Durum and Hard Red Spring Wheat From Canada

Investigations Nos. 701-TA-430A and 430B and
731-TA-1019A and 1019B (Final)

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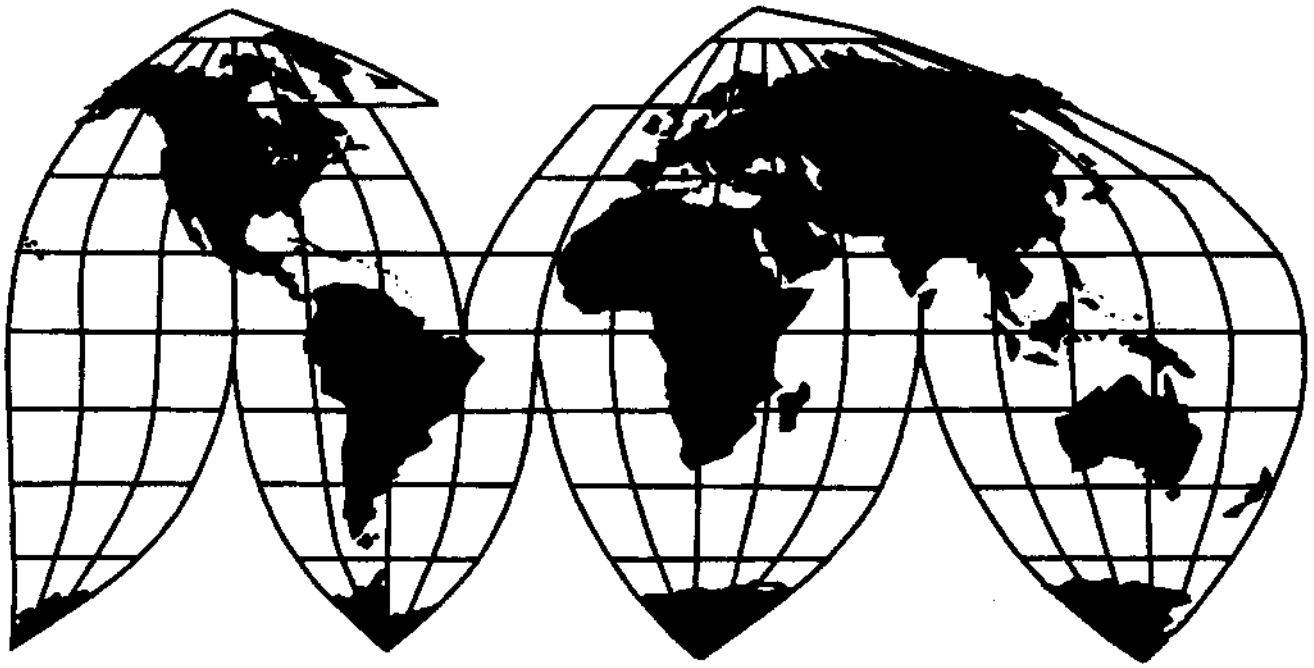
U.S. International Trade Commission



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U.S. International Trade Commission

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Note.--Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report.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

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigations Nos. 701-TA-430A and 430B and 731-TA-1019A and 1019B (Final)

DURUM AND HARD RED SPRING WHEAT FROM CANADA

DETERMINATIONS

On the basis of the record[1] developed in the subject investigations, the United States International Trade Commission (Commission) determines, pursuant to sections 705(b) and 735(b) of the Tariff Act of 1930 (19 U.S.C. § 1671d(b) and 1673d(b)) (the Act), that an industry in the United States is materially injured by reason of imports from Canada of hard red spring wheat, provided for in subheadings 1001.90.10 and 1001.90.20 of the Harmonized Tariff Schedule of the United States (HTS), that have been found by the Department of Commerce (Commerce) to be subsidized by the Government of Canada and sold in the United States at less than fair value (LTFV).[2] The Commission also determines that an industry in the United States is not materially injured or threatened with material injury by reason of imports from Canada of durum wheat, provided for in subheading 1001.10.00 of the HTS, that have been found by Commerce to be subsidized by the Government of Canada and sold in the United States at LTFV.[3]

BACKGROUND

The Commission instituted these investigations effective September 13, 2002, following receipt of a petition filed with the Commission and Commerce by the North Dakota Wheat Commission (hard red spring wheat), Bismarck, ND; the Durum Growers Trade Action Committee (durum wheat), Bismarck, ND; and the U.S. Durum Growers Association (durum wheat), Bismarck, ND. The final phase of the investigations was scheduled by the Commission following notification of preliminary determinations by Commerce that imports of durum and hard red spring wheat from Canada were being subsidized within the meaning of section 703(b) of the Act (19 U.S.C. § 1671b(b)) and were being sold at LTFV within the meaning of section 733(b) of the Act (19 U.S.C. § 1673b(b)). Notice of the scheduling of the final phase 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 May 23, 2003 (68 FR 28253).[4] The hearing was held in Washington, DC, on September 4, 2003, 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 Deanna Tanner Okun and Commissioner Stephen Koplan dissenting. Commissioner Charlotte R. Lane not participating.

[3] Commissioner Charlotte R. Lane not participating.

[4] A notice of revised scheduling was published in the *Federal Register* of June 27, 2003 (68 FR 38384).

VIEWS OF THE COMMISSION

Based on the record in these investigations, we find that an industry in the United States is not materially injured, or threatened with material injury, by reason of imports of durum wheat from Canada that are subsidized and sold in the United States at less than fair value ("LTFV"). We also find that an industry in the United States is materially injured by reason of imports of hard red spring wheat ("HRS wheat") from Canada that are subsidized and sold in the United States at LTFV.[1] [2]

The petition in these investigations was filed on September 13, 2002, by the North Dakota Wheat Commission, the Durum Growers Trade Action Committee, and the U.S. Durum Growers Association (collectively "petitioners").[3] The other principal parties to these investigations were the Canadian Wheat Board (the "CWB"), a respondent interested party that opposes the petition; and the North American Millers' Association ("NAMA"), an association of purchasers of both the subject imported and domestically produced wheat, which also opposes the petition.

I. DOMESTIC LIKE PRODUCT

A. In General

In determining whether an industry in the United States is materially injured or threatened with material injury by reason of imports of the subject merchandise, the Commission first defines the "domestic like product" and the "industry."[4] Section 771(4)(A) of the Tariff Act of 1930, as amended ("the Act"), defines the relevant domestic 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."[5] 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 . . . ."[6]

The decision regarding the appropriate domestic like product(s) in an investigation is a factual determination, and the Commission has applied the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis.[7] No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[8] The

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[1] Chairman Okun and Commissioner Koplan dissenting. See their Dissenting Views. They join sections I, II, and III A-D of these views.

[2] Material retardation is not an issue in these investigations.

[3] The Durum Growers Trade Action Committee became a petitioner by a supplement to the petition.

[4] 19 U.S.C. § 1677(4)(A).

[5] Id.

[6] 19 U.S.C. § 1677(10).

[7] See, e.g., NEC Corp. v. Department of Commerce, 36 F. Supp.2d 380, 383 (Ct. Int'l Trade 1998); Nippon Steel Corp. v. United States, 19 CIT 450, 455 (1995); Torrington Co. v. United States, 747 F. Supp. 744, 749, n.3 (Ct. Int'l Trade 1990), aff'd, 938 F.2d 1278 (Fed. Cir. 1991) ("every like product determination 'must be made on the particular record at issue' and the 'unique facts of each case'"). The Commission generally considers a number of factors including: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes, and production employees; and, where appropriate, (6) price. See, e.g., Nippon, 19 CIT at 455 n.4; Timken Co. v. United States, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996).

[8] See, e.g., S. Rep. No. 96-249, at 90-91 (1979).

Commission looks for clear dividing lines among possible like products and disregards minor variations.[9] Although the Commission must accept Commerce's determination as to the scope of the subject merchandise, the Commission determines what domestic product is like the imported articles Commerce has identified.[10]

B. Product Description

Commerce initiated investigations as to two kinds of imported merchandise. In its final determinations, Commerce defined the covered durum wheat as "all varieties of durum wheat from Canada. This includes, but is not limited to, a variety commonly referred to as Canada Western Amber Durum."[11] Commerce defined the covered HRS wheat as "all varieties of hard red spring wheat from Canada. This includes, but is not limited to, varieties commonly referred to as Canada Western Red Spring, Canada Western Extra Strong, and Canada Prairie Spring Red."[12]

C. Domestic Like Product

1. Background

Wheat is the seed of an annual cereal grass.[13] There are five primary classes of wheat grown in the United States. For the 2002/03 marketing year,[14] hard red winter wheat ("HRW wheat") accounted for 38 percent of domestic wheat production, HRS wheat for 22 percent, soft red winter wheat for 21 percent, white wheat (hard and soft) for 15 percent, and durum wheat for 5 percent.[15]

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[9] See, e.g., Nippon Steel, 19 CIT at 455; Torrington, 747 F. Supp. at 748-49; see also S. Rep. No. 96-249, at 90-91 (1979) (Congress has indicated that the domestic like product standard should not be interpreted in "such a narrow fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not 'like' each other, nor should the definition of 'like product' be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.").

[10] See, e.g., Hosiden Corp. v. Advanced Display Mfrs., 85 F.3d 1561, 1568 (Fed. Cir. 1996) (Commission may find single domestic like product corresponding to several different classes or kinds defined by Commerce); Torrington, 747 F. Supp. at 748-52 (affirming Commission's determination of six domestic like products in investigations where Commerce found five classes or kinds).

[11] 68 Fed. Reg. 52741, 52742 and 68 Fed. Reg. 52747, 52748 (September 5, 2003). Commerce noted that the durum wheat subject to these investigations "is currently classifiable under the following Harmonized Tariff Schedule of the United States ("HTSUS") subheadings: 1001.10.00.10, 1001.10.00.91, 1001.10.00.92, 1001.10.00.95, 1001.10.00.96, and 1001.10.00.99." Id. Commerce noted also the "HTSUS subheadings are provided for convenience and customs purposes, [but that] our written description of the scope of this proceeding is dispositive." Id.

[12] 68 Fed. Reg. 52741, 52742 and 68 Fed. Reg. 52747, 52748 (September 5, 2003). Commerce noted that the HRS wheat subject to these investigations "is currently classifiable under the following HTSUS subheadings: 1001.90.10.00, 1001.90.20.05, 1001.90.20.11, 1001.90.20.12, 1001.90.20.13, 1001.90.20.14, 1001.90.20.16, 1001.90.20.19, 1001.90.20.21, 1001.90.20.22, 1001.90.20.23, 1001.90.20.24, 1001.90.20.26, 1001.90.20.29, 1001.90.20.35, and 1001.90.20.96." Id. Commerce added that these investigations "do not cover imports of wheat that enter under the subheadings 1001.90.10.00 and 1001.90.20.96 that are not classifiable as hard red spring wheat." Commerce noted also the "HTSUS subheadings are provided for convenience and customs purposes, [but that] our written description of the scope of this proceeding is dispositive." Id.

[13] Final phase staff report, confidential report, as revised by INV-AA-148 (Sept. 26, 2003), INV-AA-151 (October 2, 2003), and INV-AA-152 (October 2, 2003) ("CR") at I-4, and public report ("PR") at I-3.

[14] Various government and industry sources report data on a marketing year basis, beginning June 1. CR at I-5 n.16 and PR at I-4 n.16.

[15] CR at I-5, PR at I-4.

"Spring" wheats are planted in the spring, and harvested in the late summer or early fall.[16] "Winter" wheats are planted in the fall, lie dormant during the winter, and are harvested in the mid- to late summer.[17] A "hard" wheat has a kernel that is high in protein and gluten content.[18] Durum wheat is a hard wheat that is used to make semolina, which in turn is used to make pasta.[19] The other hard wheats are used to make flour, which in turn generally is used to make bread and similar products.[20] A "soft" wheat has a kernel with a relatively low protein content, and generally is used for making cakes, crackers, biscuits, and pastries.[21] White wheats are used to make breakfast cereals, crackers, donuts, layer cakes, and foam cakes.[22]

2. Domestic Product Like Subject Durum Wheat

In the preliminary determinations, we concluded that the domestic product "like" the subject durum wheat consists of durum wheat only, and excludes all non-durum wheat. No party disputed our finding in the final phase of these investigations, nor is there new record evidence contrary to our finding. Accordingly, we incorporate here by reference our discussion in the preliminary determinations of the like product for subject durum wheat, and find that the domestic like product corresponding to the subject durum wheat consists of durum wheat only.[23]

3. Domestic Product Like Subject Hard Red Spring Wheat

Petitioners argue that the domestic like product should include HRS wheat only, whereas the CWB and NAMA argue that it should include HRW wheat as well. The parties related much of their arguments to the protein content of HRS wheat and HRW wheat, and the extent to which one was substitutable for the other. Both sides agreed that bakers require that the flour they use have a certain minimum protein content, and that millers blend HRS wheat and HRW wheat to achieve the desired protein level.[24] They agreed further that the proportions of HRS wheat and HRW wheat needed to

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[16] CR at I-4, PR at I-3.
[17] CR at I-4, PR at I-3.
[18] CR at I-5, PR at I-4.
[19] CR at I-5, PR at I-4.
[20] CR at I-5, PR at I-4.
[21] CR at I-6, PR at I-4.
[22] CR at I-6 to I-9, PR at I-4 to I-6.
[23] We stated in the preliminary determinations that we would explore further in any final phase of these investigations the extent to which producers can switch from the production of durum and non-durum wheats. Durum and Hard Red Spring Wheat from Canada, Inv. Nos. 701-TA-430A and 701-TA-430B (Preliminary) and 731-TA-1019A and 731-TA-1019B (Preliminary), USITC Pub. 3563 (Dec. 2002) at 6 n.24. Despite inquiries with all the parties and several state extension services, the record does not indicate the extent to which domestic producers switch between growing durum and non-durum wheat. CR and PR at III-6 n.8. We believe some switching occurs, however, because one producer testified to having switched from durum wheat to HRS wheat during the period examined. Transcript of Sept. 4, 2003 hearing, revised and corrected copy ("Hearing Tr.") at 66-67 (testimony of Mr. Lee). (The full names and affiliations of hearing witnesses are available at pages 2-4 of the Hearing Tr.) However, the record indicates that various factors impede switching including weather, environmental restrictions, soil conditions, the problem of "add-mixture," transportation costs, and profitability. CR and PR at III-6 n.8; Hearing Tr. at 66-67 (Lee). The term "add-mixture" refers to the phenomenon that, when land is switched to the production of a different wheat, the previously planted wheat may "volunteer" or re-sprout on its own. Petitioners' June 27, 2003 responses to questions at 2. The presence of a second type of wheat in a given volume causes the grade of the wheat to be reduced. CR at I-6; PR at I-5; Hearing Tr. at 88 (Wechsler), 152-53 (Fisher).
[24] E.g., NAMA's Prehearing Brief at 4-5; Hearing Tr. at 161 (Fisher), 396 (Hillman).

achieve the desired protein level for a given product changes from year to year because average protein levels for both HRS wheat and HRW wheat fluctuate.[25] In the preliminary determinations, the Commission did not include HRW wheat with HRS wheat in the domestic like product, but stated it would revisit the issue in any final phase of the investigations. For the reasons discussed below, we again in this final phase define HRS wheat as a like product that does not include HRW wheat.

a. Physical Characteristics and Uses

Protein content is the primary physical characteristic relevant to the analysis of whether the domestic like product should be expanded to include HRW wheat. Commercial contracts typically specify minimum protein content levels.[26] As discussed in more detail below, millers and bakers need specific and constant protein levels from year to year, even though the protein content of the wheat crop varies from year to year, primarily as a function of weather, with drier conditions causing higher protein content.[27] Unlike other wheats, both HRS wheat and HRW wheat are contracted and sold on the basis of protein content, such as "14-percent hard red spring" or "ordinary protein hard red winter."[28] Generally, higher protein wheat commands a higher price than lower protein wheat.[29]

The protein content of HRS wheat typically ranges from 12 to 16 percent, whereas the protein content for HRW wheat typically ranges from 10 to 14 percent.[30] On average, protein content is 14 percent for HRS wheat and 11.5 percent for HRW wheat.[31] Downstream purchasers reported protein averages that were somewhat higher, but they showed about the same difference between HRS wheat and HRW wheat.[32]

Information on the record indicates that the protein content of the HRS wheat harvested in a given year overlaps with that of HRW wheat to some extent, but also that the bulk of the respective crops do not overlap with respect to protein content. In the year 2000,[33] 77 percent of HRS wheat had a protein content equal to or higher than 13.5 percent, whereas 67 percent of HRW wheat (Midwestern harvest) had a protein content of less than 12.5 percent.[34] In 2001, 78 percent of HRS wheat had a protein content equal to or higher than 13.5 percent, whereas 71 percent of HRW wheat (Midwestern harvest) had a

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[25] E.g., NAMA's Prehearing Brief at 4-5.

[26] CR at I-7, PR at I-5.

[27] CR at I-7, II-1; PR at I-5, II-1. In addition, farmers can manipulate protein content by certain techniques, but weather is of far more significance in determining the wheat's protein content. Transcript of Oct. 4, 2002 conference, revised and corrected copy ("Conf. Tr.") at 57-58 (Fisher), 86 (Wechsler), 88 (Fisher), 100 (Wechsler). (The full names and affiliations of conference witnesses are available at page 2 of the Conf. Tr.)

[28] CR at I-11 to I-12, PR at I-8, and CWB's Prehearing Brief at 76.

[29] CR at I-11, PR at I-8.

[30] CR at I-10 n.38, PR at I-7 n.38, Petition at 28, CWB's Prehearing Brief at 69.

[31] Petition at 28 and petitioners' October 15, 2002 responses to supplemental questions at 3. The CWB and NAMA do not dispute these figures. Comparable figures are shown in U.S. Wheat Associates; 2000, 2001, and 2002 Crop Quality Reports, each at pages 4 and 14.

[32] On a weighted average, purchasers indicated average protein content for HRS wheat of 14.2 percent for 2000/01, 14.4 percent for 2001/02, and 14.7 percent for 2002/03. For HRW wheat, purchasers' reported weighted average for protein content was 11.7 percent for 2000/01, 11.9 percent for 2001/02, and 12.7 percent for 2002/03. CR and PR at Table II-5. The differences in average protein content for the two wheat classes were 2.5 percentage points in 2000/01, 2.5 percentage points in 2001/02, and 2.0 percentage points in 2002/03. Id.

[33] Some sources, such as U.S. Wheat Associates, report data on a calendar year basis. Because wheat is harvested in the late summer or fall, wheat harvested in calendar year 2000 falls into marketing year 2000/01.

[34] U.S. Wheat Associates, 2000 Crop Quality Report at 4, 14. The Midwestern harvest accounts for a large share of the HRW wheat harvest. U.S. Wheat Associates, 2002 Crop Quality Report at 7; Petitioners' October 15, 2002 responses to supplemental questions at 3.

protein content of less than 12.5 percent.[35] In 2002, drought conditions increased the protein content of HRS wheat and HRW wheat: 90 percent of HRS wheat had a protein content equal to or higher than 13.5 percent, whereas 26 percent of HRW wheat (Midwestern harvest) had a protein content of less than 12.5 percent.[36] In sum, HRS wheat and HRW wheat overlap to some degree in protein content, but the bulk of the HRS crop in a given year does not overlap with the bulk of the HRW wheat crop, except in drought years.[37]

Characteristics such as gluten content, stability, and water absorption have some significance as well.[38] Millers testified before the Commission that in arriving at their blends, they consider not only protein levels but other characteristics of the product as well.[39] Various government and industry publications report both protein levels and other characteristics of HRS wheat and HRW wheat.[40]

Even when HRS wheat and HRW wheat are the same in protein content, the two wheats still differ in price. At a protein content of 13 percent, prices for HRS wheat averaged slightly higher than prices for HRW wheat between marketing year 2000/01 and 2002/03.[41] The variance in price is evidence that HRS wheat has some physical characteristics that differ from those of HRW wheat, independent of protein content, and that those characteristics have at least some significance in blending decisions.[42]

The primary use of both HRS wheat and HRW wheat is for human consumption, with much smaller amounts used for livestock feed and seed.[43] When used for human consumption, HRS wheat may be used alone or blended with HRW wheat. When used alone, HRS wheat is used to make products including yeast breads, multigrain breads, croissants, bagels, frozen dough, and some pizza dough.[44] HRW wheat is used to make other goods requiring a relatively low protein content, including pan bread,

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[35] U.S. Wheat Associates, 2001 Crop Quality Report at 4, 14.

[36] U.S. Wheat Associates, 2002 Crop Quality Report at 4, 14.

[37] We have considered whether to compare HRS wheat and HRW wheat not just within years, but across years as well, given that wheat can be stored for considerable periods. The record indicates, however, that millers adjust their blends once a year, and that the blends can vary substantially from year to year. This indicates to us that within-year comparisons are most appropriate.

[38] NAMA's Prehearing Brief at Exhibit 2, ***, petitioners' Prehearing Brief at 17-22; petitioners' Posthearing Brief at App. 1 at 31-32; Hearing Tr. at 96-97 (Hunnicutt), 394-96 (Marten and Hillman); Conf. Tr. at 45-46, 60, 104-05 (Peterson), 141 (Marten).

[39] Hearing Tr. at 394-96 (Hillman), Conf Tr. at 141 (Marten).

[40] E.g., U.S. Wheat Associates, 2000, 2001, and 2002 Crop Quality Reports, each at 4 and 14.

[41] CR at I-11 to I-12, II-18, and Figure II-1, PR at I-8, II-12, and Figure II-1. The figures shown at page I-11 to I-12 of the CR (page I-8 of the PR) are HRS wheat cash prices at Minneapolis and HRW prices at Kansas City (the respective grain exchanges through which these wheat classes are sold). The figures shown at page II-18 and Figure II-1 of the CR (page II-12 and Figure II-1 of the PR) are both based on Minneapolis prices. The CWB presented data showing that, at Pacific Ports and at 13 percent protein, HRW was priced slightly higher than HRS in 2000/2001, but lower than HRS wheat in 2001/2002 and 2002/2003. CWB's Prehearing Brief at 73. The CWB argued that its data are the most probative because they compare prices of HRS wheat and HRW wheat for sale at the same location. CWB's Posthearing Brief at Tab A2, page 6. The CWB's data show approximately the same pattern as do those presented in the staff report. CR at II-18 and Figure II-1, PR at II-12 and Figure II-1.

[42] In the alternative, the price differential may be explained by petitioners' assertion that the 13 percent HRS wheat and HRW wheat are sold into different markets for different uses. Petitioners' Prehearing Brief at 38-39. This alternative explanation of the price differential also supports our finding that the domestic like product corresponding to the subject HRS wheat should consist of domestic HRS wheat only, and not include HRW wheat.

[43] CR at I-8, II-11, PR at I-6, II-7.

[44] CR at I-10 n.37; PR at I-7 n.37; Petition at 27; Conf. Tr. at 11 (Fisher), 141 (Marten); NAMA's Postconference Brief at 1-2; petitioners' Prehearing Brief at 23. See CWB's Prehearing Brief at 69-70.

Asian noodles, and hard rolls.[45] NAMA estimated that about one-fourth each of both HRS wheat and HRW wheat are directed to these distinct products and used without blending.[46]

The remaining approximately three-quarters of HRS wheat and HRW wheat are blended. Where HRS wheat and HRW wheat overlap in protein content, their uses in these blends generally are the same, and they are generally substitutable. However, the bulk of HRS wheat is higher in protein content than HRW wheat, and millers use the HRS wheat to achieve the required protein levels that they cannot achieve using HRW wheat alone.[47] [48]

b. Interchangeability

The record indicates that there is very limited interchangeability for the approximately one-fourth of HRS wheat that is directed to high-protein products and the one-fourth of HRW wheat that is directed to low-protein products. HRW wheat alone generally cannot be used to make high protein products of acceptable quality.[49] Nor generally can HRS wheat be used alone to make low protein products of acceptable quality.[50]

As to the remaining bulk of the HRS wheat and HRW wheat, substitution is not insubstantial but is still limited. As explained below, in a given year, substitution is high between those portions of the HRS wheat and HRW wheat production that overlap in protein content, but substitutability is low between the bulk of the respective crops, which do not overlap in that critical measure.

Central to our analysis is the testimony and statement of millers, the downstream consumers of HRS wheat and HRW wheat. Millers explained that the art and science of milling is to deliver flour to customers that is consistent in protein content and other characteristics, at the lowest cost possible, despite yearly fluctuations in the wheat used to make that flour.[51] Millers testified that where the wheat classes overlap in protein content, they can use either HRS wheat or HRW wheat.[52] Given the different

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[45] Petitioners' October 15, 2002 responses to supplemental questions at 7. See CWB's Prehearing Brief at 70.

[46] NAMA October 10, 2002 Postconference Submission at 1. At the hearing, the parties were requested to express any disagreement with NAMA's estimate, and/or provide an alternative source of information for that figure. Hearing Tr. at 219-20. No party indicated disagreement or provided an alternative source of information. E.g., CWB's Prehearing Brief at 72 (incorporation into blends accounts for "up to 75 percent of the total HRS and HRW use").

[47] The millers that supply the flour blend HRS wheat and HRW wheat to produce flour with the required protein content. CR at I-10; PR at I-7; NAMA's Prehearing Brief at 4-7; Petition at 27; Hearing Tr. at 161 (Fisher), 396 (Hillman); Conf. Tr. at 81 (Fisher & Hunnicutt), 141-42, 181 (Marten).

[48] See NAMA Prehearing Brief at Exh. 3. Millers set their blends once a crop year to achieve the desired characteristics, and do not vary the blend solely due to changes in price. NAMA's Prehearing Brief at Exhibit 2 ***; Hearing Tr. at 260 (Marten), 263 (Koenig), 379 (Hillman), 392-93 (Hillman, Marten, Koenig).

[49] CR at I-10 & n.37, PR at I-7 & n.37; petitioners' October 15, 2002 responses to supplemental questions at 7 (HRW wheat used to make low-protein products); Hearing Tr. at 378 (Hillman); Conf. Tr. at 141 (Marten); Petition at 27-29.

[50] Petitioners' October 15, 2002 responses to supplemental questions at 7; CWB's Prehearing Brief at 77 (too much protein can ruin a flour for any application).

[51] NAMA's Prehearing Brief at 1, 4-6 and at Exhibit 2, ***; Hearing Tr. at 256-57 (Hillman), 393 (Marten), 398 (Bair).

[52] Hearing Tr. at 377-79, 397 (Hillman). A miller testified at the conference that the process of milling wheat into flour reduces protein content by 1.1 percentage points and that in a typical year he must use HRS wheat to deliver flour with a protein content of 11.4 percent. Conf. Tr. at 141-42 (Marten). He also testified that in 2002 the protein content of HRW wheat was so high due to drought that very little HRS wheat was required. Conf. Tr. at 141-42 (Marten). NAMA confirmed that the blends are changed from year to year based on the varying protein content of the wheat harvest. NAMA's Prehearing Brief at 4-6.

ways of arriving at flour with the same protein level by using HRS wheat, HRW wheat with the same protein content, or blending the two products, millers seek the method with the lowest cost.[53] These record facts establish that under certain circumstances HRW wheat is substitutable for HRS wheat.

Nevertheless, the record also indicates substantial limits on the extent to which HRS wheat and HRW wheat are substitutable. Millers use significant amounts of HRS wheat in their blends, even though HRS wheat generally is higher in price than HRW wheat.[54] HRS wheat is higher in protein content than HRW wheat on average, and the bulk of HRS wheat and HRW wheat do not overlap in protein content, thus limiting millers' ability to substitute HRS wheat and HRW wheat.[55] In addition, even when protein content is the same, HRS wheat may still be preferred over HRW wheat based on characteristics other than protein content, an indication that the products are complementary, as petitioners claim, rather than substitutable.[56] Statements by NAMA confirm limits on substitutability and thus the millers' need for HRS wheat, suggesting that any deficits in the supply of domestic HRS wheat cannot simply be made up by substituting domestic HRW wheat, even though the latter generally is lower in price:

> The millers' business is to produce high quality, consistent . . . hard wheat flour. To do so, millers absolutely require . . . hard red spring wheat of particular quality and consistency.[57]

The protein ranges of HRS wheat and HRW wheat change from year to year. One miller indicated that prior to 2002 its blends included 60/40 and 80/20 HRW wheat to HRS wheat, but that in 2002 it used almost exclusively HRW wheat.[58] Nevertheless, data submitted by the CWB indicate that consumption of HRS wheat was only somewhat lower relative to HRW wheat in 2002 than it was in 2001.[59] That millers continue to use HRS wheat despite its generally higher price, even in years when the protein content of HRW wheat is higher than average, indicates that much HRW wheat is not completely interchangeable with HRS wheat.

Record evidence indicating that HRW wheat is substitutable for HRS wheat to a not insubstantial, but yet limited extent is borne out in responses from producers and customers. Out of fourteen responding purchasers,[60] six stated that there were no substitutes for HRS wheat.[61] Eight indicated that HRW wheat was a substitute for HRS wheat, but most qualified their response in some respect.[62] Several indicated that substitution was possible depending on the protein level of the wheat and the specifications of the product being produced.[63]

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[53] E.g., CWB's Prehearing Brief at 71 n. 134.

