers and importers, and margins of underselling/ (overselling), by quarters, Jan. 1992-Sept. 1995

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Table G-15
Weighted-average net f.o.b. prices and total quantities of product 4 sold for adhesives applications, reported by U.S. producers and importers, and margins of underselling/ (overselling), by quarters, Jan. 1992-Sept. 1995

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Table G-16
Weighted-average net f.o.b. prices and total quantities of product 5 sold for adhesives applications, reported by U.S. producers and importers, and margins of underselling/ (overselling), by quarters, Jan. 1992-Sept. 1995

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Table G-17
Weighted-average net f.o.b. prices and total quantities of off-spec polyvinyl alcohol sold for adhesives applications, reported by Air Products, Jan. 1992-Sept. 1995

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Table G-18
Weighted-average net delivered prices and total quantities of product 1 purchased for PVB applications, reported by Monsanto, by quarters, Jan. 1992-Sept. 1995

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APPENDIX H

LOST SALES AND LOST REVENUES ALLEGATIONS

Table H-1
Lost sales allegations reported by Air Products

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Table H-2
Lost revenue allegations reported by U.S. producers

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APPENDIX J

COST OF PRODUCTION OF U.S. PRODUCERS ON THEIR OPERATIONS PRODUCING POLYVINYL ALCOHOL

Table J-1
Costs of production of Air Products in its production of polyvinyl alcohol, fiscal years 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

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Table J-2
Costs of production of DuPont in its production of polyvinyl alcohol, fiscal years 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

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APPENDIX K

INCOME-AND-LOSS DATA OF U.S. PRODUCERS ON THEIR TRADE SALES AND TRANSFER OPERATIONS PRODUCING POLYVINYL ALCOHOL

Table K-1
Income-and-loss experience of Air Products and DuPont on their trade and transfer operations producing polyvinyl alcohol, fiscal years 1992-94, Jan.-Sept. 1994, and Jan.-Sept. 1995

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APPENDIX L

EFFECTS OF IMPORTS ON PRODUCERS' EXISTING DEVELOPMENT AND PRODUCTION EFFORTS, GROWTH, INVESTMENT, AND ABILITY TO RAISE CAPITAL

Response of U.S. producers to the following questions:

1. Since January 1, 1992, has your firm experienced any actual negative effects on its growth, investment, ability to raise capital, or existing development and production efforts, including efforts to develop a derivative or more advanced version of the product, as a result of imports of PVA from China, Japan, and Taiwan?

* * * * * * *

2. Does your firm anticipate any negative impact of imports of PVA from China, Japan, and Taiwan?

* * * * * * *

3. Has the scale of capital investments undertaken been influenced by the presence of imports of PVA from China, Japan, and Taiwan?

* * * * * * *