[54] E.g., NAMA's Prehearing Brief at 5-6, Hearing Tr. at 257 (Hillman), CR at I-11 to I-12, PR at I-8.

[55] U.S. Wheat Associates; 2000, 2001, and 2002 Crop Quality Reports, each at 4 and 14.

[56] Conf. Tr. at 141 (Marten) (HRS wheat used for non-protein parameters); CR at II-18 to II-19 and Figure II-1 and PR at II-12 and Figure II-1 (even when both have a 13 percent protein content, HRS wheat generally is higher in price than HRW wheat).

[57] NAMA's Prehearing Brief at 1-2.

[58] Conf. Tr. at 142 (Marten).

[59] Out of the total food use of HRS wheat and HRW wheat, HRS wheat accounted for an estimated 36 percent in 2002/03, compared to 41 percent and 42 percent in the two previous marketing years. CWB's Posthearing Brief at Tab B6.

[60] The "purchasers" listed in the staff report are downstream purchasers. The initial purchasers are country grain elevators. Hence, "purchaser" responses were from large downstream grain-trading and milling concerns. See CR at II-14 to II-17, PR at II-9 to II-11.

[61] CR at II-14, PR at II-9.

[62] CR at II-14 and Table II-4, PR at II-9 and Table II-4.

[63] CR and PR at Table II-4.

c. Channels of Distribution

HRS wheat and HRW wheat generally are not sold through the same channels of distribution because, as discussed below, they generally are harvested in different regions and typically are sold through different grain exchanges.[64] A significant portion of HRS wheat is traded at the Minneapolis Grain Exchange, while a large portion of HRW wheat is traded at the Kansas City Board of Trade.[65] Other aspects of the channels of distribution are similar. Typically, wheat from the farm is trucked to a grain elevator, although some farmers truck their wheat directly to an export terminal.[66] From grain elevators, wheat typically is moved on rail cars or barges to domestic mills, feedlots, or export ports.[67] In sum, HRS wheat and HRW wheat are sold through distinct but parallel channels of distribution.

d. Production Processes, Facilities, and Employees

HRS wheat is grown primarily in the Northern Plains: North Dakota, Montana, Minnesota, and South Dakota.[68] HRW wheat is grown primarily in the Central Plains states of Nebraska, Kansas, Oklahoma, Texas, and Colorado.[69] Several states produce both HRS wheat and HRW wheat, but the overlap is small because southern growers have poor results with spring wheat and northern growers have poor results with winter wheat.[70] Both products compete against other crops for planted acreage, and thus each is grown only where growing conditions are most suitable relative to other crops.[71]

Even in the very limited geographic areas allowing the production of both HRS wheat and HRW wheat, switching from the production of one to the other is impeded by the risk of add-mixture, because some wheat of the type produced the year before may "volunteer" or re-sprout on its own.[72] The presence of a second class of wheat will cause a sample to be downgraded and thus sell for a lower price.[73] Nor can a farmer produce HRS wheat and HRW wheat on the same land in the same year because the growing seasons for the two wheat classes overlap. HRS wheat is planted in April through May and is harvested in August through September, while HRW wheat is planted in September through November and harvested in June through July.[74]

The families that farm the wheat contribute most of the industry's production employees, with hired labor a much smaller share.[75] Accordingly, the farms and the bulk of the production employees do

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[64] CR at I-10 to I-11, PR at I-7 to I-8.

[65] CR at I-10; PR at I-7; petitioners' October 15, 2002 responses to supplemental questions at 11.

[66] CR at I-11, PR at I-8.

[67] CR at I-11, PR at I-8.

[68] CR at I-10, VI-7; PR at I-7, VI-3; U.S. Wheat Associates, 2001 Crop Quality Report at 12-13; petitioners' October 15, 2002 response to supplemental questions at 3; Conf. Tr. at 91-92 (Fisher).

[69] CR at I-10; PR at I-7; U.S. Wheat Associates, 2001 Crop Quality Report at 2-3; petitioners' October 15, 2002 responses to supplemental questions at 3.

[70] Petitioners' Prehearing Brief at 15-17, 33-34; petitioners' June 27, 2003 responses to questions at 1-3; petitioners' Postconference Brief at Exhibit 11 (map of wheat production by class); CR at I-10 and Tables III-2 and III-3; PR at I-7 and Tables III-2 and III-3, Conf. Tr. at 91-92 (Fisher).

[71] CWB's June 27, 2003 responses to questions at 1-5 (Executive Summary); petitioners' June 27, 2003 responses to questions at 2.

[72] Petitioners' June 27, 2003 responses to questions at 2.

[73] CR at I-6; PR at I-5; Hearing Tr. at 88 (Wechsler), 152-53 (Fisher).

[74] CR at I-10, PR at I-7, Conf. Tr. at 93 (Fisher).

[75] CWB's Posthearing Brief at Tab A9 at 51-52.

not overlap between HRS wheat and HRW wheat to a significant degree.[76] Production equipment is believed to be similar for HRS wheat and HRW wheat.[77]

e. Producer and Customer Perceptions

Producers do not regard HRS wheat and HRW wheat to be substitutes in terms of production because the producers and areas of production of HRS wheat and HRW wheat do not overlap to a significant degree, and because HRS wheat and HRW wheat differ in growing season. Likewise, customers (country grain elevators, which are the first purchasers of HRS wheat and HRW wheat) do not treat HRS wheat and HRW wheat as substitutes because the two classes are segregated during storage and transport.[78] U.S. grading standards require segregation, and treat the presence of other classes of wheat as a discount factor.[79]

As described in more detail previously, the views of downstream customers (millers) varied. Eight of fourteen responding downstream purchasers indicated that HRW wheat is substitutable for HRS wheat, although several indicated that such substitution was subject to certain limitations.[80] Six of the fourteen indicated that HRW wheat is not substitutable for HRS wheat.[81]

f. Price

Prices for HRS wheat and HRW wheat vary according to their protein content and other factors, making comparisons difficult. As a general indication of typical prices, the simple average marketing year 2002/03 prices of HRS wheat (Minneapolis 13 percent protein) and HRW wheat (Kansas City #1 ordinary) were $4.45 and $4.22 per bushel, respectively.[82] It is not disputed that prices for HRS wheat generally are higher than those for HRW wheat.[83] [84]

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[76] Hearing Tr. at 204 (Klein).

[77] Hearing Tr. at 159 (Klein).

[78] Hearing Tr. at 88 (Wechsler), 146 (Fisher), 159 (Klein).

[79] CR at I-6, I-11; PR at I-5, I-8; Hearing Tr. at 88 (Wechsler), 152-53 (Fisher).

[80] CR at II-14 and Table II-4, PR at II-9 and Table II-4.

[81] CR at II-14, PR at I-9.

[82] CR at I-11 to I-12, PR at I-8. See CR at V-10 to V-11, PR at V-7 to V-8.

[83] Petitioners' Prehearing Brief at 37-38. See CWB's Prehearing Brief at 74 (acknowledging the price premium for "higher protein HRS") and 76 (protein content the primary price factor). CR at V-5, PR at V-4 (cash prices for 15 percent protein HRS wheat were 26.9 percent higher than cash prices for otherwise similar 13 percent protein HRS wheat).

[84] The CWB argued that correlations in price movements of HRS wheat and HRW wheat demonstrate that the two classes were highly substitutable and thus that HRW wheat should be included with HRS wheat in the domestic like product. CWB's Prehearing Brief at 79-82. We note that price is only one of the six factors we use to guide our inquiry into the definition of the like products. Moreover, despite correlations in price movements, prices for HRS wheat and HRW wheat were not the same. E.g., CR at I-11 to I-12, V-10 to V-11; PR at I-8 and V-7 to V-8. Finally, the record shows correlations in price movements among wheat of all classes, and between wheat and other agricultural products. CR at V-11; PR at V-7 to V-8; CWB's Prehearing Brief at 50, 86 n.155, Exh. 22; Hearing Tr. at 147 (Fisher). Given the persistent differences in price between HRS wheat and HRW wheat, and the existence of price correlations among wheat of various classes and between wheat and other agricultural products, we do not find that the CWB's argument conclusively demonstrates HRS wheat and HRW wheat to be a single product.

g. Conclusion

On balance, based on the record in these investigations, we find that the domestic like product corresponding to the subject HRS wheat should include HRS wheat only.

HRS wheat is on average higher in protein content than HRW wheat. The portion of HRS wheat that overlaps with HRW wheat in protein content is not insubstantial, but the bulk of the respective crops do not. The two wheat classes also differ in physical characteristics other than protein content that are significant to downstream users, as evidenced by differences in price even when protein content is the same. The differences in protein content generally result in distinct or complementary uses for HRS wheat and HRW wheat, although substitution is high for the limited overlapping portions. Millers require significant amounts of HRS wheat which they use despite its generally higher cost. Food use of HRS wheat declined by only 5 to 6 percentage points in the 2002/03 marketing year compared to the two previous marketing years, despite reports that a higher than average amount of HRW wheat could be substituted for it in that year.[85]

Because there is very little overlap in producers of HRS wheat and HRW wheat, or the regions in which the two wheat classes are produced, producers are not likely to regard HRS wheat and HRW wheat as substitutes. Customers' perceptions are mixed. Due to the generally differing areas in which they are produced, HRS wheat and HRW wheat are sold through different distributors, but other than their location the channels are the same or similar, although distributors segregate the two types of wheat. On these bases, and consistent with our finding in the preliminary determinations, we find that the domestic like product corresponding to subject HRS wheat is limited to domestic HRS wheat and does not include HRW wheat.[86]

II. DOMESTIC INDUSTRIES

The domestic industry is defined 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."[87] In defining the domestic industry, the Commission's general practice has been to include in the industry all domestic production of the domestic like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.[88] We find two domestic industries in these investigations, one consisting of all growers of durum wheat and another consisting of all growers of HRS wheat.

III. ANALYSIS OF MATERIAL INJURY, OR THREAT OF MATERIAL INJURY, BY REASON OF SUBSIDIZED AND LESS THAN FAIR VALUE IMPORTS

In the final phase of antidumping or countervailing duty investigations, the Commission determines whether an industry in the United States is materially injured or threatened with material

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[85] CWB's Posthearing Brief at Tab B6.

[86] Because HRW wheat is more similar to HRS wheat than are other non-durum wheats, we also conclude that the domestic like product should not include other non-durum wheats, which are more dissimilar to HRS wheat than HRW wheat. The record indicates that HRW wheat is commonly blended with HRS wheat, but it does not indicate that other non-durum wheats are commonly blended with HRS wheat. Moreover, other non-durum wheats are lower in protein than either HRS wheat or HRW wheat, and other non-durum wheats have different end uses as well. CR at I-5 to I-6, I-9; PR at I-4, I-6.

[87] 19 U.S.C. § 1677(4)(A).

[88] See, e.g., United States Steel Group v. United States, 873 F. Supp. 673, 681-84 (Ct. Int'l Trade 1994), aff'd, 96 F.3d 1352 (Fed. Cir. 1996).

injury by reason of the imports under investigation.[89] [90] In making this determination, the Commission must consider the volume of imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations.[91] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[92] In assessing whether the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States.[93] 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."[94]

For the reasons discussed below, we determine that the domestic industry producing durum wheat is not materially injured, or threatened with material injury, by reason of subject imports of durum wheat from Canada that are subsidized and sold at less than fair value. We determine also that the domestic industry producing HRS wheat is materially injured by reason of subject imports of HRS wheat from Canada that are subsidized and sold at less than fair value.[95]

A. Information Available in These Investigations

The Commission's determinations are based on the record developed during these investigations.[96] The domestic durum wheat and HRS wheat industries collectively comprise tens of thousands of individual farmers (producers).[97] The Commission determined that forwarding questionnaires to all producers of the domestic like products or developing a reliable sampling methodology was impractical.[98] The Commission obtained reliable and authoritative data from a variety

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[89] 19 U.S.C. §§ 1671d(b) & 1673d(b).

[90] By statute, imports from a subject country corresponding to a domestic like product that account for less than three percent of all such merchandise imported into the United States during the most recent twelve months for which data are available preceding the filing of the petition shall be deemed negligible. 19 U.S.C. § 1677(24)(A)(i)(I). The statute also provides that, even if imports are found to be negligible for purposes of present material injury, they shall not be treated as negligible for purposes of a threat analysis should the Commission determine that there is a potential that imports from the country concerned will imminently account for more than three percent of all such merchandise imported into the United States. 19 U.S.C. § 1677(24)(A)(iv). The Commission is authorized to make "reasonable estimates on the basis of available statistics" of pertinent import levels for purposes of deciding negligibility. 19 U.S.C. § 1677(24)(C); see also Uruguay Round Agreements Act ("URAA") Statement of Administrative Action ("SAA") at 856. By operation of law, a finding of negligibility terminates the Commission's investigations with respect to such imports. 19 U.S.C. § 1673b(a)(1).

Negligibility is not an issue in these investigations because the subject imports from Canada accounted for 100.0 percent of HRS wheat imports and 95.2 percent of durum wheat imports into the United States in marketing year 2001/02, the most recent twelve month period preceding the filing of the petition for which data are available. CR and PR at Tables IV-1 and IV-2.

[91] 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 . . . [a]nd explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B); see also Angus Chemical Co. v. United States, 140 F.3d 1478 (Fed. Cir. 1998).

[92] 19 U.S.C. § 1677(7)(A).

[93] 19 U.S.C. § 1677(7)(C)(iii).

[94] 19 U.S.C. § 1677(7)(C)(iii).

[95] Chairman Okun and Commissioner Koplan dissenting. See their dissenting views.

[96] 19 C.F.R. § 207.2(f). See 19 U.S.C. § 1516a(b)(2).

[97] According to the 1997 Census of Agriculture, there were 6,887 farms growing durum wheat. CR and PR at III-1. According to petitioners, there are 40,407 U.S. producers of HRS wheat. CR and PR at III-1 & n.3.

[98] When the Commission provided draft versions of its final phase questionnaires to parties for comment, it did not propose issuing a producer questionnaire. The parties provided extensive comments on the draft questionnaires, but none indicated disagreement with the lack of a producer questionnaire. The Court of International Trade (CIT)

of other sources, including U.S. and Canadian government publications, state agricultural extension services, academia, and industry groups. The Commission also obtained data (including prices) from purchasers through questionnaires, and received testimony at its conference and hearing. The Commission received extensive submissions of factual information from the parties. Despite requests from the Commission, the parties did not suggest additional or more informative or reliable sources of data.[99]

B. Conditions of Competition and the Business Cycle

Many conditions of competition discussed below pertain both to the domestic durum wheat and HRS wheat industries, although various distinctions are noted.

1. Levels of Trade

Subject imports of HRS wheat and durum wheat enter the U.S. market at a level of trade that is downstream from sales by domestic producers of domestic HRS wheat and durum wheat. As discussed above with respect to our domestic like product determinations, domestic producers of HRS wheat and durum wheat most often sell their product to local grain elevators.[100] The grain elevators sell HRS wheat and durum wheat to large, generally multinational, firms that trade in grain.[101] Some of these grain-trading firms are integrated mills.[102] The grain-trading firms sell the wheat, often to export markets, or mill the wheat themselves into flour or semolina.[103] Many of the large grain trading and milling firms have ownership interests in local grain elevators.[104] In general, subject imports of HRS wheat and durum wheat do not compete with domestic producers for sales to local grain elevators. Instead, importers sell subject imports downstream to milling firms.[105] [106]

2. Demand and Apparent U.S. Consumption

The predominant source of ultimate demand for both HRS wheat and durum wheat is human consumption for food.[107] HRS wheat is used in bread and other bakery products, where it can face a potential substitute product in HRW wheat, depending on the appropriate protein levels required by the user.[108] Durum wheat has few substitute products in its primary application (pasta), either from other

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in Chung Ling acknowledged that it would be "impractical given the time constraints for completing its investigation" for the Commission to attempt to obtain absolute coverage utilizing questionnaires for "an industry comprised of more than 1,000 producers." Chung Ling Co. v. United States, 805 F. Supp. 45, 49 (Ct. Int'l Trade 1992).

[99] CR and PR at III-6 n.8; and Hearing Tr. at 174, 204-06 (Vice Chairman Hillman).

[100] CR at I-11, II-8; PR at I-8, II-5.

[101] CWB's Prehearing Brief at 9-11; Hearing Tr. at 232-33 (Cunningham), 240 (Sumner), 253-55 (Meyer).

[102] Hearing Tr. at 232-33 (Cunningham), CWB Hearing Charts, page 6 (attached to non-corrected and revised Hearing Transcript).

[103] CWB's Prehearing Brief at 10, Hearing Tr. at 240-41 (Sumner).

[104] CWB's Prehearing Brief at 9.

[105] ***; Hearing Tr. at 307-08 (Steinke) (CWB sells directly to millers), 309-10 (Hillman) (same).

[106] The grain-trading and milling firms are sometimes referred to as "downstream" purchasers in this opinion to distinguish them from grain elevators, which are the initial purchasers of domestically produced HRS wheat and durum wheat. This distinction is used to describe the level of trade, notwithstanding the fact that many of the grain elevators are owned or controlled by the grain trading or milling firms.

[107] CR at II-11, PR at II-7.

[108] CR at II-14 to II-17, PR at II-9 to II-11.

forms of wheat or other grains.[109] Secondary uses consist of seed, and animal feed and residual uses.[110] Demand for wheat for feed and residual use declines when prices increase, because other agricultural products can be used to feed livestock.[111] Per capita U.S. consumption of all wheat flour fell from 146.3 pounds in 2000, to 140.9 pounds in 2001, and to 136.9 pounds in 2002.[112] Purchaser questionnaire responses suggest that the popularity of low-carbohydrate diets has impacted the consumption of bread products negatively.[113]

The parties disagreed as to how the Commission should calculate apparent U.S. consumption, which the Commission frequently employs as a proxy for demand. Given that U.S. exports of durum wheat accounted for between 43.5 percent and 53.8 percent of shipments and HRS wheat exports were between 44.6 percent and 59.8 percent of total shipments during the period, including exports or not has a considerable impact on the measure of apparent U.S. consumption. Petitioners argued that U.S.-grown wheat that is exported from the United States should be excluded from apparent U.S. consumption, because it is not consumed, i.e., milled, in the United States.[114] The CWB, on the other hand, noted that in these markets, exports are made not by producers, the U.S. growers, but rather by downstream purchasers, usually two steps removed from the domestic producers.[115] The CWB asserted that U.S. producers frequently are unaware of the final destination of their wheat, and that exports by downstream purchasers are a source of demand for wheat produced in the United States, just as is demand ultimately derived from the end use in the United States.[116] Given the unusual circumstances of this case, in that exports by downstream purchasers account for a large percentage of domestic production, we find that apparent U.S. consumption calculated in both ways informs our understanding of the conditions of competition unique to these markets. Trends in apparent U.S. consumption over time generally are the same by either measure.[117]

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[109] CR at II-14, PR at II-9.

[110] CR at I-7 to I-8, PR at I-5 to I-6.

[111] See CR at II-13, PR at II-8.

[112] CR at II-13, PR at II-8.

[113] CR at II-12 to II-13, PR at II-8.

[114] Petitioners' Posthearing Brief at App. 1 at 5-7.

[115] Hearing Tr. at 47 (Cunningham).

[116] Hearing Tr. at 47, 223 (Cunningham), 240 (Sumner). See CR at II-8, PR at II-5.

[117] Commissioner Koplan, having considered the record and the conflicting arguments of the parties, agrees with his colleagues that the trends in apparent U.S. consumption for the period examined are the same, whether computations include or exclude exports of wheat sold by the domestic producers to downstream purchasers. Nevertheless, he believes that the better approach in these investigations would be to compute apparent U.S. consumption of durum and hard red spring wheats by including all of the farmers' sales of the domestic like products regardless of the fact that substantial portions are subsequently exported by the downstream purchasers. Over the period examined, farmers who are the producers of these like products sell almost all of the wheat they produce to local grain elevator operators in the United States, who then inspect, grade, clean, sell and often transport the wheat to grain trading companies, agents, brokers and milling firms. Thus, he considers all of the domestic producers' (farmers') sales of wheat to be U.S. sales. On average for the period examined in these investigations, 47.5 percent of durum wheat and 52.75 percent of hard red spring wheat produced by U.S. farmers was exported. It is undisputed on this record that these wheat supplies are not exported by the farmers but by the downstream purchasers who collectively purchase almost 100 percent of what the farmers produce. While the situation for these two like products may be unique because of the extremely large volumes exported by downstream purchasers, he finds that farmers clearly count on these sales as an important element of the demand for their products and that the farmers exercise no control over the wheat they produce once it is sold and delivered to the grain elevator. He therefore concludes that in investigations of this type, apparent U.S. consumption should include all that which is sold by producers of the domestic like products because the subsequent export sales were made by downstream purchasers who are outside the scope of the domestic industry. Finally, he notes that in any case, the exports by downstream purchasers of this significant volume of domestic production is a relevant condition of competition.

By both measures, apparent U.S. consumption of HRS wheat and durum wheat is down sharply over the period examined, particularly in the case of the former. Excluding downstream exports of domestically produced HRS wheat, apparent U.S. consumption of HRS wheat was 324 million bushels in marketing year 2000/01, 290 million bushels in 2001/02, and 182 million bushels in 2002/03.[118] When exports by downstream purchasers of domestically produced exports are included, apparent U.S. consumption was 551 million bushels in marketing year 2000/01, 506 million bushels in 2001/02, and 436 million bushels in 2002/03.[119] For durum wheat, excluding downstream exports of domestically produced products, apparent U.S. consumption was 68 million bushels in 2000/01, 61 million bushels in 2001/02, and 61 million bushels in 2002/03.[120] When downstream exports are included, apparent U.S. consumption of durum wheat was 124 million bushels in 2000/01, 111 million bushels in 2001/02, and 98 million bushels in 2002/03.[121]

3. Supply

At the level of downstream purchasers, the domestic market is supplied by domestic production, existing inventories, and imports, primarily from Canada. Supply is affected by exports of domestically produced HRS wheat and durum wheat.[122] During the period examined, U.S.-grown durum wheat and HRS wheat accounted for the majority of U.S. supply; Canada accounted for much of the balance, but Mexico provided modest amounts of desert durum wheat.[123] The volume of imports from all other countries is very small.[124] We discuss the actual volumes of subject durum wheat and HRS wheat imports from Canada in our analyses of volume later in these views.

a. Domestic Production

Domestic production is driven by the number of acres harvested and per-acre yields. Various factors influence these two determinants of domestic production.

For durum wheat, acreage planted was 3.9 million in marketing year 2000/01, but declined to 2.9 million acres in both 2001/02 and 2002/03.[125] Acres harvested declined from 3.6 million in 2000/01 to 2.8 million in 2001/02, to 2.7 million in 2002/03.[126]

For HRS wheat, acres planted increased from 14.4 million in 2000/01, to 14.8 million in 2001/02, and to an estimated 14.9 million in 2002/03.[127] [128] In 2000/01, there were approximately 0.8 million acres of HRS wheat planted but not harvested, compared to 1.0 million in 2001/02, and 2.3 million in 2002/03.[129] Thus, while the acreage planted increased over the period examined,[130] the acreage

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[118] CR and PR at Table C-2.

[119] CR and PR at Table C-2A.

[120] CR and PR at Table C-1.

[121] CR and PR at Table C-1A.

[122] CR and PR at Tables C-1, C-1A, C-2, and C-2A.

[123] CR and PR at Tables C-1 and C-2.

[124] CR and PR at Tables IV-1 and IV-2.

[125] CR and PR at Table III-6.

[126] CR and PR at Table III-6.

[127] CR and PR at Table III-6. Figures in Table III-6 for marketing year 2002/03 are estimates. CR and PR at Table III-6 n.2.

[128] Excessive dry weather, particularly in marketing year 2002/03, led to a higher rate of "abandonment" of planted acreage for spring wheats (acreage planted but never harvested). See USDA/ERS, Wheat Situation and Outlook Yearbook (March 2003) at 13-15.

[129] CR and PR at Table III-6.

[130] The USDA, however, projects lower acreage planted for 2003/04 at 13.0 million. CR and PR at Table III-6.

harvested decreased. Acres harvested for HRS wheat increased from 13.6 million in marketing year 2000/01 to 13.8 million in 2001/02, but then declined to 12.6 million in 2002/03.[131]

Various factors influence the number of acres planted in durum wheat and HRS wheat. The areas of production of durum wheat and HRS wheat overlap in North Dakota and Montana.[132] Even within North Dakota, however, regions favor the production of one class of wheat over the other.[133] While some farmers have the ability therefore to switch from the production of one to the other, there are significant impediments to such a change as discussed previously, including the problem of add-mixture. Also, changing from the production of HRS wheat to durum wheat is considered more difficult than changing from the production of durum wheat to HRS wheat.[134] In any event, switching from the production of durum wheat to HRS wheat or vice versa does not account for all the observed changes in the number of acres planted with HRS wheat and durum wheat, because the aggregate acres planted were lower in 2002/03 at 17.8 million acres than in 2000/01 at 18.3 million acres.[135] As also noted above, other crops compete for planting with HRS wheat and durum wheat, including soybeans, barley, and oilseeds such as canola and flaxseed.[136] In fact, most wheat farmers grow other crops as well.[137] The CWB asserts that acres planted with these alternative crops have increased, thereby displacing durum wheat and HRS wheat.[138]

In deciding what crops to plant, farmers must also consider various federal programs including production flexibility contract payments, marketing assistance, and crop insurance.[139] Payments under many of these programs are not a function of current production or planting, and generally the various programs have not changed significantly over the period examined.[140] An important exception is the Crop Revenue Coverage ("CRC") program, a government-backed insurance program that lowers the risk to the domestic producer of crop failure and price fluctuations.[141] The United States Department of Agriculture ("USDA") indicated that the CRC program had the effect of increasing durum wheat acres planted in North Dakota in 1999 and 2000, despite lower prices for durum wheat.[142] When the USDA terminated the CRC program for durum wheat in March 2001, acres planted in North Dakota with durum wheat fell by 1.0 million acres to 2.2 million in 2001.[143]

Apart from harvested acreage, production is driven by yield, which in turn is largely a function of weather and disease.[144] For durum wheat, average yields were 30.7 bushels per acre harvested in 2000/01, compared to 30.0 and 29.4 for marketing years 2001/02 and 2002/03, respectively.[145] For HRS

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[131] CR and PR at Table III-6.

[132] CR at VI-5 to VI-6, PR at VI-3.

[133] Hearing Tr. at 62 (Birdsall); Petitioners' June 27, 2003 responses to questions at 1-3; CWB's June 27, 2003 responses to questions at Tab B5 (1999-2001 HRS acreage by region), CWB's Prehearing Brief at Exh. 11 at 4 (2002 durum acreage by region).

[134] Hearing Tr. at 60-61 (Birdsall), 65-67 (Lee); Conf. Tr. at 48-49 (Fisher); petitioners' June 27, 2003 responses to questions at 1-2.

[135] CR and PR at Table III-6.

[136] CR at III-12; PR at III-8; CWB's Prehearing Brief at 38, 51; Hearing Tr. at 334-35 (Sumner) 375-77 (Przednowek).

[137] CR at III-12, PR at III-8, Hearing Tr. at 334-35 (Sumner).

[138] CWB's Prehearing Brief at 38-40; CWB's June 27, 2003 responses to questions at Tab B9.

[139] Wheat Trading Practices: Competitive Conditions Between U.S. and Canadian Wheat, Inv. No. 332-429, USITC Pub. 3465 (Dec. 2001) ("Wheat Trading Practices") at 2-11 to 2-13.

[140] CR at II-2 to II-7, PR at II-2 to II-5.

[141] CR at II-4, PR at II-3.

[142] CR at II-4 to II-5, PR at II-3.

[143] CR at II-5, PR at II-3.

[144] CR at II-1, II-12; PR at II-1, II-8.

[145] CR and PR at Table C-1.

wheat, average yields dropped sharply, particularly in the last marketing year of the period examined. Average yields fell from 37.0 bushels per acre in marketing year 2000/01 to 34.6 bushels per acre in 2001/02, and further to 28.2 bushels per acre in 2002/03.[146] The lower yields for HRS wheat in 2002/03 are likely attributed to drought conditions in the HRS wheat-growing regions of the United States.[147]

As a result of the factors discussed above, production of durum wheat was 110 million bushels in 2000/01, 84 million bushels in 2001/02, and 79 million bushels in 2002/03.[148] Because average yields for durum wheat declined steadily but modestly, most of the reduction in durum wheat production over the period examined reflects the decrease in harvested acreage following the termination of USDA's CRC program for durum wheat.[149] Production of HRS wheat was 502 million bushels in 2000/01, 476 million bushels in 2001/02, and 357 million bushels in 2002/03.[150] The reduction in production from 2000/01 to 2001/02 was a result of lower yields, because harvested acres increased slightly.[151] The reduction from 2001/02 to 2002/03 was due both to lower yields and lower acres harvested.[152]

b. Export Sales

Export sales are an important market for domestically produced durum wheat and HRS wheat. For durum wheat, export shipments accounted for 50.5 percent of total shipments of the domestic product in 2000/01, 53.8 percent in 2001/02, and 43.5 percent in 2002/03.[153] For HRS wheat, export shipments accounted for a growing proportion of total shipments of the domestic product, from 44.6 percent in 2000/01, to 47.0 percent in 2001/02, and 59.8 percent in 2002/03.[154]

On average, the quality of domestically produced durum wheat, as indicated by grade, that was exported was lower than that which remained in the United States. The bulk of durum wheat production is in North Dakota and the other states of the upper Great Plains.[155] On average, durum wheat harvested in the Great Plains was Grade No. 3 in 2000, Grade No. 2 in 2001, and Grade No. 2 in 2002.[156] On average, durum wheat harvested in the Great Plains and then exported was Grade No. 4 in 2000 and 2001

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[146] CR and PR at Table C-2.

[147] Fusarium Head Blight or "scab" also may have adversely impacted durum wheat and HRS wheat harvests during the period examined. Hearing Tr. at 246 (Potter). Scab is a wheat disease that may result both in lower production and lower quality wheat. CWB's Prehearing Brief at 39. See CWB's Postconference Brief at 36-38, 41-42.

[148] CR and PR at Table C-1.

[149] CR and PR at Table C-1.

[150] CR and PR at Table C-2.

[151] CR and PR at Table C-2.

[152] CR and PR at Table C-2.

[153] Figures derived from CR and PR at Table III-7. In marketing year 2000/01, export shipments of durum wheat accounted for 56 million bushels out of 111 million bushels of total shipments. In marketing year 2001/02, export shipments accounted for 50 million bushels out of 93 million bushels of total shipments. In marketing year 2002/03, export shipments accounted for 37 million bushels out of 85 million bushels of total shipments. CR and PR at Table III-7.

[154] Figures derived from CR and PR at Table III-7. In marketing year 2000/01, export shipments of HRS wheat accounted for 227 million bushels out of 509 million bushels of total shipments. In marketing year 2001/02, export shipments accounted for 216 million bushels out of 460 million bushels of total shipments. In marketing year 2002/03, export shipments accounted for 254 million bushels out of 425 million bushels of total shipments. CR and PR at Table III-7.

[155] CR at VI-5 and PR at VI-3. In 2002, North Dakota and Montana accounted for 77 percent of U.S. durum wheat production, while Arizona and California accounted for 22 percent. Id.

[156] U.S. Wheat Associates, 2001 and 2002 Crop Quality Reports, each at page 23.

(data for 2002 are not available).[157] Because the average grade of durum wheat exported was lower than the average of all durum wheat harvested, the average grade of U.S. grown durum wheat that was not exported is higher than the average for the harvest. For the much smaller volume of durum wheat produced in the Pacific Southwest (Arizona and California), the average grade of the harvest and of exports was the same, Grade No. 1.[158] For HRS wheat, the quality, as indicated by grade, of that which is exported by downstream purchasers appears comparable or slightly lower than the quality of the HRS wheat which remains in the U.S. market.[159]

Despite its proximity to domestic durum wheat and HRS wheat regions, little or no U.S.-grown durum wheat and HRS wheat is exported to Canada. Petitioners' counsel attributed the lack of U.S. wheat exports to Canada to a wheat marketing system that effectively precludes such exports, and referenced a U.S. government complaint against Canada before the World Trade Organization.[160]

c. Inventories

Inventories are an additional source of domestic supply. Ending inventories of durum wheat and HRS wheat were lower at the end of the period than they were at the beginning. For durum wheat, U.S. producers' ending inventories fell from 29 million bushels for marketing year 2000/01, to 21 million bushels for 2001/02, and to 15 million bushels for 2002/03.[161] As a percentage of total shipments of durum wheat, the ending inventories fell from 26.2 percent in marketing year 2000/01, to 22.3 percent in 2001/02, and to 17.8 percent in 2002/03.[162] For HRS wheat, U.S. producers' ending inventories rose from 194 million bushels for 2000/01 to 210 million bushels for 2001/02, but fell to their lowest level of the period examined in 2002/03 to 141 million bushels.[163] As a percentage of total shipments of HRS wheat, the ending inventories rose from 38.1 percent in marketing year 2000/01, to 45.6 percent in 2001/02, but then fell to their lowest level during the period examined at 33.1 percent in 2002/03.[164]

4. Drought

Drought conditions adversely affected domestic production of HRS wheat in marketing year 2002/03. Per acre yields were much lower in marketing year 2002/03 (28.2 bushels per acre) than in 2000/01 (37.0 bushels per acre) or 2001/02 (34.6 bushels per acre).[165] Periodic drought, or adverse growing conditions from other causes, is an accepted condition of competition in this industry. While such effects can be substantial, they generally are limited to a single year in duration if weather conditions improve. The drought conditions that impacted domestic HRS wheat production have had less observable effects on domestic production of durum wheat. The number of durum wheat acres planted but not harvested was 200,000 in marketing year 2002/03 compared to 100,000 in 2001/02 and

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[157] U.S. Wheat Associates, 2002 Crop Quality Reports, at page 23. For the year 2000, the export data were based on 48 samples of durum wheat for export from the Great Plains and 5 from the Pacific Southwest. Id. For 2001, the data were based on 30 samples of durum wheat for export from the Great Plains and 7 from the Pacific Southwest. Id.

[158] U.S. Wheat Associates, 2001 and 2002 Crop Quality Reports, each at page 23.

[159] U.S. Wheat Associates, 2000, 2001, and 2002 Crop Quality Reports, each at pages 14 and 16.

[160] Hearing Tr. at 216-17 (Hunnicutt).

[161] CR and PR at Table C-1.

[162] CR and PR at Table C-1.

[163] CR and PR at Table C-2.

[164] CR and PR at Table C-2.

[165] CR and PR at Table C-2.

300,000 in 2000/01.[166] Average yields were 29.4 bushels per acre in marketing year 2002/03 compared to 30.0 bushels per acre in 2001/02 and 30.7 bushels per acre in 2000/01.[167]

The effects of drought conditions were evident at an earlier time in Canada, and extended to both HRS wheat and durum wheat.[168] Acres planted with durum wheat but not harvested in Canada were higher in marketing years 2001/02 and 2002/03 than during 2000/01, while yields per acres harvested were lower in the 2001/02 and 2002/03 marketing years, even after abandoning acreage.[169] Acres planted with HRS wheat but not harvested in Canada decreased from marketing year 2000/01 to 2001/02, but increased *** in 2002/03, while per acre yields fell from 2000/01 to 2001/02, and again in 2002/03.[170]

5. The Canadian Wheat Board

An additional condition of competition unique to these industries is the activity of the Canadian Wheat Board. The CWB is the sole exporter of wheat grown in the prairie provinces of Canada, which account for more than 90 percent of Canadian durum and western red spring wheat production.[171] The CWB is the largest single entity selling wheat in the world.[172] [173] However, as a country, the United States ranks first in global sales of wheat.[174] The CWB does not appear to compete directly with farmers in the U.S. durum wheat and HRS wheat markets, but rather competes on the level of large-scale grain traders for sales both in the United States and third-country export markets.[175]

6. Substitutability

a. General

U.S. and Canadian HRS wheat are highly, but not perfectly, interchangeable, as are U.S. and Canadian durum wheat.[176] All responding purchasers agree that U.S. and Canadian durum wheat are used in the same applications and that U.S. and Canadian HRS wheat are used in the same

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[166] CR and PR at Table C-1.

[167] CR and PR at Table C-1.

[168] CWB's Prehearing Brief at 25 n.31, 111-13, Exhibit 4.

[169] CR and PR at Table VII-1.

[170] CR and PR at Table VII-2.

[171] CR at II-10, PR at II-6.

[172] CR at II-10, PR at II-6.

[173] The Australian Wheat Board is the only seller of wheat from Australia and operates in a fashion similar to the CWB.

[174] CR at II-7, PR at II-5.

[175] The statute requires the Commission to focus on subject imports, which in this case involve imports from a state trading enterprise. The statute does not contemplate a Commission evaluation of the practices of the CWB, *per se*, but only whether the subject imports cause, or threaten to cause, material injury to a domestic industry. Therefore the practices of the CWB were implicitly considered insofar as the Commission analyzed price and volume effects of the subject imports in the U.S. markets for durum wheat and HRS wheat during the period examined. In these investigations, the Commission is not directed by statute with issuing judgement on the marketing practices of the CWB (e.g., nontransparency and monopolization). It is important to acknowledge that the Commission's findings have no relationship to the separate proceedings currently underway in the World Trade Organization involving the practices of the CWB in third-country markets. Thus, in the current investigations, the Commission has not considered the extent to which the CWB's marketing practices disadvantage U.S. wheat producers in third-country export markets.

[176] CR at II-20, PR at II-13.

applications.[177] However, 11 of 17 responding purchasers reported that they specifically ordered wheat from one country in particular over other possible sources of supply.[178] Most purchasers reported that U.S. and Canadian durum wheat were comparable in terms of primary purchasing factors, as they also did with regard to U.S. and Canadian HRS wheat.[179] For durum wheat, a majority of responding purchasers rated the U.S. product inferior in dockage, product consistency, and the availability of forward contracts.[180] With respect to HRS wheat, five of 10 purchasers rated the U.S. product inferior in dockage (presence of foreign material).[181]

b. Price

Durum wheat and HRS wheat are largely commodity products, classified into six established grades distinguished by quality.[182] Purchasers of durum wheat were equally divided as to whether quality or price is the most important factor in purchasing decisions.[183] For HRS wheat, purchasers reported that price, quality, and consistency are the most important factors considered in purchasing decisions.[184]

There are global markets for durum wheat and HRS wheat and price information is rapidly disseminated throughout these markets.[185] Domestic producers are price takers in these markets.[186] Purchasers of durum wheat can find prices at the Minneapolis Grain Exchange ("MGE") or the USDA's Agricultural Marketing Service, although there were no cash quotes for durum wheat at the MGE during the last few months of the period examined.[187] Information bearing on domestic prices is more prevalent for HRS wheat. The MGE is the primary source of information regarding prices of HRS wheat.[188] For HRS wheat, the MGE has a cash market, future markets, and an options market.[189]

Downstream purchasers of durum wheat reported making 36 percent of their purchases on the spot market, and 64 percent by forward contract.[190] Downstream purchasers reported making 30 percent of their purchases of HRS wheat in the spot market and 70 percent by forward contract.[191] In general, prices for forward contracts are higher than the current cash price because, if the grain were actually held, there would be a carry charge.[192] Forward contracts were reported as "short" (under 30 days), "medium" (between 30 and 90 days), and "long" (over 90 days).[193] [194] Millers stated that forward

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[177] CR at II-27, PR at II-19.
[178] CR at II-28, PR at II-19
[179] CR and PR at Tables II-13 and II-14.
[180] CR and PR at Table II-13.
[181] CR and PR at Table II-14.
[182] CR at I-6, PR at I-4 to I-5.
[183] CR and PR at Table II-7.
[184] CR and PR at Table II-8.
[185] CR at V-7 & n.6, PR at V-5 & n.6.
[186] CWB's Prehearing Brief at 9-10.
[187] CR at V-7, PR at V-5; Preliminary Determinations at V-1.
[188] CR at V-7, PR at V-5.
[189] CR at V-7, PR at V-5.
[190] CR at V-8, PR at V-6.
[191] CR at V-8, PR at V-6.
[192] CR at V-7 to V-8, PR at V-5.
[193] CR at V-9, PR at V-6.
[194] For purchases of domestic HRS wheat by forward contract, short term contracts were the most common (42 percent), followed by medium term (36 percent), followed by long term (22 percent). CR and PR at Table V-3. For purchases of domestic durum wheat, downstream purchasers reported that 35 percent of forward contracts were short term, 46 percent were medium term, and 19 percent were long term. CR and PR at Table V-3. By comparison, forward contracts for HRS wheat and durum wheat imported from Canada tended less toward short term contracts

contracting plays an important role in risk management, but it does not affect prices.[195] They stated also that risk-reduction features of U.S. government programs, particularly the loan guarantee program, reduce incentives for U.S. producers to participate in forward contracting.[196]

HRS wheat is also traded in wheat futures, as well as spot and forward contracting. Participants in the market from producers to millers may buy and sell wheat futures to hedge against expected price movements.[197] [198]

There was limited futures trading for durum wheat during the period examined, as the MGE discontinued trading in that contract in February of 2003 after some months of inactivity.[199] Petitioners state that the CWB presence contributed to the discontinuation of the durum futures market.[200] Millers attributed the discontinuation to a lack of participation by domestic farmers.[201] The MGE indicated that durum wheat is a small volume commodity with very specific uses, and that it discontinued the contract owing to a lack of trading and interest.[202] [203]

The record indicates positive correlations in movements of prices for different classes of wheat, and between wheat and certain other agricultural products grown in the same regions.[204] In particular, there were positive correlations between the prices of HRS wheat and durum wheat, and between the prices of HRW wheat and durum wheat.[205] The highest observed correlations were between prices of HRS wheat and HRW wheat.[206] The Commission received testimony that higher correlations between HRS wheat and HRW wheat were due to substitutability between them.[207] As discussed above in regard to the domestic like product, we find that there is some substitution between HRS wheat and HRW wheat when they are of the same protein content, but that substitution, while substantial, has limits.

Transportation costs are an important factor in the price of wheat. Transportation costs are incurred in each step of the delivery chain, from producer to elevator, and from the elevator to the downstream grain-trading or milling firm. Most of the information collected on transportation costs was provided by downstream purchasers such as grain trading firms or milling concerns. Generally, they

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and more toward long term contracts but were predominantly medium term. CR and PR at Table V-3.

[195] CR at II-25 to II-26, PR at II-17.

[196] CR at II-26, PR at II-17 to II-18.

[197] CR at V-9, PR at V-6.

[198] A commonly used method of hedging is basis trading. For example, when a downstream purchaser buys wheat at the local cash price and simultaneously sells a futures contract, the difference between the two contracts is the basis. CR at V-9, PR at V-6. Basis trading allows market participants to shift risk away from commodity price movements to basis movements. CR at V-9, PR at V-6.

[199] CR at V-7, PR at V-5.

[200] CR at V-7, PR at V-5.

[201] CR at V-7, PR at V-5.

[202] CR at V-7, PR at V-5, Hearing Tr. at 287-89 (Horsager) (futures contract also discontinued for white wheat, which is two to three times larger in trading volume than durum wheat).

[203] The record contains information from the MGE both in the form of public statements not made in connection with our investigations, and in testimony by a representative of the MGE at the Commission's hearing. In the event that the two sources of information differ, we give more weight to the public statements not made in connection with our investigations.

[204] CR at V-10 to V-11 and Figure V-2; PR at V-7 to V-8 and Figure V-2; CWB's Prehearing Brief at 50, 86 n.155, Exh. 22; Hearing Tr. at 147 (Fisher).

[205] CR at V-11, PR at V-8.

[206] CR at V-11, PR at V-8.

[207] CR at V-11, PR at V-8, Hearing Tr. at 380-81 (Marten), 382-83 (Sumner).

reported transportation costs from Minneapolis to the point of delivery.[208] Many purchasers buy on a delivered basis and thus do not know the transportation costs associated with their purchases.[209]

Downstream purchasers who arranged for transportation reported that their transportation costs, as a percentage of total delivered price, averaged 7.9 percent for domestic HRS wheat and 4.9 percent for domestic durum wheat.[210] With respect to their purchases of subject imports, the purchasers reported transportation costs, as a percentage of total delivered price, averaged 6.3 percent for subject HRS wheat and 5.6 percent for subject durum wheat.[211] As noted, these figures generally represented downstream purchasers' transportation costs from Minneapolis to the point of delivery.[212]

There is record evidence that other factors affect prices. Protein content, for example, affects prices for HRS wheat. Cash prices for HRS wheat at the MGE at the 15 percent protein level averaged 26.9 percent more than cash prices for HRS wheat at the 13 percent level during the last three marketing years.[213] The term "protein overdelivery" refers to the practice of supplying wheat with a protein content that is higher than that specified in the contract. Protein overdelivery is common in sales of both subject and domestic HRS wheat.[214] Protein overdelivery, and upward adjustments in price, were more common in sales of domestic HRS wheat and durum wheat than in sales of the subject imports.[215]

c. Quality and Availability

Quality and availability are important purchasing factors in addition to price.[216] As discussed above, protein content is an important determinant of quality for HRS wheat. Compared to HRS wheat, the quality of durum wheat is less a function of protein content, because once a minimum level is achieved, excess protein content has little or no value.[217] The most desirable characteristics for durum wheat are a high vitreous kernel content, a golden color, consistent sizing, and a lack of damage and

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[208] Many purchasers in their questionnaire responses indicated that their contracted prices are tied to the Minneapolis market. The total delivered price then often included transportation charges between Minneapolis and flour mills. Some purchasers reported buying on a delivered basis and did not report transportation costs; a few purchasers reported some point other than Minneapolis as their base price point. *** confirmed that they had reported transportation costs between Minneapolis and their plants. *** reported in its questionnaire response that it ***.

[209] CR and PR at V-2.

[210] CR and PR at V-2.

[211] CR and PR at V-2.

[212] Two importers of the subject merchandise, *** and ***, reported *** estimates of transportation costs. *** estimates that transportation costs account for approximately *** percent of the total delivered cost of HRS wheat and durum wheat, while *** estimated that transportation costs accounted for *** percent of the cost of durum wheat. It appears from the record that the *** transportation cost estimates provided by these importers ***. As noted, *** reported that it ***. Additionally, as noted above, transportation costs reported by U.S. purchasers for subject HRS wheat and durum wheat were *** costs reported by *** and ***, and in the case of HRS wheat were lower than transportation costs for domestic HRS wheat. CR and PR at V-1 to V-2. See CR at V-1 and PR at V-2 (*** indicating that its transportation cost ***).

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

[214] CR and PR at Table V-2. See Wheat Trading Practices at 5-15 to 5-17.

[215] CR and PR at Table V-2.

[216] CR and PR at Tables II-7 and II-8.

[217] Conf. Tr. at 153 (Potter), 197 (Fisher).

contamination.[218] Record evidence also indicates that domestic and subject imported durum wheat have complementary characteristics, and that the best pasta is made from a blend of the two.[219]

Respondents argue that there are "persistent deficits" in food-grade durum wheat and HRS wheat in the United States.[220] Pasta makers reported that their customers' quality expectations are very high, and they require high quality durum as an input.[221] They also reported that there is an insufficient supply of high quality domestic durum to meet their needs.[222] Petitioners disagreed, stating that the volume of high quality domestic durum was more than sufficient to meet U.S. millers' needs, and pointing to the excess of domestic production of both durum wheat and HRS wheat over total use during the past 15 years.[223] We observe that a substantial portion of U.S.-grown wheat is consistently exported, even when U.S. import volumes fluctuated.[224] [225]

C. No Material Injury By Reason of Subject Durum Wheat Imports

1. Volume of Subject Imports of Durum Wheat

Section 771(C)(i) of the Act provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."[226]

The Commission generally considers the question of volume by examining both the absolute volumes of subject imports and market shares calculated as a percentage of apparent U.S. consumption. As noted previously, the parties advocated differing calculation methodologies for apparent U.S. consumption. As in our consideration of the conditions of competition unique to the durum wheat and HRS wheat markets, we use both proposed calculation methodologies to inform our analysis.[227] We also examine the volume of subject imports relative to production in the United States.[228]

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[218] Hearing Tr. at 248 (Potter); U.S. Wheat Associates, 2002 Crop Quality Report at 22; Conf. Tr. at 29, 43 (Fisher), 150 (Potter).

[219] NAMA's Prehearing Brief at 10; Hearing Tr. at 248, 347 (Potter).

[220] E.g., CWB's Posthearing Brief at 4 & n.2.

[221] NAMA's Prehearing Brief at 1-2, 10; Conf. Tr. at 161-63 (Miller) & (Zearfoss).

[222] NAMA Prehearing Brief at 2; CWB Posthearing Brief at 13; Hearing Tr. at 48-49, 223-24 (Cunningham), 246-47 (Potter), 348 (Bair), 349-50 (Anderson, Marten).

[223] Hearing Tr. at 71-74 (Fisher); petitioners' Prehearing Brief at 51. Petitioners also argue that the actions of "other players" in the U.S. market influence decisions regarding exports of U.S.-grown wheat. Petitioners' Posthearing Brief, App. 1 at 6.

[224] CR and PR at Table III-7 (U.S. exports) and Tables IV-1 and IV-2 (U.S. imports).

[225] We note, however, that the quality of HRS wheat exports was comparable or lower than the quality of U.S. shipments. U.S. Wheat Associates; 2000, 2001, and 2002 Crop Quality Reports, each at pages 14, 16, and 23.

[226] 19 U.S.C. § 1677(7)(C)(i).

[227] A calculation of apparent U.S. consumption including exports of domestic product by downstream purchasers is useful because we ultimately examine the significance of volume in relation to the question of material injury to the domestic industry (which here consists only of farmers) by reason of subject imports. From the perspective of domestic producers, exports by downstream purchasers are an important source of demand. In addition, however, apparent U.S. consumption excluding exports of domestic product by downstream purchasers is also useful, because those exports occur at the same level of trade at which subject imports appear in the market. As we examine competition between the domestic product and subject imports, the volume of domestic product that is exported informs our analysis.

[228] We generally used USDA data, rather than official Customs data to measure imports because USDA data exclude transhipments from Canada. Official customs data were used, however, to observe monthly import trends since the USDA data were not available on a monthly basis.

In absolute terms, the volume of subject durum wheat rose from 12 million bushels in marketing year 2000/01 to 18 million bushels in 2001/02, and then fell back to 13 million bushels in 2002/03.[229] When apparent U.S. consumption is calculated based on U.S. shipments of domestic product, the market share held by the subject durum wheat rose from 18.0 percent in marketing year 2000/01 to 29.3 percent in marketing year 2001/02, and then fell to 20.8 percent in 2002/03.[230] [231] When apparent U.S. consumption is calculated based on total shipments of domestic product, the market share held by the subject durum wheat rose from 9.9 percent in marketing year 2000/01 to 16.1 percent in 2001/02, and then fell to 12.8 percent in 2002/03.[232] Relative to production in the United States, the volume of subject durum wheat imports was equivalent to 11.1 percent of domestic production in marketing year 2000/01, 21.4 percent in 2001/02, and 15.8 percent in 2002/03.[233] By all measures the volume of subject imports rose from marketing year 2000/01 to 2001/02, and then fell in marketing year 2002/03 to levels slightly higher than in 2000/01.[234] [235] [236]

In sum, the volume of subject durum wheat imports increased from marketing year 2000/01 to 2001/02, and then declined in marketing year 2002/03 to a level slightly higher than during 2000/01. We find the volume of subject durum wheat imports to be significant when viewed in isolation. We note that the greatest quantities of durum wheat imports from Canada, as well as from other sources, entered the United States after the termination of USDA's CRC program for durum wheat, which reduced the harvested acreage for durum wheat in the United States. Moreover, as discussed below, we also find that

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[229] CR and PR at Table C-1.

[230] CR and PR at Table C-1.

[231] As noted previously, in considering apparent U.S. consumption and market shares, Commissioner Koplan includes exports of domestic production by downstream purchasers. Supra n.117.

[232] CR and PR at Table C-1A.

[233] CR and PR at Table C-1.

[234] Unlike for HRS wheat, drought conditions had a more limited impact on durum wheat yields and harvested acreage in the United States in marketing year 2002/03. Drought resulted in lower yields in durum production in Canada in marketing years 2001/02 and 2002/03 than in 2000/01. CR and PR at Table VII-1.

[235] Chairman Okun and Commissioner Koplan observe that the decline in U.S. imports of durum wheat from Canada in marketing year 2002/03 is consistent with the lower production volumes in Canada beginning in marketing year 2001/02 and continuing into marketing year 2002/03. CR and PR at Table VII-1. The decline in U.S. imports of durum wheat from Canada in marketing year 2002/03 also is consistent with the lower level of exports from Canada in marketing year 2002/03, reflecting diminished exports to both the United States and to all other markets. CR and PR at Table VII-1. Moreover, monthly export data compiled by the Canadian Grain Commission indicate that exports of durum wheat from Canada to the United States and to other markets declined irregularly over the course of marketing year 2002/03. Staff Work Papers, October 2, 2003, Table 1. Chairman Okun's and Commissioner Koplan's analysis of these data lead them to conclude that changes in the volume of the subject imports are not clearly related to the pendency of the investigations, and they do not reduce the weight accorded to data for marketing year 2002/03. Indeed, discounting the final year of the three year period for which data were collected does not, in their view, provide them with a sufficient basis for analyzing fully the volume, price effects, impact, and likely threat posed by the subject imports.

[236] Vice Chairman Hillman and Commissioner Miller attribute the decline in subject durum wheat volumes in marketing year 2002/03 in part to the pendency of these investigations and accord less weight to this period. Importers reported cancelling or postponing purchases due to the pendency of these investigations. Petitioners' Prehearing Brief at 90-91 and the questionnaire responses cited there. The decline in Canadian exports of durum wheat in marketing year 2002/03 was more pronounced with respect to exports to the United States than to third country markets. CR and PR at Table VII-1, Staff Work Papers at Table 1.

the volume of subject durum wheat imports did not have significant price effects on domestic durum wheat or a material adverse impact on the domestic durum wheat industry.[237] [238]

2. Price Effects of the Subject Durum Wheat Imports

Section 771(7)(C)(ii) of the Act provides that, in evaluating the price effects of the subject imports, the Commission shall consider whether –

> (I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and
>
> (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.[239]

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[237] The CWB argued that the volume of subject durum wheat from Canada is not significant because, according to the CWB, domestic producers are always able to sell all their production and thus they are not affected by the volume of subject imports. E.g., Hearing Tr. at 50 (Cunningham). We do not agree, because in a given investigation subject volumes can have significant price effects even if they do not depress the volume of sales by the domestic industry. We discuss below the basis for our finding that the volume of subject imports, although significant in isolation, is not having significant price effects on farm prices of domestic durum wheat.

The CWB also presented figures that it asserted were evidence that the volume of subject imports is not significant because domestic durum wheat production is insufficient to meet demand for high-quality durum wheat from U.S. millers. The CWB's figures deducted from supply domestic durum wheat that is exported. As described above in regard to the conditions of competition, the record indicates that the quality of domestically-produced durum wheat that is exported is lower than that which remains in the United States. The record also indicates, however, that Grade No. 1 durum from the Pacific Southwest is exported. We are unable to determine with confidence the degree to which domestic production of durum wheat was unable to supply demand for high-quality durum by millers. For the reasons given above, we determine that the volume of subject durum wheat imports is significant when viewed in isolation.

[238] The petitioners assert that the subject wheats are incontrovertibly commodity products and that the Canadian and U.S. products are interchangeable and substitutable one for another. Petitioners' Prehearing Brief at 2. Subsequently, at the Commission's hearing they argued that regardless of changes in market share by the subject imports in any particular year, the mere presence of dumped or subsidized imports must come at the expense of competing interchangeable U.S. products. Hearing Tr. at 91 (Wechsler). The Commission rejects the assertion here, that with respect to this commodity product the mere presence of subject imports is sufficient to demonstrate material injury by reason of subject imports.

The statute directs the Commission, inter alia, to consider volume of imports of merchandise, the effect of such imports on prices of like products in the U.S. and the impact of such imports on domestic producers. 19 U.S.C. 1677(7)(B)(i). As the CIT noted in Iwatsu Electric Co. v. United States (758 F. Supp. 1506, 1512-13 (Ct. Int'l Trade 1991), "The court cannot envision a case in which causation could be proved by volume alone. If that is a theoretical possibility, it is not a theory which was invoked by the ITC. The ITC relied on both volume and price data and its conclusions as to each will be reviewed." See also USX v. United States, 11 CIT 82,85, 655 F. Supp. 487,490(1987) wherein the CIT held that "Congress, this court and the ITC itself have repeatedly recognized that it is the *significance* of the quantity of imports, and not simply the absolute volume alone, that must guide the ITC's analysis under section 1677(7)" (emphasis in original).

[239] 19 U.S.C. § 1677(7)(C)(ii).

As noted in our discussion of the relevant conditions of competition, the record in these investigations indicates that durum wheat is a commodity-like product, sold by grade. Most sales are by contracts of varying duration, but approximately one-third of sales are on the spot market.[240]

Purchasers of durum wheat ranked quality and price as the most important factors used in purchasing decisions.[241] Interchangeability between U.S.-grown and subject durum wheat is high, but purchasers generally ranked the domestic product inferior to durum wheat from Canada in product consistency and dockage.[242] Demand for durum wheat is not price sensitive, meaning that changes in price do not substantially change quantity demanded,[243] and is consistent with the general lack of substitute products for durum wheat in its primary application, pasta.[244]

The Commission collected pricing data for durum wheat on a number of different bases. Conventional price comparisons were measured based on the weighted average delivered prices of purchases of U.S.-grown and Canadian number 1 and number 2 durum wheat.[245] Both petitioners and the CWB agreed that conventional price comparisons are influenced by various factors including, chiefly, transportation costs. Therefore, Commission staff also developed price comparisons that were plant-specific, to control for variations in transportation costs that were owing to differences in delivery locations.[246] Finally, the Commission utilized a statistical approach to incorporate the effects of important attributes such as dockage, protein content, vitreous kernel content, and test weight on prices.[247] [248] [249]

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[240] CR at V-8, PR at V-6; CR and PR at Table V-3.

[241] CR and PR at Table II-7.

[242] CR at II-27, PR at II-19 (purchasers report that wheat grown in Canada and the United States are used in the same applications); CR and PR at Table II-13 (5 purchasers find domestic durum wheat inferior in consistency and 4 find it inferior in dockage compared to Canadian durum wheat). In addition, 4 purchasers rated U.S.-grown durum wheat as inferior in terms of the availability of forward contracts. CR and PR at Table II-13.

[243] CR at II-30, PR at II-21.

[244] CR at II-14, PR at II-9.

[245] With respect to underselling, prices received by domestic producers and prices for the subject durum wheat are not directly comparable because the transactions do not take place at the same level of trade. Domestic producers generally sell to local grain elevators, which in turn sell to large grain-trading and milling firms. Subject imports generally are not sold to local grain elevators but instead directly to large grain-trading and milling firms.

[246] CR at V-15, PR at V-10.

[247] CR and PR at E-3.

[248] Because the refinements in the plant-specific and statistical analyses allow them to take into account multiple factors that directly impact price comparisons, Chairman Okun and Commissioner Koplan have placed relatively greater weight on these forms of analysis than on conventional price comparisons.

[249] It was argued that other factors besides transportation costs skew price comparisons, including protein content, and date of delivery. E.g., CWB's Prehearing Brief at 61-63. See CR at V-12 to V-13, PR at V-9 (describing Commission's data collection, based in part on party comments on draft questionnaires). To incorporate the effects on prices of dockage, protein content, vitreous kernel content, test weight, and mill location, the Commission statistically analyzed prices for durum wheat. Based on 191 usable observations, the estimated mean of Canadian number 1 durum wheat, controlling for the effects of these factors, was $194.61 per metric ton, higher than the estimated mean of $179.53 for U.S.-grown number 1 durum wheat. Based on 200 usable observations, the estimated mean of Canadian number 2 durum wheat was $180.87 per metric ton, higher than the estimated mean of $167.27 for U.S.-grown number 2 durum wheat. Thus, on balance the estimated mean price of U.S. durum wheat was statistically less than the estimated mean price of comparably graded durum wheat from Canada. CR at E-5 through E-7, PR at E-4 to E-5.

Vice Chairman Hillman and Commissioner Miller note, however, controlling for these additional variables results in the discarding of many possible price comparisons. See Hearing Tr. at 340-41 (Potter). Although plant-specific comparisons are imperfect, Vice Chairman Hillman and Commissioner Miller determine in their discretion that the plant-specific data are the best on the record for purposes of evaluating underselling.

Monthly price comparisons of No. 1 grade subject imported and domestically-produced durum wheat,[250] on a plant-specific basis, show underselling by the subject imports in 8 of 32 monthly comparisons, with 22 instances of overselling and two comparisons at the same price.[251] Margins of overselling were much higher on average than margins of underselling, ranging from 0.7 percent to 39.8 percent.[252] Monthly price comparisons of Grade No. 2 subject imported and domestically-produced durum wheat indicated underselling by the subject imports in only 2 of 18 observations, with overselling in the 16 other comparisons.[253] Margins in the few comparisons exhibiting underselling were very low, at 0.2 percent and 0.8 percent, while margins of overselling were much higher on average, ranging from 0.4 percent to 11.6 percent.[254] Subsequent to August 2002, there were no reported purchase prices for Canadian number 1 and number 2 durum wheat.

Using conventional price comparisons, evidence of underselling is highly limited. Prices for Canadian number 1 and number 2 durum wheat were lower than prices for U.S.-grown number 1 and number 2 durum wheat in 0 of 25 and 5 of 18 months, respectively, between June 2000 and August 2002. Subsequent to August 2002, there were no reported purchase prices for Canadian number 1 and number 2 durum wheat. In total, out of 72 potential monthly observations, price comparisons were possible in 43 instances (60 percent of observations); durum wheat from Canada was priced below U.S.-grown wheat in only 5 of those 43 comparisons (12 percent of comparisons).[255]

Based on the record in these investigations, there has been no underselling by conventional measurements since July 2002, and no underselling on a plant-specific basis since November 2001.[256] Moreover, evidence of underselling was highly limited even during the earlier portions of the period examined. Finally, statistical analysis indicates that mean prices for durum wheat from Canada were higher than mean prices for comparable U.S.-grown durum wheat. In sum, overselling predominated in price comparisons, and margins of overselling were much greater than in the comparisons showing underselling. Therefore, having considered fully the concerns of the parties with respect to price comparability for durum wheat grown in the United States and in Canada, we conclude that there has not been significant price underselling by the imported merchandise as compared with the price of domestic like product of the United States.

We do not find evidence of significant price depressing or price suppressing effects by subject durum wheat imports, whether prices are considered on a yearly basis or on a monthly basis. On a yearly basis, average prices received by farmers rose from $2.66 per bushel in marketing year 2000/01 to $3.00 per bushel in 2001/02, and rose further to $4.04 in 2002/03.[257] Hence, the average farm price increased from marketing year 2000/01 to 2001/02, even though the volume of subject durum imports increased.[258]

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[250] As mentioned previously, the subject imported product includes all varieties of durum wheat, but the leading product actually traded is "Canadian Western Amber Durum." This wheat comes within the scope of the subject merchandise as defined by Commerce. 68 Fed. Reg. 52741, 52742 (Sept. 5, 2003); 68 Fed. Reg. 52747, 52748 (Sept. 5, 2003). For simplicity, we refer to subject durum wheat.

[251] CR at V-21 to V-22 and Tables V-8 and V-9, PR at V-11 and Tables V-8 and V-9.

[252] CR at V-21 to V-22 and Tables V-8 and V-9, PR at V-11 and Tables V-8 and V-9. Margins of underselling ranged from 0.2 percent to 8.4 percent. Id.

[253] CR and PR at Tables V-10 and V-11.

[254] CR and PR at Tables V-10 and V-11.

[255] CR and PR at Tables V-4 and V-5.

[256] CR at V-21; PR at V-11; CR and PR at Tables V-4, V-5, V-8, V-9, V-10, and V-11; *** purchaser questionnaire.

[257] First Staff Work Papers at Table B.

[258] As noted previously the volume of subject durum wheat imports increased from marketing year 2000/01 to 2001/02 in absolute terms (from 12 million bushels to 18 million bushels), relative to consumption in the United States (depending on the measure, from 18.0 percent of market share to 29.3 percent, or from 9.9 percent of market share to 16.1 percent), and relative to production of durum wheat in the United States (from 11.1 percent to 21.4

Average farm prices increased further from marketing year 2001/02 to 2002/03, while the volume of subject imports decreased by all measures. In short, the yearly increases in the average farm prices of domestic durum wheat do not correlate to changes in the volume of subject durum wheat imports and do not show a pattern of price depression.[259]

Nor do fluctuations in monthly prices of durum wheat display significant price depressing or price suppressing effects on domestic durum wheat prices. Rather, pricing data indicate that prices for the domestic products increased over the period examined. U.S. prices for grades 1 and 2 durum wheat fluctuated in marketing years 2000/01 and 2001/02, reaching period lows in August 2000 and highs for the first two marketing years in December 2000.[260] By September 2002, however, U.S. prices for durum wheat began to rise sharply, and remained at high levels throughout the remainder of the period examined, despite softening somewhat in the last half of the marketing year.[261] Indeed, monthly prices were higher in 20 of 24 possible product/month combinations in marketing year 2002/03 than in all possible comparisons in the same months in both marketing years 2000/01 and 2001/02.[262] We conclude that subject imports of durum wheat from Canada have not depressed prices for the domestic like product to a significant degree, based on this record of fluctuating prices in marketing years 2000/01 and 2001/02,[263] followed by price increases and generally high price levels in marketing year 2002/03.

In light of the overall rise in prices, we have considered whether subject imports have prevented further price increases, which otherwise would have occurred, to a significant degree. The record in these investigations, however, does not indicate a pattern of rising costs that might suggest the existence of a "cost-price squeeze." To the contrary, total direct and overhead expenses declined for owned, cash-rented, and share-rented farms in North Dakota between 2000 and 2002.[264]

Finally, given the nature of price competition in these markets, we do not view the absence of lost sales or lost revenues allegations in the petition as meaningful to our analysis of the significance of any price effects attributable to the subject imports of durum wheat from Canada.[265]

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percent).

[259] This finding is consistent with other domestic product data on the record. On an annual basis, the average unit values of U.S. durum wheat reported by purchasers rose from $154.86 per metric ton in marketing year 2000/01 to $164.80 in marketing year 2001/02 and to $185.19 in marketing year 2002/03. CR and PR at Table II-3.

[260] CR and PR at Tables V-4 and V-5.

[261] CR and PR at Tables V-4 and V-5. Generally similar trends are observable based on plant-specific price data (lowest U.S. prices early in marketing year 2000/01, initial price peaks in mid-marketing year 2000/01 for number 2 durum wheat and *** purchases of number 1 durum wheat but early in marketing year 2001/02 for *** purchases of number 1 durum wheat, a substantial increase in prices in early-to-mid marketing year 2002/03, with continued high prices despite some softening later in the marketing year). CR and PR at Tables V-8 through V-11.

[262] These comparisons are based on the Commission's most complete price series for weighted average delivered prices. CR and PR at Tables V-4 and V-5. Other price comparisons yield consistent results, however. Based on plant-specific comparisons, U.S. durum wheat prices were higher in 46 of 53 possible product-specific comparisons in marketing year 2002/03 than in all possible comparisons the same months in both marketing year 2000/01 and 2001/02. CR and PR at Tables V-8 through V-11; purchaser questionnaires of ***.

[263] Vice Chairman Hillman and Commissioner Miller also considered price movements for durum wheat during the time before and after the filing of the petition and do not join in the remainder of this sentence as they accord less weight to the post-petition period. During marketing year 2001/02, farm prices for domestic durum wheat fluctuated, from a low of $2.40 per bushel to a high of $3.49 per bushel. First Staff Work Papers at Table C. Monthly prices for durum wheat rose in the month that the petition was filed, and in the two months after it was filed. The price increases are explained in part by the pendency of the investigations.

[264] Total and direct overhead expenses per acre declined from $95.40 in 2000 to $88.67 in 2002 for owned farms; from $106.07 to $103.95 for cash rented farms; and from $74.61 to $70.85 for share rented farms. CR and PR at Table VI-3.

[265] *See* Petition at 59-60.

In conclusion, the record in these investigations indicates that underselling by durum wheat from Canada is not significant. Likewise, the record in these investigations indicates overall rising U.S. prices and declining costs, leading us to conclude that subject imports have not depressed prices to a significant degree or prevented price increases, which otherwise would have occurred, to a significant degree. Therefore, on balance, we find that the subject imports have not had significant price effects.[266]

3. Impact of the Subject Durum Wheat Imports

In examining the impact of the subject imports on the domestic industry, we consider all relevant economic factors that bear on the state of the industry in the United States.[267] 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."[268] [269]

We have considered each of the factors listed above, and reached conclusions where the data are available to us. As noted previously, the Commission did not mail questionnaires to producers of durum wheat because producers number in the thousands and because there was insufficient information about the industry to develop a reliable representative sampling methodology. The Commission obtained public information relating to the various statutory impact factors from government, academic, and industry sources, including state agricultural extension services. The Commission received extensive information from the parties. The Commission asked the parties to identify any additional sources that the Commission should consider.

Our evaluation of the condition of the domestic industry is based on available public data on the record. Domestic production of durum wheat fell from 110 million bushels in 2000/01 to 84 million bushels in 2001/02 and then declined further to 79 million bushels in 2002/03.[270] Acres planted with durum wheat fell from 3.9 million in marketing year 2000/01 to 2.9 million each in 2001/02 and 2002/03.[271] Acres harvested fell similarly, from 3.6 million in marketing year 2000/01 to 2.8 million in 2001/02, and then declined slightly to 2.7 million in 2002/03.[272] Average yields declined over the period examined from 30.7 bushels per acre in 2000/01 to 30.0 bushels per acre in 2001/02 and to 29.4 bushels

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[266] Commission Staff did not present a formal economic model in these investigations, but rather summarized certain possible outcomes resulting from the imposition of duties on subject imports. Staff found that a reduction in imports would result in a greater price effect than quantity effect; in essence, characterizing demand for U.S. wheat as highly inelastic. CR at II-31, PR at II-21 to II-22. We have considered the possible outcomes reviewed by Staff, and based on the record as a whole and for the reasons discussed in this section of our Views, we do not conclude that any negative price effects attributable to subject imports and subject to remedy under the statute rises to a significant level.

[267] 19 U.S.C. § 1677(7)(C)(iii); see also SAA at 851 and 885 ("In material injury determinations, the Commission considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports." Id. at 885).

[268] 19 U.S.C. § 1677(7)(C)(iii); see also SAA at 851 and 885 and Live Cattle from Canada and Mexico, Invs. Nos. 701-TA-386 and 731-TA-812 to 813 (Preliminary), USITC Pub. 3155 (Feb. 1999) at 25, n.148.

[269] The statute instructs the Commission to consider the "magnitude of the dumping margin" in an antidumping proceeding as part of its consideration of the impact of imports. 19 U.S.C. § 1677(7)(C)(iii)(V). In its notice of final determinations of sales at less than fair value, Commerce determined weighted average antidumping margins on subject durum wheat from Canada of 8.26 percent ad valorem. 68 Fed. Reg. 52741, 52743 (Sept. 5, 2003).

[270] CR and PR at Table C-1.

[271] CR and PR at Table C-1.

[272] CR and PR at Table C-1.

per acre in 2002/03.[273] Thus, the bulk of the decline in domestic production is due to lower planted and harvested acres. Inventories declined throughout the period examined, decreasing from 29 million bushels in marketing year 2000/01 to 21 million bushels in marketing year 2001/02, and then to the lowest level during the period examined, 15 million bushels, in marketing year 2002/03.[274]

Similarly, sales of durum wheat declined throughout the period examined, matching the overall decline in output by the domestic industry. The domestic industry's total shipments decreased from 111 million bushels in marketing year 2000/01 to 93 million bushels in marketing year 2001/02 and to 85 million bushels in marketing year 2002/03.[275] U.S. shipments of durum wheat produced in the United States decreased from 55 million bushels in marketing year 2000/01 to 43 million bushels in marketing year 2001/02, but then increased to 47 million bushels in marketing year 2002/03.[276] The domestic industry's market share, based on U.S. shipments of domestic durum, was 81.4 percent in marketing year 2000/01 and 69.3 percent in marketing year 2001/02, but then recovered to 78.3 percent in marketing year 2002/03.[277] The domestic industry's market share, based on total shipments of domestic durum, was 89.8 percent in marketing year 2000/01 and 83.1 percent in marketing year 2001/02, but then recovered to 86.6 percent in marketing year 2002/03.[278]

Employment data are limited to hired labor and are largely extrapolated from existing data compiled by the State of North Dakota. Wages paid to hired labor fell between 2000 and 2002 from $7.5 million to $5.3 million.[279] This decline reflected the reductions in harvested acreage, partially offset by rising labor costs per acre harvested.[280] Productivity can be measured only indirectly through a comparison of wages and production. Nonetheless, the observed decline in productivity between marketing year 2000/01 and marketing year 2002/03 (as reflected by the increase in labor cost per bushel) is consistent with the reduction in durum yields.[281]

In examining the financial performance of the domestic durum wheat industry, we examine data provided for durum wheat farms in North Dakota, which accounted for 61 percent of the harvest of durum wheat in 2002.[282] Because the data are reported on a per-harvested-acre basis, we take into account that fluctuations in per acre total product return is a function both of prices received and yields per acre.[283] The data are segregated according to the three predominant land tenure arrangements found

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[273] CR and PR at Table C-1.

[274] CR and PR at Table III-8.

[275] CR and PR at Table III-7. We focus on the quantity of total shipments as the nearest equivalent to sales volume. Financial data on net sales are unavailable from USDA, as are data quantifying the value of total shipments. Similarly, capacity utilization is not adequately captured in the data available from USDA. See CR and PR at III-8 and n.10.

[276] CR and PR at Table III-7. The concept of "U.S. shipments," as opposed to export shipments, is of mixed usefulness in these investigations, as the U.S. growers that constitute the domestic industry sell much of their production to grain elevators. E.g., Hearing Tr. at 101 (Klein), Petition at 59-60.

[277] CR and PR at Table IV-9.

[278] CR and PR at Table C-1A.

[279] CR and PR at Table III-10. Economic returns are shown on a calendar year basis. We note that, for example, economic returns in 2000 generally reflect industry conditions (such as price) in marketing year 2000/01, because the economic returns reflect the expenses and revenues associated with the crop harvested in the late summer or early fall.

[280] CR and PR at Table III-10.

[281] Between marketing year 2000/01 and marketing year 2002/03, labor costs rose from $0.10 to $0.11 per bushel in North Dakota. CR and PR at Table III-10.

[282] CR at VI-5, PR at VI-3.

[283] As noted above, average yields declining from 30.7 bushels per acre in marketing year 2000/2001, to 30.0 bushels per acre in 2001/02 and to 29.4 bushels per acre in 2002/03.

in the durum wheat industry: owned land, cash rented land, and share rented land.[284] In North Dakota, for all farms growing wheat, cash rented land is the most common form, accounting for just over half of acres harvested.[285] Owned land accounted for approximately 30 percent of all wheat acres harvested in North Dakota, while share rented land accounted for approximately 15 percent of all wheat acres harvested in that state.[286]

In general, the experience of domestic producers of durum wheat was consistent across the forms of land tenure. The domestic durum wheat industry experienced per-harvested-acre net returns on owned land and net losses on cash rented and share rented land in 2000.[287] In 2001, domestic producers experienced poorer financial performance when measured by net returns. Net returns on owned land declined from 2000 to 2001, and net losses increased on cash rented and share rented land.[288] In 2002, per-harvested acre net returns improved on owned land to a level much higher than in 2000 or 2001.[289] Net losses were smaller in 2002 than in 2001, and about the same as in 2000, for cash rented and share rented land.[290]

We also examine total product return because it reflects market prices, although it also includes loan deficiency payments.[291] In this industry, we view total product return as the closest approximation of the impact of changes in the price of durum wheat on the domestic industry's performance (as noted, yields also influence total product return, but declined only very slightly over the period examined). Total product return increased from 2000 to 2001, and from 2001 to 2002 on cash rented and share rented land.[292] On owned land, total product return increased from 2000 to 2001, and, while it declined in 2002, remained at a level that was higher than in 2000.[293]

Based on the best information available to the Commission, net returns and total product returns generally show a domestic industry that declined in financial health from 2000 to 2001, but then in 2002 reached a level the same as, or higher than, the level experienced in 2000, particularly in net returns on owned land and total product return by all tenures. The poorer performance in 2001 is coincident with higher volumes of subject durum wheat imports and lower volumes of U.S.-grown wheat. As discussed above, however, subject imports of durum wheat did not significantly undersell the domestic product, and did not have significant price depressing or price suppressing effects during the period examined. Farm prices for durum wheat increased from marketing year 2000/01 to 2001/02 and again in 2002/03. In addition, the lower net returns in 2002/02 were due to decreases in miscellaneous income, such as crop

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[284] When durum wheat is produced on share rented land, the producer pays rent to the land owner in the form of a share of the crop harvested.

[285] CR and PR at Table VI-3 n.1.

[286] CR and PR at Table VI-3 n.1.

[287] In North Dakota in 2000, per acre net returns without government payments were $3.21 for owned land, and per acre net losses without government payments were $2.83 for cash rented land, and $3.12 for share rented land. CR and PR at Table VI-3.

[288] In North Dakota in 2001, per acre net returns without government payments were $1.09 for owned land, and per acre net losses without government payments were $8.09 for cash rented land, and $5.20 for share rented land. CR and PR at Table VI-3.

[289] In North Dakota in 2002, per acre net returns without government payments were $21.90 for owned land. CR and PR at Table VI-3.

[290] In North Dakota in 2002, per acre net losses without government payments were $2.66 for cash rented land, and $3.21 for share rented land. CR and PR at Table VI-3.

[291] CR and PR at Table VI-3 n.2.

[292] In North Dakota, per acre total product return for cash rented land increased from $66.32 in 2000 to $82.04 in 2001 and to $85.97 in 2002. Per acre total product return for share rented land increased from $53.87 in 2000 to $58.60 in 2001 and to $61.98 in 2002. CR and PR at Table VI-3.

[293] In North Dakota, per acre total product return for owned land increased from $80.18 in 2000 to $90.68 in 2001, and declined to $86.94 in 2002. CR and PR at Table VI-3.

insurance or disaster payments, and increases in total direct and overhead expenses, factors unrelated to subject imports. When these factors improved in 2002,[294] so did the industry's net returns. In addition, total product return, the factor most nearly related to price changes, was higher in 2001 than in the previous years for all types of land tenure and continued to improve in 2002 for both cash rented and share rented land while it fell somewhat for owned land, although remaining above the 2000 level. Accordingly, we do not attribute changes in the financial performance of the domestic industry to subject durum wheat imports in any significant respect. We thus do not find that subject imports of durum wheat from Canada are having significant adverse effects on the domestic durum wheat industry.[295]

We also consider any additional burden on government income or price support programs relating to this agricultural product.[296] On a per acre basis, government payments, including decoupled payments under the Agricultural Market Transition Act and market loss assistance payments, declined over the period examined.[297] In particular, we observe that as a result of rising market prices, loan program and disaster/countercyclical payments for all types of wheat were lower in 2001 than in 2000 and virtually disappeared in 2002 and 2003.[298]

CONCLUSION

For the reasons stated above, we determine that the domestic industry producing durum wheat is not materially injured by reason of subject durum wheat imports from Canada that are subsidized and sold in the United States at less than fair value.

D. No Threat of Material Injury By Reason of Subject Durum Wheat Imports

Section 771(7)(F) of the Act directs the Commission to determine whether an industry in the United States is threatened with material injury by reason of the subject imports by analyzing whether "further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted."[299] The Commission may not make such a determination "on the basis of mere conjecture or supposition," and considers the threat factors "as a whole."[300] In making our determination, we have considered all factors that are relevant to these investigations.[301] Based on an evaluation of the relevant statutory factors, we find that an industry

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[294] Although miscellaneous income continued to decline for cash rented and share rented land, this was more than offset by improved expenses and total product return. CR and PR at Table VI-3.

[295] Both parties submitted economic models in their pre-hearing briefs and responded to requests for additional information. Commission staff analyzed all information on the record regarding both models. See CR at II-32 to II-33 and App. E, PR at II-22 and App. E. The Commission did not rely on the economic analyses provided by either party in reaching its determinations in these investigations.

[296] 19 U.S.C. § 1677(7)(D).

[297] CR and PR at Table VI-3.

[298] CR at II-5, PR at II-2; CR and PR at Table II-2.

[299] 19 U.S.C. § 1677d(b) and 1677(7)(F)(ii).

[300] 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 Corp. v. United States, 590 F. Supp. 1273, 1280 (Ct. Int'l Trade 1984); see also Calabrian Corp. v. United States, 794 F. Supp. 377, 387-88 (Ct. Int'l Trade 1992), citing H.R. Rep. No. 98-1156 at 174 (1984).

[301] 19 U.S.C. § 1677(7)(F). The Commission must consider, in addition to other relevant economic factors, the following statutory factors in its threat analysis:

> (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

in the United States is not threatened with material injury by reason of imports of durum wheat from Canada that are subsidized and sold in the United States at LTFV.[302]

Our consideration of threat takes into account conditions that may affect the volume of subject durum wheat imports from Canada in the imminent future. The subject Canadian durum wheat industry is highly export-oriented. Sales to the home market accounted for between *** percent and *** percent of shipments of Canadian durum wheat production over the period examined.[303] The bulk of exports of Canadian durum wheat, however, was directed to third-country markets. The volume of exports directed to third country markets was between *** and *** times the volume shipped to the United States over the period examined, depending on the marketing year.[304] Nevertheless, the United States remains an important export market for durum wheat produced in Canada.

Drought adversely affected production of durum wheat in Canada in marketing years 2001/02 and 2002/03, particularly in the former marketing year.[305] Production of durum wheat in Canada fell by nearly *** from marketing year 2000/01 to 2001/02, but then increased from 2001/02 to 2002/03.[306] The lower yields associated with drought were not projected to continue into the 2003/04 marketing year.[307]

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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 indicating the likelihood of substantially increased imports of the subject merchandise into 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 country, which can be used to produce the subject merchandise, are currently being used to produce other products,

(VII) in any investigation under this subtitle 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 that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 1671d(b)(1) or 1673d(b)(1) of this title 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 domestic 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).

Moreover, the Commission shall consider the threat factors "as a whole" in making its determination "whether further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur" unless an order issues. 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.

Factor VII is inapplicable to these investigations.

[302] In its notice of final affirmative countervailing duty determinations, Commerce did not provide any information relevant to Factor I. 68 Fed. Reg. 52747 (Sept. 5, 2003).

[303] CR and PR at Table VII-1.

[304] CR and PR at Table VII-1.

[305] CR and PR at Table VII-1.

[306] CR and PR at Table VII-1.

[307] CR and PR at Table VII-1.

Drought conditions did not, however, immediately lead to lower exports to the United States. Despite the very steep decline in production of durum wheat from marketing year 2000/01 to 2001/02, exports to the United States increased, both in absolute volume and as a percentage of Canadian shipments as stocks decreased.[308] Later, when production of durum wheat in Canada increased from marketing year 2001/02 to 2002/03, exports to the United States fell, in quantity and as a share of Canadian shipments. Because home market demand is small in Canada relative to production, the Canadian durum wheat is able to meet home market demand despite drought-induced declines in domestic production.

Taking into account this and other record evidence, we do not find that substantial increases in imports of durum wheat from Canada are likely in the imminent future. While the United States is an important market for the Canadian durum wheat industry, it is far less important than the combined home market and export sales to third country markets. The expected end of drought conditions in Canada does not indicate a likelihood of significantly higher volumes because the record indicates no change in the volume of subject imports as a result of the drought. To the contrary, the volume of subject imports to the United States increased despite much lower production in Canada in 2001/02. Consistent with CWB projections, some increase in subject import volumes is likely compared with subject import volume observed in marketing year 2002/03. There is no evidence, however, that subject durum wheat volumes likely would increase substantially above the levels observed in 2000/01 or 2001/02, prior to the filing of the petition.

Even with projected increases in production and stock levels, Canadian exports of durum wheat to the United States are not expected to achieve even 2000/01 and 2001/02 marketing year levels. As a share of the projected U.S. market in 2003/04 (including U.S. shipments of 49 million bushels), Canadian exports (*** bushels) would account for only about *** percent, which is lower than the share in the initial year of the period examined (18.0 percent).[309] Moreover, the record indicates that inventories of Canadian durum wheat held by U.S. importers were reported to have fallen to *** by the end of marketing year 2002/03, their lowest level during the period examined.[310]

The record indicates there is at best only a limited potential for product shifting from HRS wheat (subject now to an affirmative determination) to durum wheat production due to certain impediments. Agronomic conditions tend to favor one wheat over the other in a given region. As noted above, the production of durum wheat is considered to be more risky than the production of HRS wheat because the former is more susceptible to quality losses due to changes in weather. Shifting production from HRS wheat to durum wheat is also complicated by the risk of add-mixture. Wheat that is co-mingled is downgraded and is sold at a lower price. Moreover, in Canada, acres planted with durum wheat and HRS wheat each declined from marketing year 2000/01 to 2002/03, contrary to the notion of significant shifts between the two.[311]

Considered in isolation, the Commission's affirmative material injury determination on HRS wheat[312] from Canada might create an incentive for producers of HRS wheat in Canada to shift to the production of durum wheat. However, export sales to the United States account for a relatively small share of Canadian durum wheat and HRS wheat shipments, given that shipments to the home market and third country markets are much larger. Based on these facts, and the impediments to shifting discussed above, we do not find that the entry of antidumping duty and countervailing duty orders on HRS wheat

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[308] CR and PR at Table VII-1.

[309] *See* CR and PR at Table VII-1 and Table C-1. If calculated based on total shipments, the share of Canadian producers' shipments is projected to be *** percent in marketing year 2003/04. *See* CR and PR at Table VII-1 and Table C-1A.

[310] CR and PR at Table VII-6.

[311] CR and PR at Tables VII-1 and VII-2.

[312] Chairman Okun and Commissioner Koplan dissenting.

would likely result in a substantial increase in subject import volumes of durum wheat in the imminent future.

The capacity of the Canadian durum wheat industry, measured in acres planted, is projected to be lower in marketing years 2003/04 than in 2000/01 or 2002/03.[313] End-of-period inventories of durum wheat held in Canada declined by *** from *** bushels in marketing year 2000/01 to *** bushels in 2002/03.[314] Nor is there a significant rate of increase in the volume or market penetration of subject imports during the period examined indicating the likelihood of substantial increases of imported durum wheat from Canada in the imminent future. As discussed above, the volume of subject imports of durum wheat increased from marketing year 2000/01 to 2001/02, and then fell in 2002/03. We attribute declines in 2002/03 in part to the pendency of these investigations, but we do not believe that the absence of that factor would result in increases to levels above those in 2000/01 and 2001/02, given the importance of the home market and third-country markets to the Canadian durum wheat industry.[315]

The record also indicates that transportation costs play an important role in determining the ultimate destination of wheat grown in Canada. Transportation costs strongly influence whether durum wheat from Canada is competitive for sales to particular markets. Accordingly, we would not expect that substantial volumes of durum wheat would be directed away from their most competitive markets (often third-country markets or the home market) to the U.S. market.

We also find no evidence in the record that subject durum wheat is likely to enter the United States at prices likely to have a significant depressing or suppressing effect on domestic prices for durum wheat. As discussed above, the subject durum wheat oversold the domestic durum wheat in most price comparisons. The subject durum wheat did not have significant price-depressing or price-suppressing effects during the period examined. Farm prices for durum wheat rose from marketing year 2000/01 to 2001/02 despite an increase in the volume of subject durum wheat imports. They rose again from marketing year 2001/02 to 2002/03 when the volume of subject durum wheat was lower, but an examination of monthly changes in the volume of subject imports and monthly farm prices does not show a correlation. In addition, the USDA projects a 30-cent per bushel increase for U.S. wheat prices generally for 2003/04.[316]

The record does not indicate any actual or potential negative effects on the existing development and production efforts of the domestic industry. As discussed above, the number of acres planted with durum wheat declined over the period examined, but largely as a result of changes in the federal CRC program. In the absence of any observable price effects or adverse impact by subject durum wheat, we do not attribute any difficulties experienced by domestic durum wheat producers to subject imports in significant part.

We have considered whether there are any other demonstrable adverse trends that indicate the probability of likely 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). In this regard, there are no known dumping findings or antidumping remedies in third-country markets against the subject imports.

Based on an evaluation of all the relevant statutory factors, including those indicating a lack of likely volume and price effects of subject imports, we do not find that further subsidized and dumped subject imports from Canada are imminent or that material injury by reason of such imports would occur absent countervailing duty and antidumping duty orders. Accordingly, we do not find that an industry in

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[313] CR and PR at Table VII-1.

[314] CR and PR at Table VII-1.

[315] For the reasons discussed in the "Volume" section of these Views, Chairman Okun's and Commissioner Koplan's analysis of the data lead them to conclude that changes in the volume of the subject imports are not clearly related to the pendency of the investigations. They agree that significant increases in subject import volume are not likely.

[316] CR at II-2, PR at II-1.

the United States is threatened with material injury by reason of subject imports of durum wheat from Canada that are subsidized and sold at less than fair value.

CONCLUSION

For the foregoing reasons, we determine that an industry in the United States is not materially injured or threatened with material injury by reason of imports of durum wheat from Canada that Commerce found to be subsidized and sold in the United States at less than fair value.

E. Material Injury by Reason of Subject Imports of Hard Red Spring Wheat[317]

In contrast to our negative determinations on durum wheat, we find that subject imports of HRS wheat are causing material injury to the domestic industry, as explained more fully below. In addition to a significant volume of subject imports, we find that subject HRS wheat imports, unlike subject durum wheat imports, significantly undersold and had significant price depressing effects on the domestic product. The domestic product and subject imports are highly interchangeable, price is an important factor in purchases, and quality differences played a less important role in HRS wheat purchasing decisions than in the case of durum wheat. The declines in the industry's financial performance during the period examined are attributable in significant part to the declines in prices when subject import volumes were highest. As with durum wheat, we give less weight to the post-petition period when subject imports declined sharply and prices rose abruptly.

1. Volume of Subject Imports of Hard Red Spring Wheat

Section 771(C)(i) of the Act provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."[318]

The Commission generally considers volume by examining both the absolute volumes of subject imports and the market shares held by subject imports calculated as a percentage of apparent U.S. consumption. As noted, the parties advocated differing calculation methodologies for apparent U.S. consumption. As we did for purposes of considering the conditions of competition unique to these markets, we use both proposed calculation methodologies to inform our analysis. We also examine the volume of subject imports relative to production in the United States.[319]

In absolute terms, the volume of subject HRS wheat rose from 41 million bushels in marketing year 2000/01 to 46 million bushels in 2001/02, and then fell sharply to 11 million bushels in 2002/03.[320] When apparent U.S. consumption is calculated not to include exports of domestic product by downstream purchasers, the market share held by the subject HRS wheat rose from 12.8 percent in marketing year 2000/01 to 15.9 percent in marketing year 2001/02, and then fell to 5.8 percent in 2002/03.[321] [322] When apparent U.S. consumption is calculated to include exports of domestic product by downstream

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[317] Chairman Okun and Commissioner Koplan do not join this section. See their dissenting views.

[318] 19 U.S.C. § 1677(7)(C)(i).

[319] We generally used USDA data, rather than official Customs data to measure imports because USDA data exclude transhipments from Canada. Official customs data were used, however, to observe monthly import trends since the USDA data were not available on a monthly basis.

[320] CR and PR at Table C-2.

[321] CR and PR at Table C-2.

[322] Apparent U.S. consumption, calculated by both methodologies, is reported above in the discussion of the conditions of competition.

purchasers, the market share held by the subject HRS wheat rose from 7.5 percent in marketing year 2000/01 to 9.1 percent in 2001/02, and then fell to 2.4 percent in 2002/03.[323] Relative to production in the United States, the volume of subject HRS wheat imports was 8.3 percent of domestic production in marketing year 2000/01, 9.7 percent in 2001/02, and 3.0 percent in 2002/03.[324] By all measures the volume of subject imports rose from marketing year 2000/01 to 2001/02, and then fell by a greater amount from 2001/02 to 2002/03.

Significant to our analysis are observed declines in subject import volumes in marketing year 2002/2003 after the filing of the petition in these investigations. The petition was filed on September 13, 2002.[325] The questionnaire responses of several purchasers indicated that they canceled or postponed purchases due to the pendency of these investigations.[326] Coincident with the filing of the petition, the volume of subject imports of HRS wheat was sharply lower in October of 2002 and in the following months compared with the months preceding the filing of the petition. The post-petition decline accounted for the entire decline in subject import volume from the previous marketing year.[327] [328] Exports of HRS wheat by Canada to the United States declined more sharply than did its exports of HRS wheat to third country markets in marketing year 2002/03, despite the fact that production was also down in the United States and prices for HRS wheat were higher in marketing year 2002/03 than during the two previous marketing years.[329] Accordingly, we attribute the decline in the volume of subject HRS wheat from Canada in marketing year 2002/03 in significant part to the pendency of these investigations. Consistent with the statutory scheme, we thus give less weight in our analysis to the lower post-petition subject import volumes compared with those observed prior to the filing of the petition.[330] [331]

In sum, the volume of subject HRS wheat imports maintained a significant and increasing presence in the U.S. market in marketing years 2000/01 and 2001/02, whether measured in absolute terms, relative to consumption in the United States under either measure, or relative to production in the United States. We attribute less weight to volume data from marketing year 2002/03 because import volumes declined abruptly after the petition was filed and appear impacted by the pendency of these investigations. Any effect on imports of lower yields in Canada, likely due to drought conditions in both

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[323] CR and PR at Table C-2A.

[324] CR and PR at Table C-2.

[325] CR and PR at I-1.

[326] Petitioners' Prehearing Brief at 90-91 and the questionnaire responses cited there.

[327] First Staff Work Papers (October 2, 2003) at Table A. Nor do we attribute lower monthly import volumes in October, November, and December to any seasonal effect. Monthly volumes of subject imports in October, November and December of 2002 were sharply lower than the volumes of subject imports in the same months of 2000 and 2001. Id.

[328] The CWB argued that declines in the volume of subject HRS wheat imports began in August 2002, one month prior to the filing of the petition. CWB's Prehearing Brief at 24 n.30. While subject imports of HRS wheat declined in August 2002 from the prior month, declines were also present during the same period in 2001 and 2000. First Staff Work Papers (October 2, 2003) at Table A.

[329] CR and PR at Figure V-3 and Tables VII-2 and C-2. Production of HRS wheat in the United States fell from 476 to 357 million bushels from marketing year 2001/02 to 2002/03. CR and PR at Table C-2.

[330] See 19 U.S.C. § 1677(7)(I).

[331] In contrast, we note that imports of subject durum wheat did not fall as abruptly in the month following the filing of the petition as did HRS subject imports. After the filing of the petition in September of 2002, monthly volumes of subject durum wheat from Canada continued to enter the United States during October, November, and December in amounts somewhat lower on average than, but yet generally within the range of, the volume of monthly subject durum wheat imports during 2002 before the petition was filed, as well as in October, November, and December of 2001. First Staff Work Papers at Table A. Beginning in calendar year 2003, monthly volumes of subject durum wheat imports were sharply lower, likely related in part to the filing of the petition. First Staff Work Papers at Table A.

marketing years 2001/02 and 2002/03, are more difficult to discern. Import volumes did not decline at all in marketing year 2001/02, but declined abruptly in 2002/03 after the petition was filed. In addition, Canadian exports of HRS wheat to the United States declined by *** percent from marketing year 2001/02 to 2002/03 while its exports of HRS wheat to third country markets declined by *** percent during the same period.[332] We therefore conclude that the volume of subject imports is significant both in absolute and relative terms.

2. Price Effects of the Subject Hard Red Spring Wheat Imports

Section 771(C)(ii) of the Act provides that, in evaluating the price effects of the subject imports, the Commission shall consider whether –

> (I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and
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> (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.[333]

As noted previously, HRS wheat is a commodity product, with quality ranges indicated by the various grades into which it falls. Within a given grade, the subject HRS wheat and domestically produced HRS wheat are highly, although not perfectly, interchangeable.[334]

Compared to the market for durum wheat, the HRS wheat market places more emphasis on price than quality. According to purchasers, price is the most important factor in HRS wheat purchasing decisions, whereas equal numbers of purchasers of durum wheat ranked quality and price as the most important factor.[335] Most sales are by contracts of varying duration, but sales on the spot market account for nearly one-third of sales. There is also trading in HRS wheat futures. Information is readily available for prices in the international market and in the United States. Demand for HRS wheat is not sensitive to price, in the sense that changes in price do not substantially change quantity demanded.[336] [337] [338]

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[332] Figures derived from CR and PR at Table VII-2.

[333] 19 U.S.C. § 1677(7)(C)(ii).

[334] CR at II-20, PR at II-13.

[335] CR and PR at Tables II-7 and II-8.

[336] CR at II-30, PR at II-21.

[337] The CWB argued that correlations in price movements of HRS wheat and HRW wheat demonstrate that the two classes were highly substitutable and thus that subject HRS wheat did not have significant price effects on U.S. HRS wheat. CWB's Prehearing Brief at 79-82. We note that, despite correlations in price movements, prices for HRS wheat and HRW wheat were not the same. E.g., CR at I-11 to I-12, V-10 to V-11; PR at I-8 and V-7 to V-8. Moreover, the record shows correlations in price movements among wheat of all classes, and between wheat and other agricultural products. CR at V-11; PR at V-8; CWB's Prehearing Brief at 50, 86 n.155, Exh. 22; Hearing Tr. at 147 (Fisher). The price correlations are stronger between HRS wheat and HRW wheat, but a witness testified on behalf of the CWB that even a small amount of substitution between HRS wheat and HRW wheat ("substitution on the margins") can result in additional price correlations. Hearing Tr. at 382-83 (Sumner). Given the persistent differences in price between HRS wheat and HRW wheat, and the existence of price correlations among wheat of various classes and between wheat and other agricultural products, we do not subscribe to the CWB's argument.

[338] Prices for HRS wheat are influenced by both global and local factors. Changes in global supply and demand affect prices worldwide, as demonstrated by the fact that prices for HRS wheat at different locations in the world tend to fluctuate in tandem. See CWB's Prehearing Brief at 83. Local factors also influence prices of HRS wheat,

As in durum wheat, the Commission collected pricing data for HRS wheat on multiple bases. Conventional price comparisons based on weighted average delivered prices at the level of downstream purchasers were compiled for U.S.-grown and Canadian number 1 and 2 HRS wheat. Both petitioners and the CWB agreed, however, that these price comparisons are influenced by various factors including, chiefly, transportation costs.[339] To control for variations in transportation costs that were due to differences in delivery locations, Commission staff developed price comparisons that were company-specific and place-specific. We look to both of the data sets in evaluating underselling.[340]

Conventional price comparisons show predominant underselling. Weighted average delivered prices for Canadian number 1 and 2 HRS wheat were lower than comparable U.S.-grown HRS wheat in 28 of 40 monthly comparisons during June 2000 to August 2002.[341] [342]

Company-specific and place-specific comparisons also show significant underselling. Monthly price comparisons of Grade No. 1 subject imported and domestically-produced HRS wheat[343] show underselling by the subject imports in 5 out of 9 monthly comparisons on a company-specific basis and in 8 out of 15 monthly comparisons on a place-specific (Minnesota) basis.[344] Margins of underselling ranged from 0.5 percent to 8.2 percent (for company-specific comparisons) and less than 0.05 percent to 8.4 percent (for place-specific comparisons).[345] Margins of overselling ranged from 3.6 percent to 8.1 percent (for company-specific comparisons) and from 1.9 percent to 17.5 percent (for place-specific

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as a result of changes in local supply and demand, which changes are independent of global trends. See e.g., CWB's Prehearing Brief at 84 (transportation costs and customs duties prevent perfect price arbitrage). The trade-limiting effect of transportation costs results in "location economics," with the result that HRS wheat flows to the best market with the least transportation cost. E.g., Hearing Tr. at 267 (Linville). Events affecting supply and demand in local markets, therefore, cause local HRS wheat prices to change relative to prices in other markets around the world. See CWB's Prehearing Brief at 83 (showing that the price spread between certain HRS wheats at different worldwide locations narrowed and even reversed over the course of the period examined).

These general observations are confirmed with respect to the U.S. market for HRS wheat. HRS wheat grown in certain parts of Canada has a transportation cost advantage in serving large portions of the U.S. market compared to HRS wheat from other parts of Canada, or from third countries. Hearing Tr. at 222 (Cunningham), 304-07 (Steinke), 336 (Cunningham), 339 (Hillman); Hearing Exhibit entitled "Outline: Testimony of Richard O. Cunningham on Behalf of Respondent Canadian Wheat Board, at 1 and 4; CWB's Prehearing Brief at 104-07. As a result, U.S. prices for HRS wheat move in reaction to changes in U.S. supply (including subject HRS wheat imports) and demand, independent of global price movements, because HRS wheat cannot be replaced by other HRS wheat at the same transportation cost. See, in addition to the parts of the record cited above, Hearing Tr. at 113-15 (Birdsall, Szamosszegi, Wechsler). As explained elsewhere in these views, prices for HRS wheat in the U.S. market reacted to changes in local supply and demand, including drought and the pendency of these investigations.

[339] With respect to underselling, comparisons of the prices received by domestic producers with the prices for the subject HRS wheat paid by downstream purchasers are not meaningful because they are not made at the same level of trade. Domestic producers generally sell to the local grain elevator, which in turn sells to large grain-trading and milling firms. Subject imports generally are not sold to local grain elevators but instead directly to large downstream purchasers.

[340] CR at V-15, PR at V-10.

[341] CR and PR at Tables V-6 and V-7.

[342] Consistent with our finding that the volume of subject imports declined in 2002/03 due to the pendency of these investigations, no prices for Canadian number 1 and 2 HRS wheat were reported for September 2002 to May 2003.

[343] As mentioned previously, the subject imported product is known as "Canada Western Red Spring Wheat." This wheat comes within the scope of the subject merchandise as defined by Commerce. 68 Fed. Reg. 52741, 52742 (Sept. 5, 2003) and 68 Fed. Reg. 52747, 52748 (Sept. 5, 2003). For simplicity, we refer to Canada Western Red Spring Wheat as subject HRS wheat.

[344] CR at V-23 and Tables V-12 and V-13, PR at V-13 and Tables V-12 and V-13.

[345] CR and PR at Tables V-12 and V-13.

comparisons).[346] Monthly price comparisons of Grade No. 2 subject imported and domestically-produced HRS wheat show underselling by the subject imports in 9 out of 15 monthly comparisons (on a company-specific basis) and in 6 out of 16 monthly comparisons (on a place-specific basis).[347] Company-specific margins of underselling by subject imports ranged from 1.5 percent to 7.0 percent, while margins of overselling ranged from 1.3 percent to 18.0 percent.[348] Place-specific margins of underselling ranged from 0.1 percent to 5.6 percent and margins of overselling ranged from 0.5 percent to 21.8 percent.[349] We find this mixed underselling to be significant, given that half of the combined place- and company-specific comparisons showed underselling by subject imports, in a market for a commodity product sold by grade, with pricing information readily available to market participants.[350]

We also find evidence of significant price depressing effects by subject imports, both when considering prices on a yearly basis and on a monthly basis. On a yearly basis, average prices received by farmers fell from $2.94 per bushel in marketing year 2000/01 to $2.89 per bushel in 2001/02.[351] This decline was coincident with a significant increase in the volume of subject imports of HRS wheat, which in absolute terms increased over 11 percent, from 41 million bushels in marketing year 2000/01 to 46 million bushels in 2001/02. Prices rose to $3.84 per bushel in marketing year 2002/03 when the volume of subject imports fell to 11 million bushels, due in part to the pendency of these investigations. We consider higher prices in marketing year 2002/03 in the context of drought conditions in the United States, which resulted in lower domestic production of HRS wheat. All other things being equal, the reduction in domestic production would result in higher prices for HRS wheat.[352] We also consider that the lower volume of subject HRS wheat imports in the last marketing year, due in significant part to the pendency of these investigations, has likely contributed to increases in prices.

Our examination of changes in monthly prices also confirms that subject HRS wheat imports had significant price depressing effects on sales of domestic HRS wheat. The monthly prices received by farmers were among the lowest in 2001/02 when subject import volumes were the highest. During the 2001/02 marketing year, and through June of 2002, monthly import volumes of the subject HRS wheat averaged about 4.4 million bushels, fluctuating between 2.6 million and 7.3 million bushels per month.[353] Over the same period, average monthly farm prices for domestic HRS wheat fluctuated in a narrow band,

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[346] CR and PR at Tables V-12 and V-13.

[347] CR and PR at Tables V-14 and V-15.

[348] CR and PR at Table V-14.

[349] CR and PR at Table V-15.

[350] It was argued that other factors skew price comparisons as well, including protein content, and date of delivery. E.g., CWB's Prehearing Brief at 61-63. See CR at V-12 to V-13, PR at V-9 (describing Commission's data collection, based in part on party comments on draft questionnaires). The Commission statistically analyzed prices for HRS wheat incorporating the effects of dockage, protein content, vitreous kernel content, and test on prices. The estimated mean prices for Canadian Western Red Spring and U.S. number 1 HRS wheat were $146.35 and $146.07 per metric ton, respectively. CR at E-8, PR at E-6. For comparable Canadian and U.S. number 2 HRS wheat, the estimated mean prices were $146.90 and $141.50 per metric ton, respectively. CR at E-9, PR at E-7. Given that these estimates include prices over the three-year period examined and the mean numbers for the Canadian and U.S. product are close, particularly for number 1 HRS wheat, we find these estimated mean prices are not inconsistent with the evidence of mixed underselling. Moreover, we would not expect significant underselling in a commodity product, especially one traded on an open exchange.

We note, however, that controlling for these additional variables results in the discarding of all, or almost all, possible price comparisons. Although company-specific and place-specific comparisons are imperfect, we determine in our discretion that these data are the best on the record for purposes of evaluating underselling.

[351] First Staff Work Papers at Table B.

[352] But see our discussion below, noting that apparent U.S. consumption fell more steeply than the fall in domestic production.

[353] Average monthly import figure derived from First Staff Work Papers at Table A.

from $2.80 to $3.03 per bushel, among the lowest of the entire period examined.[354] In each of the latter seven months of marketing years 2000/01 and 2001/02, prices were lower in the 2001/02 marketing year than in the same month of the previous year.

With the filing of the petition in September 2002, HRS wheat prices rose dramatically and subject imports fell off drastically. The single-highest monthly price received by farmers over the period examined was in October of 2002, the first full month following the filing of the petition. These prices increased from $3.67 per bushel in August 2002 to $4.49 in October 2002, remaining above $4 per bushel until February 2003. For the three months following the filing of the petition, prices averaged $4.33 per bushel compared with $2.93 per bushel for the same period in 2001.[355] In the same period, the volume of subject HRS wheat fell in October of 2002 to 1.2 million bushels, and then to 0.3 million bushels in November 2002, lower than any previous single month of the period examined. During the three months following the filing of the petition, average monthly subject import volumes were 607,532 bushels compared with 5.9 million bushels for the same period in 2001.

Respondents argue that the rise in wheat prices and decline in subject imports was attributable primarily to the drought.[356] We would expect monthly price increases over the course of the late summer and early fall as the market received information regarding the extent of drought-related effects on domestic production. The price spike observed in October of 2002, however, was above and beyond the price increases associated with drought conditions and occurred in the first full month following the filing of the petition. We view that price spike as a reflection of how the market reacted to the pendency of these investigations. That farm prices would rise in reaction to the pendency of the investigations (signifying the potential increase in prices of subject HRS wheat and/or decrease in volume of subject HRS wheat) confirms the strong price interactions between subject imports and domestic HRS wheat. However, while we take note of this effect, we based our analysis of the price effects on the pre-petition period, as discussed above.[357] [358]

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[354] We would not expect monthly prices to vary very much as a function of normal monthly variations in subject HRS wheat volumes. Price information is rapidly disseminated in this market and it would take more than normal "background" noise to influence prices on a monthly basis.

[355] Derived from First Staff Work Papers at Table C.

[356] CWB's Posthearing Brief at 2.

[357] We note in addition that monthly U.S. prices for HRS wheat fluctuated in a much narrower range during marketing year 2001/02 than did monthly U.S. prices for durum wheat. The narrower range of fluctuation increases the significance of price increases observed in HRS wheat relative to the increases seen in durum wheat prices. First Staff Work Papers at Table C.

[358] Drought conditions in the United States also likely contributed to the observed price increases late in the period examined. We do not, however, attribute all price increases to the drought in the United States. We observe that drought in the United States was responsible for a 25.1 percent decline in domestic production of HRS wheat from marketing year 2001/02 to 2002/03. CR and PR at Table C-2. (We note that, in contrast, drought did not depress per acre yields for durum wheat to any significant degree. CR and PR at Table C-1.) This decline is large when viewed in isolation. When considered in the context of the conditions of competition unique to this industry, however, the decline in domestic production is smaller than the 37.3 percent decline in apparent U.S. consumption, when the latter is measured excluding exports of domestic production by downstream purchasers over the same period. CR and PR at Table C-2. Accordingly, when examining drought-induced changes in production in the United States from marketing year 2001/02 to 2002/03, we find that domestic production is not lower in the latter marketing year relative to U.S.-derived consumption, despite drought induced declines in domestic production. Higher prices in marketing year 2002/03 are not solely explained, therefore, by a relative decrease in supply relative to U.S.-derived demand. When export-fueled demand is included in the calculation, apparent U.S. consumption declined by a smaller amount: 13.9 percent. CR and PR at Table C-2A. The smaller decline when measured this way is due to the rise in the volume of exports of domestic product by downstream purchasers, which increased from 216 million bushels in marketing year 2001/02 to 254 million bushels in 2002/03. CR and PR at Table C-2.

Finally, given the nature of price competition in these markets, we do not view the absence of lost sales or lost revenues allegations in the petition as meaningful to our analysis of the significance of any price effects attributable to the subject imports of HRS wheat from Canada.[359]

In sum, we find that average farm prices for HRS wheat fell from marketing year 2000/01 to 2001/02 at the same time that there was a significant increase in the volume of subject HRS wheat imports into the U.S. market. Monthly prices for HRS wheat were their highest over the entire period examined in the first full month following the filing of the petition when the volume of subject imports declined significantly. While drought in the United States likely had a contributing effect on the higher observed prices, the record indicates that U.S.-derived demand for HRS wheat fell more rapidly than did production in the United States, showing that the drought did not lower supply relative to U.S.-derived demand, and thus does not account for the significant increase in prices.

On these bases, we conclude that the frequency of underselling was significant and that subject imports of HRS wheat from Canada had significant price depressing effects during the period examined.[360] We attribute the decline in subject import volumes and the sharp rise in domestic prices at the end of the period in significant part to the filing of the petition, and accord less weight to this period in our price analysis.

3. Impact of the Subject Hard Red Spring Wheat Imports

In examining the impact of the subject imports on the domestic industry, we consider all relevant economic factors that bear on the state of the industry in the United States.[361] 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."[362] [363]

We have considered each of the factors listed above, to the extent data on a particular factor are available to us and relevant to assessing the condition of the industry. As noted previously, with the implicit agreement of the parties, we did not mail questionnaires to producers of HRS wheat because they number in the tens of thousands and because we lacked sufficient information about the industry to

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[359] See Petition at 59-60.

[360] The CWB argued that subject HRS wheat from Canada did not have significant effects on farm prices for domestic HRS wheat because there exists a "world price" set by global supply and demand considerations. As discussed above, however, the CWB repeatedly acknowledged in other contexts that transportation costs play a very important role in prices for HRS wheat. Due to its proximity to the United States, HRS wheat from Canada delivered to U.S. purchasers incurs lower transportation costs than would HRS wheat from third countries. Consistent with its lower transportation costs, HRS wheat from Canada accounted for 100.0 percent of all imports of HRS wheat into the United States throughout the period examined. CR and PR at Table IV-2. Accordingly, HRS wheat from Canada, which is subsidized and sold at LTFV, can and does have significant depressing effects on farm prices for domestic HRS wheat, despite the existence of what is termed a world price.

[361] 19 U.S.C. § 1677(7)(C)(iii); see also SAA at 851 and 885 ("In material injury determinations, the Commission considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports." Id. at 885).

[362] 19 U.S.C. § 1677(7)(C)(iii); see also SAA at 851 and 885 and Live Cattle from Canada and Mexico, Invs. Nos. 701-TA-386 and 731-TA-812 to 813 (Preliminary), USITC Pub. 3155 (Feb. 1999) at 25, n.148.

[363] The statute instructs the Commission to consider the "magnitude of the dumping margin" in an antidumping proceeding as part of its consideration of the impact of imports. 19 U.S.C. § 1677(7)(C)(iii)(V). In its notice of final determinations of sales at less than fair value, Commerce determined weighted average antidumping margins on subject HRS wheat from Canada of 8.87 percent ad valorem. 68 Fed. Reg. 52741, 52744 (Sept. 5, 2003).

develop a reliable representative sampling methodology. The Commission obtained public information relating to the various statutory impact factors from government, academic, and industry sources, including state agricultural extension services. The Commission received extensive information from the parties and asked the parties to identify any additional sources that the Commission should consider.[364]

We evaluate the condition of the industry based on available public data on the record. Domestic production of HRS wheat fell from 502 million bushels in 2000/01 to 476 million bushels in 2001/02 and then declined further to 357 million bushels in 2002/03.[365] While production declined, acres planted with HRS wheat increased from 14.4 million in marketing year 2000/01 to 14.8 million in 2001/02 and to 14.9 million in 2002/03.[366] Acres harvested increased from 13.6 million in marketing year 2000/01 to 13.8 million in 2001/02, but acres harvested declined sharply to 12.6 million in 2002/03.[367] Thus, acres harvested did not contribute to lower production from 2000/01 to 2001/02, but acres harvested did account for some of the decline in production in 2002/03. Average yields declined from 37.0 bushels per acre in 2000/01 to 34.6 bushels per acre in 2001/02 and then dropped sharply to 28.2 bushels per acres in 2002/03.[368] Lower yields accounted for all of the drop in production from 2000/01 to 2001/02 (because harvested acres increased), and contributed to declines in production from 2001/02 to 2002/03. Drought in the United States accounted for the sharp declines in production and yields in marketing year 2002/03, while the drop in production from 2000/01 to 2001/02 appears due to normal fluctuations in agronomic conditions, which resulted in lower yields.

Similarly, sales of HRS wheat declined throughout the period examined, matching the overall decline in output by the domestic industry. The domestic industry's total shipments decreased from 509 million bushels in marketing year 2000/01 to 460 million bushels in marketing year 2001/02 and to 425 million bushels in marketing year 2002/03.[369] U.S. shipments of HRS wheat produced in the United States decreased from 282 million bushels in marketing year 2000/01 to 244 million bushels in marketing year 2001/02, and to 171 million bushels in marketing year 2002/03.[370] The domestic industry's market share, based on U.S. shipments of domestic HRS wheat, was 87.2 percent in marketing year 2000/01 and 84.1 percent in marketing year 2001/02, but then rose to 94.2 percent in marketing year 2002/03.[371] The domestic industry's market share, based on total shipments of domestic HRS wheat, was 92.5 percent in marketing year 2000/01 and 90.9 percent in marketing year 2001/02, but then rose to 97.6 percent in marketing year 2002/03.[372]

U.S. producers' inventories increased from 194 million bushels in 2000/01 to 210 million bushels in 2001/02, then declined to 141 million bushels in 2002/03. Consistent with subject HRS wheat imports, inventories were highest during 2001/02, then declined in 2002/03 with decreasing subject HRS

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[364] We do not rely on the economic analyses provided by the parties. See CR at II-31 to II-33 and App. E; PR at II-21 to II-22 and App. E.

[365] CR and PR at Table C-2.

[366] CR and PR at Table C-2.

[367] CR and PR at Table C-2.

[368] CR and PR at Table C-2.

[369] CR and PR at Table III-7. We focus on the quantity of total shipments as the nearest equivalent to sales volume. Financial data on net sales are unavailable from USDA, as are data quantifying the value of total shipments. Similarly, the concept of capacity utilization is not adequately captured in the data available from USDA. See CR and PR at III-8 n.10.

[370] CR and PR at Table III-7. The concept of "U.S. shipments," as opposed to export shipments, is of mixed utility in these investigations, as the U.S. growers that constitute the domestic industry sell much of their production to grain elevators. CR at I-11, PR at I-8; Hearing Tr. at 101 (Klein); Petition at 59-60; CWB's Prehearing Brief at 9-11.

[371] CR and PR at Table IV-10.

[372] CR and PR at Table C-2A.

wheat imports.[373] As a share of total shipments, inventories increased from 38.1 percent in marketing year 2000/01 to 45.6 percent in 2001/02 as subject import volumes increased, then inventories declined to 33.1 percent in 2002/03, as subject import volumes declined sharply.[374]

Employment data are limited to hired labor and are extrapolated from existing data compiled by the States of North Dakota, Minnesota, and South Dakota, which collectively accounted for about two-thirds of HRS wheat production in the United States.[375] Wages paid to hired labor fell between 2000 and 2002 from $39.0 million to $29.4 million.[376] This decline reflected the reductions in harvested acreage, partially offset by rising labor costs per acre harvested.[377] Productivity can be measured only indirectly through a comparison of wages and production. Nonetheless, the observed decline in productivity between marketing year 2000/01 and marketing year 2002/03 (as reflected by the increase in labor cost per bushel) is consistent with the reduction in HRS wheat yields.[378]

In examining the financial performance of the domestic HRS wheat industry, we examine data provided for HRS wheat farms in North Dakota, northwestern Minnesota, and South Dakota; these states accounted for 46 percent, 13 percent, and 10 percent respectively of the acres of HRS wheat planted in crop year 2002/2003.[379] Because the data are reported on a per-harvested-acre basis, we take into account that fluctuations in per acre total product return is a function both of prices received and yields per acre.[380]

The data are segregated according to the three predominant land tenure arrangements found in the HRS wheat industry: owned land, cash rented land, and share rented land.[381] With respect to all wheat farms in North Dakota, the state accounting for the bulk of the information available to us on the financial performance of HRS wheat farmers, cash rented land is the most common form, accounting for just over half of acres harvested.[382] Owned land accounted for approximately 30 percent of all wheat acres harvested in North Dakota, while share rented land accounted for approximately 15 percent of all wheat acres harvested in that state.[383] In northwestern Minnesota, approximately 75 percent of the HRS

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[373] CR and PR at Table III-8.

[374] CR and PR at Tables C-2 and C-2A.

[375] CR at Tables III-11 to III-13 and at page VI-7 & n.6, PR at Tables III-11 to III-13 and at page VI-3 & n.6.

[376] Derived from CR and PR at Tables III-11 to III-13. As noted previously, economic returns are shown on a calendar year basis. As we also noted, economic returns in 2000, for example, generally reflect industry conditions (such as price) in marketing year 2000/01, because the economic returns reflect the expenses and revenues associated with the crop harvested in the late summer or early fall.

[377] CR and PR at Tables III-11 to III-13.

[378] CR and PR at Tables III-11 to III-13 and C-2. Between marketing year 2000/01 and marketing year 2002/03, labor costs rose from $0.09 to $0.10 per bushel in North Dakota, from $0.08 to $0.09 in Minnesota, and from $0.17 to $0.29 in South Dakota. CR and PR at Tables III-11 to III-13.

[379] CR at VI-7 n.6, PR at VI-3 n.6.

[380] As noted above, average yields declined from 37.0 bushels per harvested acre in marketing year 2000/2001, to 34.6 bushels per acre in 2001/02 due to normal fluctuations in agronomic conditions. Average yields were sharply lower at 28.2 bushels per acre in 2002/03.

[381] When HRS wheat is produced on share rented land, the producer pays rent to the land owner in the form of a share of the crop he or she harvests. Because HRS wheat is planted in April and May and harvested during August and September, the growing year does not perfectly match the marketing year. However, inasmuch as harvesting and, to a large extent, sales of the HRS wheat to the elevators take place in the second half of the calendar year and the first half of the marketing year, financial data for 2000 would closely align with farmers' sales in marketing year 2000/01. Although the planting expenses would have been incurred in the previous marketing year, their presentment in the marketing year sold is not different from our treatment in other investigations where we collect questionnaire expenses on the basis of cost of goods sold instead of cost of production.

[382] CR and PR at Table VI-4 n.1.

[383] CR and PR at Table VI-4 n.1.

wheat acres harvested is cash rented, with the remaining harvested acreage being owned land.[384] Information for HRS wheat farms in South Dakota is not segregated by land tenure.[385]

In general, the experience of domestic producers was consistent across states and forms of land tenure. The domestic HRS wheat industry experienced per-harvested-acre net returns without government payments that were positive for all states and types of land tenure in 2000.[386] In 2001, domestic producers experienced per-harvested-acre net losses in North Dakota on cash rented and share rented land, and in northwestern Minnesota on owned and cash rented land.[387] Net returns approached zero in 2001 for owned land in North Dakota and in the combined tenures reported for South Dakota.[388] In 2002, per-harvested-acre net returns showed a significant improvement over the net losses generally experienced in 2001, but in most cases net returns in 2002 did not approach net returns for 2000.[389] Except in South Dakota, much of the improvement in net returns for each tenure type observed from 2001 to 2002 is the result of higher miscellaneous income, which includes crop insurance and disaster payments, and so the improvement in net return is due in part to intervention rather than recovery in market forces.[390]

We also examine total product return because it is not affected by miscellaneous income or direct and overhead expenses. In this industry, we view total product return as the closest approximation of the impact of changes in the price of HRS wheat on the domestic industry's performance. As noted, however, yields also influence total product return. Consistent with the highest yields experienced in 2000, total product return was highest for all states and all tenure types in that year.[391] Total product return was lower for all states and all tenure types in 2001, a combined result of lower yields and lower

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[384] CR and PR at Table VI-5 n.1.

[385] CR at VI-9, PR at VI-6. See CR and PR at Table VI-6.

[386] In North Dakota in 2000, per acre net returns without government payments were $26.23 for owned land, $9.35 for cash rented land, and $1.36 for share rented land. In northwestern Minnesota in 2000, per acre returns without government payments were $53.31 for owned land and $28.38 for cash rented land. In South Dakota in 2000, per acre net returns without government payments were $19.74. CR and PR at Tables VI-4 to VI-6.

[387] In North Dakota in 2001, per acre net losses without government payments were $18.58 for cash rented land, and $15.25 for share rented land. In northwestern Minnesota in 2001, per acre net losses without government payments were $8.38 for owned land and $11.21 for cash rented land. CR and PR at Tables VI-4 and VI-5.

[388] In North Dakota in 2001, per acre net returns without government payments were $0.08 for owned land. In South Dakota in 2001, per acre net returns without government payments were $0.05. CR and PR at Tables VI-4 and VI-6.

[389] In North Dakota in 2002, per acre net returns without government payments were $15.05 for owned land, $5.80 for cash rented land, and $8.71 for share rented land. In Minnesota in 2002, per acre net returns without government payments were $6.96 for owned land, compared with per acre net losses without government payments of $6.78 for cash rented land. For South Dakota in 2002, per acre net returns without government payments were $6.71. CR and PR at Tables VI-4 to VI-6. In general, these results were an improvement over 2001, but lower than in 2000. The exceptions were share rented acres in North Dakota, which experienced higher net returns in 2002 than during 2000 or 2001. CR and PR at Table VI-4. Cash rented land in northwestern Minnesota continued to experience a net loss in 2002, albeit a smaller net loss than in 2001. CR and PR at Table VI-5.

[390] In North Dakota, from 2001 to 2002, per acre miscellaneous income rose from $3.56 to $20.53 for owned land, from $6.35 to $19.88 for cash rented land, and from $2.28 to $7.27 for share rented land. In northwestern Minnesota, from 2001 to 2002, per acre miscellaneous income rose from $10.20 to $30.92 for owned land, and from $14.45 to $22.39 for cash rented land. In South Dakota, from 2001 to 2002, per acre miscellaneous income fell from $4.69 to $0.59. CR and PR at Tables VI-4 to VI-6.

[391] In North Dakota in 2000, per acre total product return was $118.53 for owned land, $113.58 for cash rented land, and $73.98 for share rented land. In northwestern Minnesota in 2000, per acre total product return was $187.65 for owned land and $179.63 for cash rented land. In South Dakota in 2000, per acre total product return was $144.32. CR and PR at Tables VI-4 to VI-6.

average prices.[392] Despite higher average prices during the latter portion of 2002, total product return fell further in 2002 in all states and tenure types except for the large number of harvested acres represented by cash rented land in North Dakota, as well as the smaller number of harvested acres represented by share rented land in North Dakota.[393] When fluctuations in average yields are taken into account, the record indicates that price-driven changes negatively impacted total product return and thereby contributed to the industry's worst performance of the period examined in 2001, when subject import volumes were high and domestic prices were depressed.

More generally, the data show that fluctuations in the financial state of the domestic HRS wheat industry is primarily a function of farm prices and yields per acre.[394] Prices and yields determine total product return (except for the much smaller contribution of loan deficiency payments). The fact that yields fluctuate significantly from year to year leaves the domestic industry particularly vulnerable to injury as a result of price depression by subject imports.[395]

Net returns without government payments and total product return show a domestic industry with generally positive performance in 2000, much poorer performance in 2001 resulting in losses or break-even situations, and an incomplete recovery in 2002 to levels generally below that of its performance in 2000. The change in performance demonstrates the precarious state of the domestic industry, and thus its sensitivity to the price-depressing effects of subject imports. The domestic industry slipped from a positive performance in 2000 to significant net losses or break-even product returns in 2001. The industry did not experience drought conditions in 2001, yet a downward fluctuation in yield, coupled with a decline in price, when subject import volumes were increasing, had a significant effect on the domestic industry. We would not expect that normal fluctuations in yield in non-drought years would be enough to tip an industry experiencing positive net returns in all states and tenure types to net losses or net returns approaching zero. The fact that the industry experienced severe losses indicates that it is extremely sensitive to changes in price, which declined on average from marketing year 2000/01 to 2001/02, and that prices were depressed, such that even minor downward fluctuations in yield had a devastating impact. The critical role of price is confirmed by the evidence from 2002. In 2002, despite a further decline in yields (this time attributable to drought conditions), the domestic industry showed a recovery (measured in net returns without government payments), albeit an incomplete one, due to higher miscellaneous income and higher prices during the last 4 or 5 months of the year, when subject imports began to leave the market.

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[392] In North Dakota in 2001, per acre total product return was $100.87 for owned land, $95.49 for cash rented land, and $64.59 for share rented land. In northwestern Minnesota in 2001, per acre total product return was $127.57 for owned land and $134.79 for cash rented land. In South Dakota in 2001, per acre total product return was $131.00. CR and PR at Tables VI-4 to VI-6.

[393] In North Dakota in 2002, per acre total product return was $90.88 for owned land, $96.12 for cash rented land, and $71.52 for share rented land. In northwestern Minnesota in 2002, per acre total product return was $102.25 for owned land and $115.74 for cash rented land. In South Dakota in 2002, per acre total product return was $126.05. CR and PR at Tables VI-4 to VI-6.

[394] Total overhead and direct expenses, while an important measure, were relatively stable over the period examined. CR and PR at Tables VI-4 to VI-6.

[395] We have considered any additional burden on government income or price support programs relating to this agricultural product. 19 U.S.C. § 1677(7)(D). On a per acre basis, government payments, including decoupled payments under the Agricultural Market Transition Act and market loss assistance payments, were lower in 2002 than in 2000 for all states and land tenures. CR and PR at Tables VI-4 and VI-5. These trends do not demonstrate an additional burden on government income or price support programs relating to HRS wheat. In particular, we observe that as a result of rising market prices, loan program and disaster/countercyclical payments for wheat were lower in 2001 than in 2000 and virtually disappeared in 2002 and 2003. CR at II-5, PR at II-3; CR and PR at Table II-2.

The record indicates that subject HRS wheat imports had a material adverse impact on the domestic industry through their significant volume and price effects. The volume of subject imports was highest in absolute terms, relative to consumption, and relative to production, in 2001, which was also the year of the domestic industry's poorest performance, including net losses in most states and tenure types. As explained above, the record indicates that subject HRS wheat had significant price-depressing effects during the period examined, as evidenced by the underselling and price declines in U.S. prices when subject import volumes peaked and the rapid increase in U.S. farm prices associated with the filing of the petition when subject import volumes declined.[396] Drought conditions in the United States contributed to price increases observed at that time, but declines in apparent U.S. consumption indicate that drought induced reductions in domestic production do not fully explain the price increases.

For these reasons, we find that imports of subject HRS wheat have had a material adverse impact on the domestic industry producing HRS wheat.

CONCLUSION

For the reasons stated above, we determine that the domestic industry producing HRS wheat is materially injured by reason of subject HRS wheat imports from Canada that are subsidized and sold in the United States at less than fair value.

[396] The CWB argues that the significant share of U.S. exports of HRS wheat during the period examined establishes that subject imports are not causing significant price or volume effects. CWB's Prehearing Brief at 97-101. As a percentage of total shipments, U.S. exports of HRS wheat increased from 44.6 percent to 59.8 percent during the period examined, and are traded or exported by downstream purchasers including grain-trading companies. The decision to sell domestically or in international markets is made downstream from the farmer. Given that an impact analysis is focused on the defined domestic industry, we do not attribute significant weight to the actions of downstream users in regard to exports of HRS wheat.

DISSENTING VIEWS OF CHAIRMAN DEANNA TANNER OKUN AND COMMISSIONER STEPHEN KOPLAN

Based on the record in these investigations, we determine that an industry in the United States is neither materially injured nor threatened with material injury by reason of imports of hard red spring (HRS) wheat from Canada that are subsidized and sold in the United States at less than fair value (LTFV).[397] [398]

I. OVERVIEW

Domestic producers of all classes of wheat operate in a demanding business climate that includes unpredictable weather conditions, changing consumer tastes, and, increasingly, the concentration of purchasing power by downstream consumers. Domestic producers of HRS wheat and durum wheat also face the presence of imports from Canada.

The Commission is required to analyze the record evidence to determine whether the subject imports from Canada are causing material injury or threatening to cause material injury to a domestic industry. We join our colleagues in discussing the appropriate domestic like products, the pertinent domestic industries, the conditions of competition that are distinctive to the affected industries, and the reasoning supporting our negative determinations with respect to subsidized and LTFV imports of durum wheat from Canada. As we observed in the Views of the Commission, many of the conditions of competition pertain both to the domestic HRS wheat and durum wheat industries, although various distinctions are noted. The record for HRS wheat is similar in many instances to the record for durum wheat, and for the reasons we discuss below, we also reach negative determinations with respect to subsidized and LTFV imports of HRS wheat from Canada.

The record in these investigations makes clear that this is not a case of a sudden, structural change in the growing and marketing conditions of U.S. producers' wheat. Nor is this a case where there is a sudden emergence of a new exporter to the U.S. market. Imports of wheat from Canada, sold in the United States by the Canadian Wheat Board, increased after the signing of the U.S.-Canada Free Trade Agreement, and as the record indicates, have fluctuated, but have remained a consistent presence in the U.S. market thereafter.[399]

In examining the facts on the record in these investigations, we find that in a market of several hundred million bushels, the volume of subject imports in absolute terms and relative to production and consumption in the United States is not significant. Despite the moderate increase in volume in absolute terms relative to domestic production and consumption in marketing year 2001/02, the record does not indicate that subject imports gained significant market share at the expense of U.S. producers. Moreover, as a result of the marked decline in subject imports in marketing year 2002/03, volume in absolute and relative terms in the last year of the period examined decreased to very low levels. In our view, the petitioners' argument in this case that regardless of the direction of changes in the Canadian market share in any particular year, the mere presence of subsidized and LTFV imports in the U.S. market must come at the expense of competing domestic producers,[400] is not sufficient to meet our statutory obligation to

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[397] Commerce determined the total estimated net subsidy rate for HRS wheat from Canada to be 5.29 percent. 68 Fed. Reg. 52747, 52749 (September 5, 2003). Commerce determined the weighted average antidumping margins on subject HRS wheat from Canada to be 8.87 percent *ad valorem*. 68 Fed. Reg. 52741, 52744 (Sept. 5, 2003).

[398] Material retardation is not an issue in these investigations.

[399] Petitioner's Postconference Brief at 5; Hearing Tr., CWB Hearing Chart 4, page 4 (attached to non-corrected and revised Hearing Transcript).

[400] Hearing Tr. at 91.

consider the significance of the volume, price effects, and impact of subject imports in determining whether the domestic industry is materially injured by reason of subject imports.

After conducting several different types of price analyses, we find similar or higher Canadian prices, rising U.S. prices, and declining U.S. costs, leading us to conclude that there is not significant underselling, price depression, or price suppression. While the condition of the domestic industry fluctuated over the period examined, and reflected steep declines in output and employment as a result of declining yields and drought-induced reductions in harvested acres, we do not find that subject imports from Canada contributed materially to these circumstances. In light of our findings with respect to volume and price, we conclude that the impact of subject imports on the domestic industry, based on the record before us, is not significant.

We also considered whether subject imports pose a threat of material injury to the domestic industry producing HRS wheat in the imminent future. As adverse weather conditions recede, Canadian production and exports to the United States of HRS wheat are projected to recover in marketing year 2003/04; however, even with the increase, exports to the United States will be below the observed levels in marketing years 2000/01 and 2001/02. Canada has export commitments elsewhere and domestic consumption requirements as well. In addition, HRS wheat stocks on both sides of the border are low. Currently, prices remain near their highest levels over the period examined and USDA has projected an increase in overall wheat prices of $0.30 per bushel for marketing year 2003/04. We therefore conclude that subject imports do not pose a threat of material injury to the domestic industry producing HRS wheat in the imminent future.

II. NO MATERIAL INJURY BY REASON OF HRS WHEAT FROM CANADA THAT IS SUBSIDIZED AND SOLD AT LESS THAN FAIR VALUE

In the final phase of antidumping and countervailing duty investigations, the Commission determines whether an industry in the United States is materially injured by reason of the imports under investigation.[401] In making this determination, the Commission must consider the volume of imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations.[402] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[403] In assessing whether the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States.[404] 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."[405]

For the reasons discussed below, we determine that the domestic industry producing HRS wheat is not materially injured by reason of subject imports from Canada found to be subsidized and sold at LTFV.

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[401] 19 U.S.C. §§ 1671d(b) and 1673d(b).

[402] 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 . . . [a]nd explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B). *See also* Angus Chemical Co. v. United States, 140 F.3d 1478 (Fed. Cir. 1998).

[403] 19 U.S.C. § 1677(7)(A).

[404] 19 U.S.C. § 1677(7)(C)(iii).

[405] Id.

A. Conditions of Competition

As we noted in the Views of the Commission, many conditions of competition pertain both to the domestic HRS wheat and durum wheat industries, although various distinctions are noted. We identify below the competitive conditions which are most pertinent to our analysis.

Demand for HRS wheat is derived primarily from demand for bread and other bakery products, where it can face a potential substitute product in HRW wheat, and secondarily from demand for seed, and animal feed and residual uses, where it can face competition from other agricultural products. Per capita U.S. consumption of wheat flour fell sharply between 2000 and 2002, and apparent U.S. consumption of HRS wheat exhibited a similar declining trend over the period examined.

U.S. supply primarily reflects U.S. production, plus available imports of HRS wheat from Canada and U.S. stocks. U.S. production, in turn, reflects the harvested acreage devoted to HRS wheat and yields, both of which can be, and in fact were in marketing year 2002/03, influenced by weather conditions, in this case, a significant drought. In addition, approximately one-half of total grower shipments of HRS wheat are eventually exported by downstream purchasers.

HRS wheat is a widely traded commodity. The Minneapolis Grain Exchange (MGE), with a cash market, futures market, and an options market, is the primary source of information regarding prices of HRS wheat. Domestic producers, however, often sell their product to local grain elevators and are considered to be price takers, as farm receipts largely reflect price trends at the MGE. Subject imports of HRS wheat enter the U.S. market at a level of trade that is downstream from sales by domestic producers, selling to large milling firms that also purchase grain from local grain elevators. Many of the milling firms are multinational and are largely responsible for the export of substantial volumes of U.S.-grown HRS wheat.

HRS wheat grown in the United States and in Canada are largely interchangeable, though some purchasers consider Canadian HRS wheat to be superior in terms of dockage. Although price, quality (including protein content), and availability are all important considerations, there is no clear price leader in the U.S. HRS wheat market. Most purchasers reported that HRS wheat grown in Canada and the United States were comparable in terms of spot and forward prices. While forward contracting is viewed as very important by purchasers, Canadian HRS wheat is not considered to be systematically superior in terms of either availability or pricing of forward contacts. Protein over-delivery, and upward adjustment of prices, were common in sales of domestic HRS wheat as well as in sales of subject imports.[406]

B. Volume of the Subject Imports

Section 771(7)(C)(i) of the Act provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."[407]

While the volume of subject imports increased by 11.3 percent between marketing year 2000/01 and marketing year 2001/02 to 46 million bushels, the volume of subject imports from Canada decreased by 74.5 percent over the period examined, from 41 million bushels in marketing year 2000/01 to 11 million bushels in marketing year 2002/03.[408] Volume relative to U.S. production fell from 8.3 percent in

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[406] CR and PR at Table V-2.

[407] 19 U.S.C. § 1677(7)(C)(i).

[408] We observe that the decline in U.S. imports of HRS wheat from Canada in marketing year 2002/03 is consistent with the significantly lower production volumes in Canada in marketing year 2002/03. CR and PR at Table VII-2. The decline in U.S. imports of HRS wheat from Canada in marketing year 2002/03 also is consistent with the lower level of exports from Canada in marketing year 2002/03, reflecting diminished exports to both the

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marketing year 2000/01 to 3.0 percent in marketing year 2002/03, after rising to 9.7 percent in marketing year 2001/02. Volume relative to apparent U.S. consumption, excluding exports, was 12.8 percent, 15.9 percent, and 5.8 percent in marketing years 2000/01, 2001/02, and 2002/03, respectively.[409] Volume relative to apparent U.S. consumption, including exports, was 7.5 percent, 9.1 percent, and 2.4 percent in marketing years 2000/01, 2001/02, and 2002/03, respectively.[410]

Despite the moderate increase in volume in absolute terms relative to domestic production and consumption in marketing year 2001/02, the record does not indicate that subject imports gained significant market share at the expense of U.S. producers. Moreover, as a result of the marked decline in subject imports in marketing year 2002/03, volume in absolute and relative terms in the last year of the period examined decreased to very low levels.

Based on the above, we find that the volume of subject imports in absolute terms and relative to production and consumption in the United States is not significant.[411]

C. Price Effects of the Subject Imports

Section 771(7)(C)(ii) of the Act provides that, in evaluating the price effects of the subject imports, the Commission shall consider whether –

> (I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and

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[408] (...continued)
United States and to all other markets. CR and PR at Table VII-2. Moreover, monthly export data compiled by the Canadian Grain Commission indicate that exports of HRS wheat from Canada to the United States and to other markets declined irregularly throughout 2002 and into 2003. Staff Work Papers, October 2, 2003, Table 1. Finally, U.S. imports of HRS wheat from Canada began to fall on a monthly basis (comparing 2002 to 2001 and 2000) as early as April 2002, significantly in advance of the filing of the petition. First Staff Work Papers, October 2, 2003, Table A. Our analysis of these data lead us to conclude that changes in the volume of the subject imports are not clearly related to the pendency of the investigations, and we therefore do not reduce the weight accorded to subject import data for marketing year 2002/03. Indeed, discounting the final year of the three year period for which data were collected does not, in our view, provide us with a sufficient basis for analyzing fully the volume, price, impact, and likely threat posed by the subject imports.

[409] CR and PR at Table C-2.

[410] CR and PR at Table C-2A.

[411] The petitioners assert that the subject wheats are incontrovertibly commodity products and that the Canadian and U.S. products are interchangeable and substitutable one for another. Petitioners' Prehearing Brief at 2. Subsequently, at the Commission's hearing they argued that regardless of changes in market share by the subject imports in any particular year, the mere presence of dumped or subsidized imports must come at the expense of competing interchangeable U.S. products. Hearing Tr. at 91 (Wechsler). We reject the assertion here, that with respect to this commodity product the mere presence of subject imports is sufficient to demonstrate material injury by reason of subject imports.

The statute directs the Commission, inter alia, to consider volume of imports of merchandise, the effect of such imports on prices of like products in the U.S. and the impact of such imports on domestic producers. 19 U.S.C. 1677(7)(B)(i). As the CIT noted in Iwatsu Electric Co. v. United States (758 F. Supp. 1506, 1512-13 (Ct. Int'l Trade 1991), "The court cannot envision a case in which causation could be proved by volume alone. If that is a theoretical possibility, it is not a theory which was invoked by the ITC. The ITC relied on both volume and price data and its conclusions as to each will be reviewed."). *See also* USX v. United States, 11 CIT 82,85, 655 F. Supp. 487,490 (1987) wherein the CIT held that "Congress, this court and the ITC itself have repeatedly recognized that it is the *significance* of the quantity of imports, and not simply the absolute volume alone, that must guide the ITC's analysis under section 1677(7)" (emphasis in original).

(II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.[412]

As noted in our discussion of the relevant conditions of competition, the record in these investigations indicates that HRS wheat is a commodity-like product, sold by grade. Most sales are by contracts of varying duration, but nearly one-third of sales are on the spot market.[413]

Purchasers of HRS wheat ranked price, quality, and consistency as the most important factors used in purchasing decisions.[414] Interchangeability between U.S.-grown and subject HRS wheat is high, but purchasers generally ranked the domestic product inferior to HRS wheat from Canada in dockage.[415] Although demand for HRS wheat is characterized as relatively price inelastic, such that changes in price do not substantially change the quantity demanded,[416] HRS wheat faces competition from large volumes of HRW wheat which is used interchangeably with HRS wheat in many applications.[417] Indeed, prices for HRS wheat and for HRW wheat exhibited very similar trends over the period examined, despite the near absence of imports of HRW wheat from Canada or any other import supply source.[418] Prices for both types of wheat rose from lows in early marketing year 2000/01 to initial peaks late in marketing year 2000/01, fluctuated in marketing year 2001/02, then rose to their highest levels in marketing year 2002/03.[419]

The Commission collected pricing data for HRS wheat on a number of different bases. Conventional price comparisons were measured based on the weighted average delivered prices of purchases of U.S.-grown and Canadian number 1 and number 2 HRS wheat. As petitioners and respondents both pointed out, however, conventional price comparisons based on purchaser data do not take into account important factors such as transportation costs.[420] Therefore, in addition to assessing conventional price comparisons, to account for differences in transportation costs, the Commission also collected and presented plant/company-specific purchase price data as well as state-specific price data based on deliveries within the State of Minnesota.[421] [422] Finally, the Commission utilized a statistical

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[412] 19 U.S.C. § 1677(7)(C)(ii).

[413] CR at V-8, PR at V-6; CR and PR at Table V-3.

[414] CR and PR at Table II-8.

[415] CR at II-27, PR at II-19 (purchasers report that wheat grown in Canada and the United States are used in the same applications); CR and PR at Tables II-14 (5 purchasers find domestic HRS wheat inferior in dockage, 4 find it comparable to Canadian HRS wheat, and 1 finds U.S. HRS wheat superior).

[416] CR at II-30, PR at II-21.

[417] Between marketing year 2000/01 and marketing year 2002/03, the quantity of domestic production of HRW wheat was 1.7 times that of domestic production of HRS wheat, and 22.7 times the quantity of U.S. imports of HRS wheat from Canada. CR and PR at Table III-6 (domestic production of HRW wheat and HRS wheat) and Table IV-2 (U.S. imports of HRS wheat from Canada).

[418] U.S. imports of HRW wheat from Canada account for less than one percent of apparent U.S. consumption of HRW wheat. CR and PR at Table C-3 (excluding exports) and Table C-3A (including exports).

[419] CR and PR at Figure V-2; First Staff Work Papers, October 2, 2003, Table C.

[420] *See, e.g.*, Hearing Transcript at 84-85 (testimony of Andrew Wechsler); Hearing Transcript at 226 (testimony of Richard Cunningham); Petitioners' Prehearing Brief at 98-103; CWB's Prehearing Brief at 59-63; and NAMA's Prehearing Brief at 28.

[421] CR at V-15 and V-22-23, PR at V-10 and V-12-13.

[422] The Commission compared prices based on contract date as opposed to delivery date, based on data collected in questionnaires that were reviewed by the parties. In the responses to the Commission's questionnaire, pricing data based on contract dates were reported in a uniform and consistent manner. In contrast, data based on delivery dates were inconsistent and not uniform. Therefore, although we have considered arguments in favor of price data based

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approach to incorporate the effects of additional important attributes such as dockage, protein content, vitreous kernel content, and test weight, on prices.[423] Because the refinements in the plant/company-specific, Minnesota-wide, and statistical analyses allow us to take into account multiple factors that directly impact price comparisons, we have placed relatively greater weight on these forms of analysis than on conventional price comparisons.

To address concerns regarding the comparability of prices by taking into account transportation costs, the Commission compared prices at specific plants that purchased comparable grades of wheat grown in Canada and in the United States. These data provided mixed evidence of underselling. Prices for Canadian number 1 and number 2 HRS wheat were lower than prices for U.S.-grown number 1 and number 2 HRS wheat in 5 of 9 and 9 of 15 possible comparisons, respectively, between June 2000 and August 2002. Subsequent to August 2002, there were no reported purchase prices for Canadian number 1 and number 2 HRS wheat. In total, HRS wheat from Canada was priced below U.S.-grown wheat in 14 of 24 comparisons (58 percent of comparisons).[424]

The Commission also compared delivered prices on a Minnesota-wide basis, which, again, continued to provide mixed evidence of underselling. Prices for Canadian number 1 and number 2 HRS wheat were lower than prices for U.S.-grown number 1 and number 2 HRS wheat in 8 of 15 and 6 of 16 possible comparisons, respectively, between June 2000 and August 2002. Subsequent to August 2002, there were no reported purchase prices for Canadian number 1 and number 2 HRS wheat. In total, HRS wheat from Canada was priced below U.S.-grown wheat in 14 of 31 comparisons (45 percent of comparisons).[425]

Even using conventional price comparisons, evidence of underselling was mixed. Prices for Canadian number 1 and number 2 HRS wheat were lower than prices for U.S.-grown number 1 and number 2 HRS wheat in 10 of 18 and 18 of 22 months, respectively, between June 2000 and August 2002. Subsequent to August 2002, there were no reported purchase prices for Canadian number 1 and number 2 HRS wheat. In total, out of 72 potential monthly observations, price comparisons were possible in 40 instances (56 percent of observations); HRS wheat from Canada was priced below U.S.-grown wheat in 28 of those 40 comparisons (70 percent of comparisons).[426]

Finally, to incorporate the effects on prices of dockage, protein content, vitreous kernel content, test weight, and mill location, the Commission statistically analyzed prices for HRS wheat. Based on 219 usable observations, the estimated mean of Canadian number 1 HRS wheat, controlling for the effects of these factors, was $146.35 per metric ton, slightly higher but not statistically different than the estimated mean of $146.07 for U.S.-grown number 1 HRS wheat. Based on 188 usable observations, the estimated mean of Canadian number 2 HRS wheat was $146.90 per metric ton, higher than the estimated mean of $141.50 for U.S.-grown number 2 HRS wheat. Thus, the estimated mean price of U.S. HRS wheat was either lower but not statistically different than, or statistically less than, the estimated mean price of comparably graded HRS wheat from Canada.[427]

Based on the record in these investigations, there has been no underselling by conventional measurements since August 2002, no underselling on a plant/company-specific basis since January 2002,

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[422] (...continued)
on delivery dates (*see, e.g.*, Petitioners' Posthearing Brief at 4), we view price data based on contact dates as sound evidence to evaluate the significance of any price effects.

[423] CR at E-3, PR at E-3.

[424] CR at V-22-23, PR at V-12-13; *see also* CR and PR at Tables V-13 and V-15.

[425] CR and PR at Tables V-12 and V-15.

[426] CR and PR at Tables V-6 and V-7.

[427] CR at E-7-9, PR at E-6-7. Location, protein level, dockage, and weight were found to be significant determinants of price for No. 1 HRS wheat. Location and protein level were found to be significant determinants of price for No. 2 HRS wheat. *Id.*

and no underselling on a Minnesota-wide basis since August 2002. Moreover, evidence of underselling was mixed even during the earlier portions of the period examined. Finally, statistical analysis evidences that mean prices for HRS wheat from Canada were higher than mean prices for comparable U.S.-grown HRS wheat during the portion of the period examined when direct price comparisons were possible. Therefore, having considered fully the concerns of the parties with respect to price comparability for HRS wheat grown in the United States and in Canada, we find that there has not been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States.

While evidence of underselling by HRS wheat from Canada was at most mixed,[428] pricing data and other record information do not show price depression or suppression. Rather, pricing data indicate that prices for HRS wheat increased over the period examined. U.S. prices for grades 1 and 2 HRS wheat fluctuated in marketing years 2000/01 and 2001/02, reaching period lows in August 2000 and highs for the first two marketing years in January and March 2001, respectively.[429] By August 2002, however, U.S. prices for HRS wheat began to rise sharply, and remained at high levels throughout the remainder of the period examined, despite softening somewhat in the last half of the marketing year.[430] Moreover, it is significant that monthly prices were higher in 19 of 22 possible product/month combinations in marketing year 2002/03 than in the same months in marketing years 2000/01 and 2001/02.[431] This finding is consistent with other domestic product data on the record. On an annual basis, the average unit values of U.S. HRS wheat reported by purchasers rose from $132.44 per metric ton in marketing year 2000/01 to $144.11 in marketing year 2001/02 and to $157.23 in marketing year 2002/03.[432] U.S. farmers' prices for HRS wheat were stable overall between marketing year 2000/01 and 2001/02, declining only slightly on an annual basis from $2.94 per bushel to $2.89 per bushel, before rising sharply in marketing year 2002/03 to $3.84 per bushel.[433] Based on this record of fluctuating prices early in the period examined, followed by price increases and generally high price levels in marketing year

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[428] All 13 responding purchasers indicated that there is no price leader for the U.S. HRS wheat market in the United States. CR at V-5, PR at V-3. Most purchasers reported that HRS wheat grown in Canada and in the United States were comparable in terms of spot and forward prices (8 and 7 purchasers, respectively), although a minority identified U.S. prices as lower (2 each for spot and forward prices), and a single purchaser identified Canadian forward prices as being lower. CR and PR at Table II-14. We note that forward contracting is viewed as very important by purchasers (CR and PR at Table II-11), but Canadian HRS wheat is not considered to be systematically superior in terms of either availability or pricing of forward contacts. In short, the availability of forward contracting of HRS wheat from Canada does not translate into price leadership or a direct price effect.

[429] CR and PR at Tables V-6 and V-7.

[430] CR and PR at Tables V-6 and V-7. Similar trends are observable based on plant/company-specific and Minnesota-wide price data (lowest U.S. prices early in marketing year 2000/01, initial price peaks in mid-to-late marketing year 2000/01, a substantial increase in prices in early-to-mid marketing year 2002/03, with continued high prices despite some softening later in the marketing year). CR and PR at Tables V-12 through V-15.

[431] These comparisons are based on the Commission's most complete price series for weighted average delivered prices. CR and PR at Tables V-6 and V-7. Other price comparisons yield consistent results, however. Based on plant/company-specific comparisons, U.S. HRS wheat prices were higher in 13 of 14 possible product-specific comparisons in marketing year 2002/03 than in the same months in marketing year 2000/01 and/or 2001/02. CR and PR at Tables V-13 and V-14. Likewise, on a Minnesota-wide basis, U.S. HRS wheat prices were higher in 19 of 21 possible product-specific comparisons in marketing year 2002/03 than in the same months in marketing year 2000/01 and/or 2001/02. CR and PR at Tables V-12 and V-15.

[432] CR and PR at Table II-3.

[433] First Staff Work Paper, October 2, 2003, Table B. As with the purchaser price data examined above, prices received by U.S. farmers were at their lowest early in the period examined, in August - September 2000, and at their highest in September - December 2002. First Staff Work Paper, October 2, 2003, Table C.

2002/03, we conclude that subject imports of HRS wheat from Canada have not depressed prices for the domestic like product to a significant degree.

Further, we have considered whether subject imports have prevented price increases, which otherwise would have occurred, to a significant degree. The record in these investigations, however, does not indicate a pattern of rising costs that might suggest the existence of a "cost-price squeeze" caused by the subject imports. To the contrary, total direct and overhead expenses declined by up to 8.5 percent for owned, cash-rented, and share-rented farms in North Dakota between 2000 and 2002.[434] A similar declining trend in expenses of up to 8.7 percent was evident in Minnesota and in South Dakota.[435]

Finally, given the nature of price competition in these markets, we do not view the absence of lost sales or lost revenues allegations in the petition as meaningful to our analysis of the significance of any price effects attributable to the subject imports of HRS wheat from Canada.[436]

Respondents have argued that the law of one price (that is, the tendency for prices for a commodity to equalize across markets after accounting for transportation costs) holds for durum wheat and HRS wheat.[437] Petitioners, in contrast, argue that diverse national markets for durum wheat and HRS wheat are not unified.[438] We note that there is some published support for the law of one price in world wheat markets, after taking into account transaction costs, transportation costs, and perhaps a period of adjustment.[439] We also observe that the United States is the world's largest exporter of wheat,[440] and that both the United States and Canada export substantial volumes of durum wheat and HRS wheat in addition to consumption in their respective home markets.[441] While we note the distinct linkages between the U.S. durum wheat and HRS wheat markets and foreign markets for these products, our determinations in these investigations are based on our evaluation of the record in light of the Commission's statutory obligations, and do not rest on the applicability of the law of one price.

The record in these investigations indicates that underselling by HRS wheat from Canada is not significant. Likewise, the record in these investigations indicates overall rising U.S. prices and declining costs, leading us to conclude that subject imports have not depressed prices to a significant degree or prevented price increases, which otherwise would have occurred, to a significant degree. Therefore, we find that the price effects of the subject imports are not significant.[442]

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[434] Total and direct overhead expenses declined from $97.66 per acre in 2000 to $96.36 per acre in 2002 for owned farms; from $113.65 to $110.20 for cash-rented farms; and from $76.62 to $70.09 for share-rented farms. CR and PR at Table VI-4.

[435] Total and direct overhead expenses declined from $136.75 per acre in 2000 to $126.22 per acre in 2002 for owned farms in Minnesota, and from $154.73 to $144.92 for cash-rented farms. CR and PR at Table VI-5. Total and direct overhead expenses declined from $131.30 per acre in 2000 to $119.93 per acre in 2002 for farms in South Dakota. CR and PR at Table VI-6.

[436] *See* Petition at 59-60.

[437] CWB's Prehearing Brief at exhibit 20 and CWB's Posthearing Brief at 9 and exhibit 4 (pages 17-19).

[438] Petitioners' Posthearing Brief at 8-9 and attachment 2.

[439] CR at V-7, PR at V-5.

[440] CR at II-7, PR at II-5.

[441] CR and PR at Table III-7 (U.S. shipments and U.S. exports of durum wheat and HRS wheat); CR and PR at VII-1 (Canadian home market and export shipments of durum wheat); and CR and PR at VII-2 (Canadian home market and export shipments of HRS wheat).

[442] Commission Staff did not present a formal economic model in these investigations, but rather summarized certain possible outcomes resulting from the imposition of duties on subject imports. Staff found that a reduction in imports would result in a greater price effect than quantity effect; in essence, characterizing demand for U.S. wheat as highly inelastic. CR at II-31, PR at II-21-22. We have considered the possible outcomes reviewed by Staff, and based on the record as a whole and for the reasons discussed in this section of our Dissenting Views, we do not conclude that any negative price effects attributable to subject imports and subject to remedy under the statute rises

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D. Impact of the Subject Imports

In examining the impact of the subject imports on the domestic industry, we consider all relevant economic factors that bear on the state of the industry in the United States.[443] 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."[444] [445]

At the outset, we note that agricultural cases in general can pose unique analytical challenges, and these investigations are no exception. In some instances, available data do not align perfectly with the statute. Capacity, for example, is only imperfectly approximated by acreage, and capacity utilization is not truly applicable in cases such as these where harvest and yields can fluctuate dramatically in response to weather conditions. Similarly, research and development is not always conducted primarily by growers, but instead may reflect the efforts of third parties, such as land grant universities. In these investigations, we have analyzed output, shipment, and inventory data, formal employment data (i.e., limited to hired labor), and data on costs, expenses and returns in major HRS wheat-producing states. We consider the data that the Commission has collected and that we have analyzed to be sufficient to address the statutory criteria presented above, although we have had to combine our analysis of certain criteria (e.g., by consolidating employment considerations and profitability/investment considerations).

Despite increases in the planted acreage devoted to HRS wheat in the United States, the domestic industry's output decreased over the period examined, declining from 502 million bushels in marketing year 2000/01 to 476 million bushels in marketing year 2001/02 and to 357 million bushels in marketing year 2002/03.[446] In large measure, the modest decline in output between marketing year 2000/01 and marketing year 2001/02 reflected diminished yields, while the substantial decrease in output between marketing year 2001/02 and marketing year 2002/03 reflected the impact of a major drought, resulting in both a steep decline in yields and a reduction in the acreage harvested in the United States.[447] Inventories fluctuated, rising from 194 million bushels in marketing year 2000/01 to 210 million bushels in marketing year 2001/02, but then decreased to the lowest level during the period examined, 141 million bushels, in marketing year 2002/03.[448]

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[442] (...continued)
to a significant level.

[443] 19 U.S.C. § 1677(7)(C)(iii); *see also* SAA at 851 and 885 ("In material injury determinations, the Commission considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.")

[444] 19 U.S.C. § 1677(7)(C)(iii); *see also* SAA at 851 and 885; Live Cattle from Canada and Mexico, Invs. Nos. 701-TA-386 and 731-TA-812-813 (Preliminary), USITC Pub. 3155 (Feb. 1999) at 25 n.148.

[445] The statute instructs the Commission to consider the "magnitude of the dumping margin" in an antidumping proceeding as part of its consideration of the impact of imports. 19 U.S.C. § 1677(7)(C)(iii)(V). Commerce determined the weighted average antidumping margins on subject HRS wheat from Canada to be 8.87 percent *ad valorem*. 68 Fed. Reg. 52741, 52744 (Sept. 5, 2003). We also note that Commerce determined the total estimated net subsidy rate for HRS wheat from Canada to be 5.29 percent. 68 Fed. Reg. 52747, 52749 (September 5, 2003).

[446] CR and PR at Table III-6.

[447] CR at II-1, PR at II-1. Output declined by 29.0 percent during the period examined. Yields fell from 37.0 bushels per acre harvested in marketing year 2000/01 to 34.6 bushels per acre in marketing year 2001/02, offsetting an increase in acreage harvested of 200,000 acres. In marketing year 2002/03, harvested acreage fell by 1.2 million acres and yields declined substantially, to 28.2 bushels per acre. CR and PR at Table III-6.

[448] CR and PR at Table III-8.

Similarly, sales of HRS wheat declined throughout the period examined, matching the overall decline in output by the domestic industry. The domestic industry's total shipments decreased from 509 million bushels in marketing year 2000/01 to 460 million bushels in marketing year 2001/02 and to 425 million bushels in marketing year 2002/03.[449] U.S. shipments of HRS wheat produced in the United States decreased from 282 million bushels in marketing year 2000/01 to 244 million bushels in marketing year 2001/02 and to 171 million bushels in marketing year 2002/03.[450] The domestic industry's market share, based on U.S. shipments of domestic HRS wheat, was 87.2 percent in marketing year 2000/01 and 84.1 percent in marketing year 2001/02, but then increased to 94.2 percent, the highest level during the period examined, in marketing year 2002/03.[451] Likewise, the domestic industry's market share, based on total shipments of domestic HRS wheat, was 92.5 percent in marketing year 2000/01 and 90.9 percent in marketing year 2001/02, but then increased to 97.6 percent, the highest level during the period examined, in marketing year 2002/03.[452]

Employment data are limited to hired labor and are largely extrapolated from existing data compiled by the States of Minnesota, North Dakota, and South Dakota. Wages paid to hired labor fell between 2000 and 2002 for all three states, decreasing from $8.0 million to $5.7 million in Minnesota, from $20.5 million to $16.7 million in North Dakota, and from $10.5 million to $7.0 million in South Dakota.[453] These declines reflected both reductions in harvested acreage and, with the exception of South Dakota, reduced labor costs per acre harvested.[454] Productivity can be measured only indirectly through a comparison of wages and production. Nonetheless, the clear decline in productivity between marketing year 2000/01 and marketing year 2002/03 (as reflected by the increase in labor cost per bushel) in all three states is consistent with the drought-related reduction in HRS wheat yields.[455]

Domestic HRS wheat growers on owned, cash-rented, and share-rented farms in Minnesota, North Dakota, and South Dakota generated positive net returns (without government payments) in 2000.[456] In contrast, in 2001, net returns per acre declined to breakeven or below for domestic HRS

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[449] CR and PR at Table III-7. We focus on the quantity of total shipments as the nearest equivalent to sales volume. Financial data on net sales are unavailable from USDA, as are data quantifying the value of total shipments. Similarly, capacity utilization is not adequately captured in the data available from USDA. *See* CR at III-8 and n.10, PR at III-8 and n.10.

[450] CR and PR at Table III-7. The concept of "U.S. shipments," as opposed to export shipments, is of mixed usefulness in these investigations, as the U.S. growers that constitute the domestic industry sell much of their production to grain elevators and generally do not directly export HRS wheat. CR at I-11, PR at I-8; Hearing Transcript at 101 (testimony of Harlan Klein); Petition at 59-60; CWB's Prehearing Brief at 4-5 and CWB's Posthearing Brief at 5-6.

[451] CR and PR at Table IV-10.

[452] CR and PR at Table C-2A.

[453] CR and PR at Table III-11 (Minnesota), Table III-12 (North Dakota), and Table III-13 (South Dakota).

[454] CR and PR at Table III-11 (Minnesota), Table III-12 (North Dakota), and Table III-13 (South Dakota).

[455] Between marketing year 2000/01 and marketing year 2002/03, labor costs rose from $0.08 to $0.09 per bushel in Minnesota, from $0.09 to $0.10 in North Dakota, and from $0.17 to $0.29 in South Dakota. CR and PR at Table III-11 (Minnesota), Table III-12 (North Dakota), and Table III-13 (South Dakota).

[456] Owned farms in North Dakota generated net returns of $26.23 per harvested acre of HRS wheat in 2000, while cash-rented farms generated net returns of $9.35 per acre and share owned farms generated net returns of $1.36 per acre. Owned farms in Minnesota generated net returns of $53.31 per harvested acre of HRS wheat in 2000, while cash-rented farms generated net returns of $28.38 per acre. Farms in South Dakota generated net returns of $19.74 per harvested acre of HRS wheat in 2000. CR and PR at Table VI-4 (North Dakota), Table VI-5 (Minnesota), and Table VI-6 (South Dakota).

wheat growers in those States,[457] as total product returns fell from peak levels[458] and total direct and overhead expenses increased.[459] Net returns recovered in 2002, however, as declining total product returns (reflecting diminished yields due to drought conditions) were more than offset by increasing miscellaneous income (including crop insurance) and declining expenses.[460] As a result, with the exception of cash-rented farms in Minnesota, domestic HRS wheat growers on owned, cash-rented, and share-rented farms in Minnesota, North Dakota, and South Dakota generated positive net returns, albeit usually but not always lower than in 2000.[461]

As discussed in the section of these Views entitled "Price Effects of the Subject Imports," increased price levels and declining costs over the period examined lead us to conclude that subject imports have not contributed significantly to a "cost-price squeeze." Even focusing on the limited period of time in calendar year 2001 when total product returns decreased and total direct and overhead expenses increased, import trends during this calendar year prevent us from attributing declining industry performance to subject imports, which decreased in volume and increased in average unit value in 2001.[462]

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[457] Owned farms in North Dakota generated net returns of $0.08 per harvested acre of HRS wheat in 2001, while cash-rented farms generated negative net returns of -$18.58 per acre and share owned farms generated negative net returns of -$15.25 per acre. Owned farms in Minnesota generated negative net returns of -$8.38 per harvested acre of HRS wheat in 2001, while cash-rented farms generated negative net returns of -$11.21 per acre. Farms in South Dakota generated net returns of $0.05 per harvested acre of HRS wheat in 2001. CR and PR at Table VI-4 (North Dakota), Table VI-5 (Minnesota), and Table VI-6 (South Dakota).

[458] Disaster/counter-cyclical and loan program payments declined markedly during this period. CR and PR at Table II-2.

[459] Owned farms in North Dakota saw total product returns fall from $118.53 to $100.87 and total direct and overhead expenses rise from $97.66 to $104.35 per harvested acre of HRS wheat in 2001, while cash-rented farms saw total product returns fall from $113.58 to $95.49 and total direct and overhead expenses rise from $113.65 to $120.42 per acre and share owned farms saw total product returns fall from $73.98 to $64.59 and total direct and overhead expenses rise from $76.62 to $82.12 per acre. Owned farms in Minnesota saw total product returns fall from $187.65 to $127.57 and total direct and overhead expenses rise from $136.75 to $146.15 per harvested acre of HRS wheat in 2001, while cash-rented farms saw total product returns fall from $179.63 to $134.79 and total direct and overhead expenses rise from $154.73 to $160.44 per acre. Farms in South Dakota saw total product returns fall from $144.32 to $131.00 per acre and total direct and overhead expenses rise from $131.30 to $135.64 per harvested acre of HRS wheat in 2001. CR and PR at Table VI-4 (North Dakota), Table VI-5 (Minnesota), and Table VI-6 (South Dakota).

[460] Total product returns per acre decreased in 2002 for owned farms in North Dakota, increased for cash-rented and share-rented farms in North Dakota, and decreased for farms in Minnesota and South Dakota. Miscellaneous income per acre rose for North Dakota and Minnesota, but fell in South Dakota. Total direct and overhead expenses fell for all forms of land tenure in all three states. CR and PR at Table VI-4 (North Dakota), Table VI-5 (Minnesota), and Table VI-6 (South Dakota).

[461] Owned farms in North Dakota generated net returns of $15.05 per harvested acre of HRS wheat in 2002, while cash-rented farms generated net returns of $5.80 per acre and share owned farms generated net returns of $8.71 per acre. Owned farms in Minnesota generated net returns of $6.96 per harvested acre of HRS wheat in 2002, while cash-rented farms generated negative net returns of -$6.78 per acre. Farms in South Dakota generated net returns of $6.71 per harvested acre of HRS wheat in 2002. CR and PR at Table VI-4 (North Dakota), Table VI-5 (Minnesota), and Table VI-6 (South Dakota).

[462] First Staff Work Papers, October 2, 2003, Table A. We rely on these unadjusted Commerce statistics for the limited purpose of evaluating trends on a calendar year basis, since data adjusted according to USDA end use certificates are not available on this basis.

We also took into consideration any additional burden on government income or price support programs relating to this agricultural product.[463] On a per acre basis, government payments, including decoupled payments under the Agricultural Market Transition Act and market loss assistance payments, declined over the period examined.[464] In particular, we note that as a result of rising market prices, loan program and disaster/countercyclical payments for all types of wheat were lower in 2001 than in 2000 and virtually disappeared in 2002 and 2003.[465]

Based on the record in the final phase of these investigations, and in light of our analysis of the significance of the volume, price effects, and impact of subsidized and LTFV sales of subject imports, we determine that the HRS wheat industry in the United States is not materially injured by reason of imports of the subject HRS wheat from Canada.[466]

III. NO THREAT OF MATERIAL INJURY BY REASON OF HRS WHEAT FROM CANADA THAT IS SUBSIDIZED AND SOLD AT LESS THAN FAIR VALUE

Section 771(7)(F) of the Act directs the Commission to determine whether an industry in the United States is threatened with material injury by reason of the subject imports by analyzing whether "further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted."[467] The Commission may not make such a determination "on the basis of mere conjecture or supposition," and considers the threat factors "as a whole."[468] In making our determination, we have considered all factors that are relevant to these investigations.[469] Based on an evaluation of the relevant statutory factors, we find that an industry

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[463] 19 U.S.C. § 1677(7)(D).

[464] CR and PR at Table VI-4 (North Dakota) and Table VI-5 (Minnesota).

[465] CR at II-5, PR at II-3; CR and PR at Table II-2.

[466] Both parties submitted economic models in their prehearing briefs and responded to requests for additional information. Commission staff analyzed all information on the record regarding both models. *See* CR at II-32 to II-33 and App. E, PR at II-22 and App. E. The Commission did not rely on the economic analyses provided by either party in reaching its determinations in these investigations.

[467] 19 U.S.C. § 1677d(b) and 1677(7)(F)(ii).

[468] 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 Corp. v. United States, 590 F. Supp. 1273, 1280 (Ct. Int'l Trade 1984); see also Calabrian Corp. v. United States, 794 F. Supp. 377, 387-88 (Ct. Int'l Trade 1992), citing H.R. Rep. No. 98-1156 at 174 (1984).

[469] 19 U.S.C. § 1677(7)(F). The Commission must consider, in addition to other relevant economic factors, the following statutory factors in its threat analysis:

> (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 indicating the likelihood of substantially increased imports of the subject merchandise into 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,

(continued...)

in the United States is not threatened with material injury by reason of imports of HRS wheat from Canada that are subsidized and sold in the United States at LTFV.[470]

We conduct our analysis of threat of material injury with respect to the domestic industry for HRS wheat only, and do not incorporate factors from other types of wheat to this analysis, with two possible exceptions: data on end-of-the-year inventories and non-food consumption in Canada were supplied by the CWB not on a disaggregated level individual to particular types of wheat, but rather for all wheat. Accordingly, with regard to these data, we considered aggregated levels.

The United States did not account for the majority of the shipments of HRS wheat by the subject Canadian producers during the period examined. The share of foreign producers' shipments that was exported to the United States was *** percent in 2000/01, and after increasing to *** percent in 2001/02, fell noticeably to *** percent of Canadian shipments (excluding non-food Canadian consumption) in 2002/03.[471] The share of Canadian shipments (excluding non-food Canadian consumption) that was exported to all other markets also trended downward over the period examined from *** percent in 2000/01 to *** percent in 2002/03.[472] As a result of the drought-related production declines and attendant reductions in stock levels, the Canadian home market accounted for an increasing share of Canadian shipments (excluding non-food Canadian consumption) during the period examined, reaching *** percent in 2002/03, compared to *** percent in 2000/01.[473]

There is not a significant rate of increase in the volume or market penetration of subject imports indicating the likelihood of substantially increased imports in the imminent future. The share of Canadian producers' shipments of apparent U.S. consumption of HRS wheat declined significantly during the period examined. Subject imports accounted for 5.8 percent of apparent U.S. domestic consumption in the last marketing year of the period, down from 12.8 percent in the first marketing year of the period examined.[474] If exports by downstream purchasers are included as part of U.S.

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[469] (...continued)

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

(VII) in any investigation under this subtitle 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 that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 1671d(b)(1) or 1673d(b)(1) of this title 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 domestic 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).

Moreover, the Commission shall consider the threat factors "as a whole" in making its determination "whether further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur" unless an order issues. 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.

Factor VII is inapplicable to these investigations.

[470] In its notice of final affirmative countervailing duty determinations, Commerce did not provide any information relevant to Factor I. 68 Fed. Reg. 52747 (Sept. 5, 2003).

[471] CR and PR at Table VII-2.

[472] CR and PR at Table VII-2.

[473] CR and PR at Table VII-2.

[474] CR and PR at Table C-2.

consumption, the share of Canadian producers' shipments in apparent U.S. consumption declined from 7.5 percent in marketing year 2000/01 to 2.4 percent in marketing year 2002/03.[475]

We find that the reduction in exports to the United States from Canada to a low level in the last year of the period examined contrasts with the levels in the previous two years. The decline in volume was entirely consistent with lower production in Canada and an overall reduction in exports owing in substantial part to drought conditions that affected both Canada and the United States. Absent forecasts of a continuation of drought conditions in Canada and the United States, for purposes of evaluating the likely threat posed to the domestic industry, we therefore do not view marketing year 2002/03 as "typical." Nonetheless, the record does not indicate that substantially increased imports of HRS wheat from Canada in the imminent future are likely. The data show that Canadian production of HRS wheat is projected to rebound in 2003/04. Canadian production is expected to increase by *** percent, from *** bushels in 2002/03 to *** bushels in 2003/04; however the projected level of production is not expected to meet the 2000/01 levels of *** bushels.[476] In addition to lower production levels, Canadian stocks of wheat are low relative to the levels that existed at the beginning of the period examined.[477] While stocks are projected to increase *** from the 2002/03 level, in 2003/04 stocks are estimated to be *** percent below the 2000/01 level.[478]

Consequently, even with the projected increase in production and stock levels, Canadian exports of HRS wheat to the United States are not expected to achieve even 2000/01 and 2001/02 marketing year levels. As a share of the projected U.S. market in 2003/04 (including U.S. shipments of 205 million bushels), Canadian exports (*** bushels) would account for only about *** percent, which is lower than the share in the initial year of the period examined (12.8 percent).[479] Moreover, the record indicates that there is no additional possibility of the release of any currently held inventories of Canadian HRS wheat by U.S. importers, as these inventories were reported to have fallen to *** in the last year of the period examined.[480]

We are mindful also that Canada has other export commitments and domestic consumption requirements as well. Canada's total exports as a share of total domestic production in 2003/04 (*** percent) is projected below the shares in 2000/01 (*** percent) and 2001/02 (*** percent), indicating that lower stock levels are likely to constrain the exportation of Canadian output, both to the United States and other third-country markets, in order to meet domestic demand requirements in Canada.

Canadian producers have the ability to product-shift to some extent (i.e., shift from producing other crops to producing HRS wheat). Based on the projected production levels of HRS wheat in Canada for 2003/04 (i.e., a lower level relative to the level in the beginning of the period examined), however, the record indicates that significant product-shifting is not likely in the imminent future.

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[475] CR and PR at Table C-2A.

[476] CR and PR at Table VII-2.

[477] Petitioners assert that post-petition stock levels in Canada were high despite the drought and further assert that the CWB chose to withhold stocks rather than exporting them to the United States. Petitioners' Posthearing Brief at 3. In light of the steep decline in stocks, we do not find the Petitioners' characterization of the stocks to be accurate. In 2002/03, the CWB reported the lowest stock levels during the period examined. Stocks for all wheat fell markedly from *** bushels in marketing year 2000/01 to *** bushels in marketing year 2002/03, representing a nearly *** percent decline (CR and PR at Table VII-2.) Projected levels for 2003/04 are expected to reach approximately *** bushels, which is well below the initial year of the period examined.

[478] CR and PR at Table VII-2.

[479] *See* CR and PR at Table VII-2 and Table C-2. If calculated based on total shipments, the share of Canadian producers' shipments is projected to be *** percent in marketing year 2003/04. *See* CR and PR at Table VII-2 and Table C-2A.

[480] CR and PR at Table VII-6.

We also find no evidence in the record that subject HRS wheat is likely to enter the United States at prices likely to have a significant depressing or suppressing effect on U.S. prices of HRS wheat. Based on the record in these investigations, there has been no underselling since August 2002, and over the period examined the estimated mean price of Canadian HRS wheat was found to be higher than that of U.S. HRS wheat in the U.S. market. Currently, prices of U.S. HRS wheat remain near their highest levels over the period examined, and USDA has projected a $0.30 per bushel increase in overall wheat prices for the 2003/04 marketing year.[481] Further, there is no indication in the record of a likely and imminent decline in the price of subject imports, particularly in light of the diminished stocks in both the United States and in Canada.

The record does not indicate actual or potential negative effects on the existing development and production efforts of the domestic industry. U.S. HRS wheat production and U.S. shipments are expected to increase in 2003/04 relative to the last year of the period examined,[482] despite projected increases in U.S. imports of HRS wheat from Canada. Additionally, with rising prices of HRS wheat over the period examined and with projected further increases in prices of wheat, the financial condition of the domestic industry is not likely to deteriorate.

We have considered whether there are any demonstrable adverse trends that indicate the probability of likely 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). In this regard, there are no known dumping findings or antidumping remedies in third-country markets against the subject HRS wheat imports.

Given the lack of likely volume and price effects of subject imports and the present condition of the domestic industry, we find that material injury by reason of subject imports of HRS wheat from Canada is not imminent.

Based on an evaluation of all relevant statutory factors, we do not find that further subsidized and dumped subject imports from Canada are imminent or that material injury by reason of such imports would occur absent antidumping and countervailing duty orders. Accordingly, we find that the HRS wheat industry in the United States is not threatened with material injury by reason of subject imports from Canada that Commerce found to be subsidized and sold in the United States at less than fair value.

CONCLUSION

For the foregoing reasons, we determine that an industry in the United States is neither materially injured nor threatened with material injury by reason of imports of HRS wheat from Canada that are subsidized and sold in the United States at less than fair value.

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[481] CR at II-2, PR at II-1.

[482] CR and PR at Table C-2.

PART I: INTRODUCTION

BACKGROUND

These investigations result from a petition filed by counsel on behalf of the North Dakota Wheat Commission (hard red spring wheat), Bismarck, ND; the Durum Growers Trade Action Committee (durum wheat), Bismarck, ND; and the U.S. Durum Growers Association (durum wheat), Bismarck, ND on September 13, 2002, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized and less-than-fair-value (LTFV) imports of durum and hard red spring wheat[1] from Canada. Information relating to the background of the investigations is provided below.[2]

Date	*Action*
September 13, 2002 .	Petition filed with Commerce and the Commission; institution of Commission investigations (67 FR 60256, September 25, 2002)
October 29, 2002 ...	Commerce's notices of initiation (67 FR 65947 (antidumping) and 67 FR 65951 (countervailing duty))
November 25, 2002 .	Commission's preliminary determinations transmitted to Commerce
March 10, 2003	Commerce's preliminary countervailing duty determinations and alignment of final countervailing duty determinations with final antidumping duty determinations (68 FR 11374)
May 8, 2003	Commerce's preliminary antidumping duty determinations (68 FR 24707); scheduling of final phase of Commission investigations (68 FR 28253, May 23, 2003)[3]

[1] For purposes of these investigations, durum wheat includes all varieties of durum wheat from Canada. This includes, but is not limited to, a variety commonly referred to as Canada Western Amber Durum. Durum wheat is provided for in subheading 1001.10.00 of the Harmonized Tariff Schedule of the United States (HTS) with a special free rate of duty, applicable to NAFTA-eligible imports from Canada. For purposes of these investigations, hard red spring wheat includes all varieties of hard red spring wheat from Canada. This includes, but is not limited to, varieties commonly referred to as Canada Western Red Spring, Canada Western Extra Strong, and Canada Prairie Spring Red. Hard red spring wheat is provided for in subheadings 1001.90.10 and 1001.90.20 of the HTS with a special free rate of duty, applicable to eligible imports from Canada. Although the HTS subheadings are provided for convenience and custom purposes, the written description of the merchandise is dispositive. Where an importer fails to claim a special duty rate or the article fails to meet North American Free Trade Agreement (NAFTA) requirements, the general duty rate applies; these rates are 0.65 cent per kilogram for 1001.10.00, 2.8 percent *ad valorem* for 1001.90.10, and 0.35 cent per kilogram for 1001.90.20.

[2] *Federal Register* notices for the Commission's notice of scheduling, the Commission's notice of revised scheduling, Commerce's final determinations, and Commerce's notice of amended final determination on sales of hard red spring wheat at less than fair value are presented in app. A.

[3] Due to Commerce's extension of its countervailing duty and antidumping determinations (68 FR 35381, June 13, 2003), the Commission revised its schedule effective June 19, 2003 (68 FR 38384, June 27, 2003).

August 28, 2003	Commerce's final antidumping determinations (68 FR 52741, September 5, 2003)[4] and countervailing duty determinations (68 FR 52747, September 5, 2003)[5]
September 4, 2003 . .	Commission's hearing[6]
October 3, 2003	Commission's vote
October 16, 2003 . . .	Commission determinations sent to Commerce

SUMMARY DATA

Summaries of data collected in the investigations are presented in appendix C, tables C-1 to C-7, and C-1A to C-7A. With respect to data presented in the body of this report, except as noted, U.S. industry data are based on publicly available data concerning U.S. production of durum, hard red spring, and hard red winter wheat. U.S. imports of durum and hard red spring wheat from Canada are based on end-use certificate data of the U.S. Department of Agriculture (USDA), and all other imports are based on official Commerce statistics.[7] Past and projected U.S. industry and U.S. import data are presented for the most recent three marketing years and marketing year 2003/04 to the extent such data are publicly available.

PREVIOUS INVESTIGATIONS

The Commission has conducted a number of investigations on wheat and wheat products. In 1941, in an investigation under section 22 of the Agricultural Adjustment Act of 1933 (inv. No. 22-3), the U.S. Tariff Commission determined in effect that wheat and wheat flour fit for human consumption were practically certain to be imported under such conditions and in such quantities as to interfere materially with USDA price support programs for wheat. After reviewing the Commission's findings, on May 29, 1941, President Roosevelt issued Presidential Proclamation No. 2489 establishing, effective on that date, absolute annual global import quotas of 800,000 bushels of wheat fit for human consumption and 4 million pounds of milled wheat products fit for human consumption.[8] These quotas essentially remained in effect through 1974, although they were modified three times to provide certain exemptions in extenuating circumstances.[9]

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[4] Commerce's final dumping margins were, for durum wheat, 8.26 percent for the Canadian Wheat Board (CWB) and all others, and for hard red spring wheat, 8.87 percent for the CWB and all others. Commerce subsequently (after the Commission voted in these investigations) slightly revised the final dumping margin for hard red spring wheat to 8.86 percent for the CWB and all others (68 FR 57666, October 6, 2003).

[5] Commerce's final countervailing duty rate is 5.29 percent for both durum and hard red spring wheat, for the CWB and all others.

[6] App. B contains a list of witnesses appearing at the hearing.

[7] App. C tables C-1 (durum wheat) and C-2 (hard red spring wheat) present data on imports from Canada based on USDA end-use certificate data; table C-3 (hard red winter wheat) is based on official Commerce statistics; and table C-4 (hard red spring and hard red winter wheat combined) is a summation of tables C-2 plus C-3. Alternate summaries of data in which imports are based only on official Commerce statistics are presented in app. C, tables C-5 to C-7. In addition, summaries of data in which apparent U.S. consumption includes U.S. exports are presented in app. C, tables C-1A to C-7A. Certain official USDA data are presented in app. D.

[8] These included wheat flour, semolina, crushed or cracked wheat, and similar products.

[9] These exceptions were made for distress shipments of experimental or seed wheat, for puchases by the War Food Administrator, and for certain wheat flour used for religious and ritual purposes in Passover matzo production.

Global quotas effective during this period were allocated among countries on the basis of average annual U.S. imports of the covered products during the period 1929-40. Canada received 99.4 percent of the quota for wheat and 95.4 percent of the quota for milled wheat products.

At the request of President Nixon, the Tariff Commission, in 1974, conducted an investigation under section 22 of the Agricultural Adjustment Act of 1933 (inv. No. 22-38) on wheat and milled wheat products.[10] The Commission recommended that the President issue a proclamation suspending the import quotas on wheat and milled wheat products for a 1-year period, July 1, 1974, to June 30, 1975, inclusive. The President adopted the Commission's recommendation, and decided to suspend the quotas. No action was taken to reinstate the quotas until 1994.

In 1990, the Commission conducted an investigation regarding durum wheat under section 332 of the Tariff Act of 1930.[11]

At the request of President Clinton, the Commission, in 1994, conducted an investigation under section 22 of the Agricultural Adjustment Act of 1933 to determine whether wheat classified under HTS heading 1001, wheat flour classified under HTS heading 1101, and semolina classified under HTS subheading 1103.11.00 were being or practically certain to be imported into the United States under such conditions or in such quantities as to render or tend to render ineffective, or materially interfere with, the USDA's price support, payment, and production adjustment program for wheat.[12] The Commission determined that imports had materially interfered with the U.S. wheat programs,[13] and the President imposed a tariff-rate quota on wheat, wheat flour, and semolina imports for the duration of marketing year 1994/95.

At the request of the United States Trade Representative, the Commission, in 2001, conducted an investigation under section 332 of the Tariff Act of 1930, concerning the conditions of competition between U.S. and Canadian wheat in the United States, and in certain third country markets.[14]

THE PRODUCT

Wheat (*genus Triticum*), the seed of an annual cereal grass, is the leading food grain of the temperate regions of the world; among U.S. grains, wheat ranks second only to corn in terms of the value of production. Wheat is generally categorized as "hard" or "soft" wheat on the basis of kernel characteristics. Then, wheat varieties are distinguished depending on when the wheat is planted–spring or fall. Spring wheat is sown in the spring as soon as the ground can be worked, and grows until harvested in late summer and early fall. Winter wheat is sown in the fall and germinates before cold weather halts growth. After lying dormant during the winter, the wheat plant resumes growth until maturation, in the summer.

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[10] *Wheat and Milled Wheat Products*, inv. No. 22-38, TC Pub. 675, May 1974.

[11] *Durum Wheat: Conditions of Competition between the U.S. and Canadian Industries*, inv. No. 332-285, USITC Pub. 2274, June 1990.

[12] *Wheat, Wheat Flour, and Semolina*, inv. No. 22-54, USITC Pub. 2794, July 1994.

[13] Chairman Watson, Vice Chairman Nuzum, and Commissioner Crawford dissented, finding that wheat, wheat flour, and semolina were not being imported under such conditions and in such quantities as to render, or tend to render, ineffective the USDA wheat program, and that the evidence of the recent impact of increased wheat imports, which were concentrated in one region of the United States and two segments of the wheat market, could support the President finding either material interference, or no material interference.

[14] *Wheat Trading Practices*, inv. No. 332-429, USITC Pub. 3465, December 2001.

The USDA recognizes eight classes of wheat in the United States: hard red winter, hard red spring, durum, soft red winter, soft white, hard white, unclassed, and mixed wheat.[15] For the 2002/03 marketing year, the USDA reported the composition of the U.S. wheat crop, as follows:[16]

Wheat class	Production volume	Share
	Million bushels	*Percent*
Hard Red Winter	609	38
Hard Red Spring	357	22
Soft Red Winter	332	21
White (Soft and Hard)	239	15
Durum	79	5
Total	1,616	100

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

Durum wheat is a hard wheat, grown mainly in the spring, and is generally milled into a coarser meal (called semolina) rather than flour, though durum flour is an inevitable byproduct of semolina. Semolina is used chiefly for making macaroni, spaghetti, vermicelli, and similar pasta products. Typically, 100 pounds of durum wheat are milled into 64 pounds of semolina, 13 pounds of durum flour, and 23 pounds of mill feed byproducts.[17] Durum flour is used chiefly to make "short-cut" pasta products such as shells or elbow macaroni, blended with non-durum bakery flour to make Middle Eastern flat breads or used in breakfast cereals, desserts, and as a filler for pastries.[18]

Hard wheat has a kernel that is high in protein and gluten content. It is produced in areas with hot summers and moderate rainfall. The flour made from hard wheat readily absorbs water and produces an elastic and tenacious dough well-suited to commercial bread baking. Wheat cereal breakfast foods to be prepared by the consumer, such as farina, are also generally made from hard wheat. The two principal classes of hard wheat grown in the United States are hard red winter wheat and hard red spring wheat. Hard white wheat is a hard wheat grown in small commercial volumes in the United States.

Soft wheat has a kernel relatively low in protein content, and is grown in areas of abundant rainfall and moderate temperature. The flour made from soft wheat is used primarily for baking cakes, crackers, biscuits, and pastry. Prepared breakfast food, such as wheat flakes, are made from soft wheat. Soft red winter wheat is the leading soft wheat, and soft white wheat the second-leading soft wheat.

The classes of hard red spring wheat, soft white wheat, and durum wheat are further divided into subclasses.[19] Each USDA class and subclass is divided into five U.S. numerical grades and U.S. sample

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[15] Under the United States Grain Standards Act, as amended, 7 U.S.C. Part 810.2204, and 57 CFR 58966, December 14, 1992.

[16] USDA, Economic Research Service (ERS), *Wheat Outlook*, August 14, 2003, table 2. The marketing year begins June 1.

[17] Brendan J. Donnelly, "Pasta: raw material and processing," *Handbook of Cereal Science and Technology*, ed. K.J. Lorenz et al., 1991, p. 768.

[18] J.W. Dick, and R.R. Matsuo, "Durum wheat and pasta products," *Wheat Chemistry and Technology*, vol. II, Y. Pomeranz, ed., American Association of Cereal Chemists, St. Paul, MN, 1988, pp. 515-518; and Brendan J. Donnelly, "Pasta: raw materials and processing," *Handbook of Cereal Science and Technology*, ed. K.J. Lorenz et al., 1991, p. 768.

[19] The three subclasses for durum wheat are: hard amber durum wheat (HAD), amber durum wheat, and durum wheat. Hard red spring wheat subclasses are: dark northern spring wheat (DNS), northern spring wheat, and red spring wheat. The three subclasses for soft white wheat are soft white wheat, white club wheat, and western white wheat. USDA, Grain Inspection, Packers and Stockyards Administration, Federal Grain Inspection Service, *Grain*

(continued...)

grade, with grade No. 1 being the highest quality and sample grade the lowest.[20] The five USDA numerical grades are distinguished by test weight per bushel, and the percentage of damaged kernels, foreign material, shrunken and broken kernels, defects, and wheat of other classes.[21]

The USDA grading system does not preclude the introduction of new wheat varieties. Consequently, there are a large number of varieties of wheat grown in the United States. In 2003 in the United States for example, there were 47 different hard red spring varieties grown in North Dakota, the leading one being the Alsen variety, comprising 37.4 percent of the 2003 North Dakota crop.[22]

The U.S. system can be contrasted to the restrictive Canadian grading system that has permitted fewer than a dozen wheat varieties. The Canadian Government is very restrictive as to the introduction of new wheat varieties, and as a result, 80 percent of Canadian Western Red Spring wheat comes from seven wheat varieties.[23] NAMA indicated that this tight regulation of wheat varieties in Canada is an important consideration why U.S. millers may select hard red spring wheat from Canada.[24] NAMA indicated that the Alsen variety is an inferior product based upon the fact that Alsen variety wheat can be grown in Canada, but must be marketed as "feed wheat" at a substantially lower price than milling grade wheat.[25] Petitioners dispute that the Alsen hard red spring wheat is inferior simply because it was denied registration in Canada, noting that Asian and European buyers, as well as U.S. millers, continue to buy U.S. Alsen hard red spring wheat.[26]

Minimum protein content levels are typically specified in commercial contracts. Millers and bakers usually need specific and constant protein levels, depending on their customers' needs. The protein level of wheat varies greatly depending on growing conditions.[27] Flour millers frequently purchase hard red spring wheat to blend with the lower-protein hard red winter wheat in order to achieve the desired protein level. The price premium that millers pay (the "protein premium") can be quite high in years when crop protein levels are low. After receiving the wheat, millers typically perform their own quality tests, and may blend wheats together before milling in order to meet customer specifications.

In 2002/03, total domestic consumption of wheat was 1,126 million bushels, of which the principal uses were:[28]

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[19] (...continued)
Inspection Handbook II, Wheat, as obtained online on September 22, 2003, *http://www.usda.gov/gipsa/reference-library/handbooks/grain-insp/grbook2/bk2ch13.pdf.*

[20] Under the United States Grain Standards Act, as amended, 7 U.S.C. Part 810.2204, and 57 CFR 58966, December 14, 1992.

[21] Special grades may be further provided to emphasize special qualities or conditions affecting the value of wheat. Special grades are added to and made a part of the USDA grade designation, but do not affect the numerical grade designation. The protein level (as a percentage of the total grain weight) may be used to distinguish a special grade.

[22] North American Millers' Association's (NAMA) prehearing brief, pp. 22-22.

[23] USITC, *Wheat Trading Practices*, USITC Pub. 3465, December 2001, pp. 2-32 to 2-33.

[24] NAMA's prehearing brief, pp. 19-20

[25] Ibid.

[26] See, petitioners' posthearing brief, pp. 13-14, app. 1 at 58-60, and exh. 22.

[27] Walter Heid, USDA, ERS, *U.S. Wheat Industry*, August 1979, p. 13.

[28] USDA, ERS, *Wheat Outlook*, August 14, 2003, table 2.

Use	All wheat Share	Hard red spring Share	Durum Share	Hard red winter Share
	Percent	*Percent*	*Percent*	*Percent*
Food (milling)	82	102	106	80
Seed	7	9	6	8
Feed and residual	11	-11	-12	13
Total	100	100	100	100

Note.--The negative numbers reported for "feed and residual" use occurred because of underreporting of production, stocks, imports, and/or exports. Totals may vary because of rounding.

Food use accounted for 82 percent of all wheat consumed in the United States in 2002/03, for nearly all durum and hard red spring wheat, and for 80 percent of hard red winter wheat according to USDA data. In the United States, most wheat used in food is first milled into flour and meal and further processed to make products for human consumption.

Wheat is also used in significant quantities for seeding and as livestock feed, and in small amounts for the manufacture of starch, gluten, and some industrial products. The "feed and residual" use of wheat has been quite volatile, with animal feeding of wheat rising during years when wheat quality is low or when large crops render wheat feeding cost-competitive to such alternative feedgrains as sorghum or corn.

The five primary U.S. wheat classes shown below vary considerably in the end uses to which they are put. In general, all wheat (with the exception of wheat grown expressly for seed for planting) is planted with the goal of being milled and used in food, although often one-eighth or more of each year's crop ends up being fed to livestock. Therefore, desirable milling qualities strongly influence wheat characteristics. The primary food uses of these five wheat classes are shown below:[29]

Classes	Qualitative factors	Primary food use
Hard red winter	Good milling and baking characteristics, wide range of protein levels	All flours, but primarily bread flour, whole wheat breads
Hard red spring	Excellent protein level and milling qualities	All flours, primarily bread flour, white bakers' bread and rolls
Durum	Highest protein level	Semolina for pasta products
Soft white	Low protein	Breakfast cereals, noodles, crackers, donuts, layer cakes, foam cakes
Soft red winter	Low protein	Flour for cakes, pastries, quick breads, crackers, snack foods

In previous investigations, the Commission has found evidence that wheat of comparable classes from the United States and Canada tend to be perfect or near perfect substitutes on the basis of the various physical characteristics of the wheats.[30] In the 2001 section 332 investigation, U.S. wheat millers reported few qualitative differences between Canadian hard red spring and domestic hard red spring

[29] *The Wheat Grower: Wheat Facts, 1998*, p. 9; and Joy Harwood, Mack Leath, and Walter Heid, USDA, ERS, *The U.S. Milling and Baking Industries*, December 1989, p. 17.

[30] *Wheat, Wheat Flour, and Semolina,* inv. No. 22-54, USITC Pub. 2794, July 1994, p. II-83, and app. M; and *Wheat Trading Practices,* inv. No. 332-429, USITC Pub. 3465, December 2001, p. 2-10.

wheat, or between Canadian and domestic durum wheat within the same grade.[31] Thus, #1 Canada Western Red Spring wheat was found to be directly substitutable for #1 U.S. hard red spring wheat, and #1 Canadian Western Amber Durum directly substitutable for #1 U.S. Hard Amber Durum.

DOMESTIC LIKE PRODUCT ISSUES

Petitioners argue that there are two domestic like products consisting of durum and hard red spring wheat.[32] They argue that hard red spring wheat is distinguished from other types of wheat based on physical qualities, geographical origin, planting and harvest periods, end use, and pricing factors. The CWB and NAMA argue that hard red spring and hard red winter wheat are highly substitutable and constitute a single domestic like product.[33] As discussed in further detail in Part II, the majority of the purchasers' questionnaire respondents reported that hard red winter wheat, sometimes with certain qualifications, is substitutable for hard red spring wheat. The CWB and NAMA do not dispute that durum wheat is a separate domestic like product.

In the United States, hard red spring wheat is grown primarily in the Northern Plains, whereas hard red winter wheat is grown primarily in the Southern Plains. While several States produce both hard red spring and hard red winter wheat, there was testimony at the conference in the preliminary phase of the investigations that the actual overlap was small.[34] Hard red spring wheat is planted during April and May and harvested during August and September. Hard red winter wheat is planted during September through November and harvested during June and July. Flour from hard red spring wheat is traded in the Minneapolis area as "Spring Short Patent" or "Spring Standard Patent" flour.[35] Flour from hard red winter wheat is marketed in the Kansas City area as "Bakers Short Patent" or "Bakers Standard Patent" flour. Minneapolis Spring Standard Patent flour and Kansas City Bakers Standard Patent flour sold at close to or nearly the same price during the past five years.[36] For example, in 2001/02, Kansas City bakery flour sold for $8.98 per hundred pounds, and Minneapolis bakery flour sold for $9.11 per hundred pounds, according to USDA.

Hard red spring wheat may be used alone[37] or blended with hard red winter wheat. These millers blend hard red spring and hard red winter wheat to achieve both the desired protein characteristics and a lower cost of the flour. Notwithstanding the variations in quantity and protein levels of hard red spring and hard red winter wheat from crop year to crop year,[38] typical blends for some major product categories

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[31] *Wheat Trading Practices,* inv. No. 332-429, USITC Pub. 3465, December 2001, pp. 4-9 to 4-19.

[32] Petition, pp. 26-30, petitioners' postconference brief, pp. 2-3, and petitioners' prehearing brief, pp. 10-47.

[33] CWB's postconference brief, p. 11, CWB's prehearing brief, pp. 68-78, and NAMA and its Ad Hoc AD/CVD Committee's prehearing brief, pp. 3-9.

[34] Conference transcript, pp. 91-92 (Fisher). The following states were identified as having produced hard red spring and hard red winter wheat in 2002: Colorado, Idaho, Minnesota, Montana, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming. See Part III for further information.

[35] See *Milling and Baking News*, September 17, 2002, p. 46.

[36] USDA, ERS, *Wheat Situation and Outlook Yearbook*, March 2002, table B-12, p. B-9.

[37] Hard red spring wheat is used for products requiring high protein levels such as yeast breads, croissants, bagels, multi-grain breads, frozen dough, high quality pizza dough, hard rolls, French bread, English muffins, and tortillas. Petition, p. 27 and North American Millers' Association's (NAMA) postconference brief, p. 1.

[38] The protein content of hard red spring and hard red winter wheat ranges from 12 to 16 percent and 10 to 14 percent, respectively. Petition, p. 28 and CWB's postconference brief, p. 12. Petitioners claim that the protein quality of hard red spring wheat performs differently than that of hard red winter wheat in terms of strength and absorption properties of a flour as it is being mixed into a dough. They state that the flours that have equivalent

(continued...)

are the following: 75 percent hard red winter wheat and 25 percent hard red spring wheat for white pan bread; 50 percent hard red winter wheat and 50 percent hard red spring wheat for English muffins; and 20 percent hard red winter wheat and 80 percent hard red spring wheat for bagels.[39] Hard red winter wheat is often supplemented with hard red spring wheat to elevate the protein level to specific customer requirements.[40]

Channels of distribution are distinct but parallel for hard red spring and hard red winter wheat. The two wheat classes are sold through different grain exchanges and are never co-mingled in grain elevators or during transit. Despite some overlap, hard red spring and hard red winter wheat are produced in different regions of the country. Nevertheless, the channels of distribution are otherwise parallel. Wheat from farms is normally trucked to country elevators, although some farmers truck their wheat directly to an export terminal. From country elevators, wheat then moves typically on rail cars or barges to domestic mills or to export ports.[41]

Historically, higher protein wheat commands a higher price than lower protein wheat. For example, during the past three crop years (2000/01 to 2002/03), the price of 13-percent protein hard red spring wheat averaged $3.81 per bushel, 14-percent protein hard red spring wheat averaged $3.90 per bushel, and 15-percent protein hard red spring wheat averaged $4.09 per bushel.[42] Similarly, for hard red winter wheat, the price of "ordinary protein" hard red winter wheat averaged $3.59 per bushel during these three years, and 13-percent hard red winter wheat averaged $3.69 per bushel.[43]

Prices for hard red spring and hard red winter wheat can vary according to protein level, vitreous kernel count, moisture level, and other factors, making comparisons between these classes problematic. However, as a general indication of typical prices, the simple average marketing year 2002/03 prices of hard red spring wheat (Minneapolis 13 percent protein), hard red spring wheat (Minneapolis 14 percent protein), hard red winter wheat (Kansas City #1 ordinary[44] protein), and hard red winter wheat (Kansas City 13 percent protein) were $4.45, $4.47, $4.22, and $4.24 per bushel, respectively.[45] Additional information on prices is found in Part V of this report.

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[38] (...continued)
levels of gluten or protein can have different "strength" qualities. Petition, p. 29. The CWB argues that the absorption and strength properties of hard red spring wheat are largely functions of its relatively higher gluten content, which corresponds to its relatively higher protein content. CWB's postconference brief, p. 15.

[39] NAMA's postconference brief, p. 2.

[40] Petition, pp. 28-29 and conference transcript, p. 156.

[41] *Industry and Trade Summary: Grain (Cereals)*, USITC Pub. 3350, September 2000, pp. 4 and 22-23.

[42] Cash prices of Dark Northern Spring, HRS at Minneapolis; source: USDA, ERS, *Wheat Outlook*, July 15, 2003, table 7; and *Wheat Situation and Outlook Yearbook*, March 2003, app. table 21.

[43] Cash prices of No. 1. HRW at Kansas City; source: USDA, ERS, *Wheat Outlook*, July 15, 2003, table 7; and *Wheat Situation and Outlook Yearbook*, March 2003, app. table 21.

[44] Ordinary protein Kansas City hard red winter wheat is wheat for which no protein premium is paid, and which is no more than 11 percent protein for marketing year 2003/04. The definition of ordinary protein varies each year and is set by the Kansas City Grain Exchange participants depending on the protein level of the hard red winter wheat crop. Phone interview with ***, USDA, August 21, 2003.

[45] Thirteen percent protein level hard red spring wheat is believed to be the most commonly traded type of hard red spring wheat in the Minneapolis Grains Exchange. #1 ordinary hard red winter wheat is believed to be the most commonly traded hard red winter wheat in the Kansas City Board of Trade. Source: USDA, ERS, *Wheat Outlook*, July 15, 2003, table 7; and *Wheat Situation and Outlook Yearbook*, March 2003, app. table 21.

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

SUPPLY OF U.S.-PRODUCED WHEAT

Available information indicates that U.S. durum and hard red spring wheat producers are likely to respond to changes in demand with small changes in the quantity of wheat planted and shipped to the U.S. market. Important determinants of this supply response are marginal production costs, available crop land suitable for cultivating more than one type of crop, inventories, government programs, and export markets. Costs are addressed in Part VI.

Domestic Production

The five major types of wheat grown in the United States in order of greatest production are: hard red winter wheat, hard red spring wheat, soft red winter wheat, white wheat, and durum wheat. The area planted in durum wheat in 2002/03 was the same as in the previous marketing year but was 26.1 percent less than in marketing year 2000/01 (see table C-1). The area harvested and the per-acre yields were down slightly, which led to lowered production of durum in 2002/03 by 5.4 percent compared to the previous marketing year and by 27.8 percent compared to marketing year 2000/01. The area planted in hard red spring wheat in 2002/03 increased from the previous year, but the area harvested and per-acre yields decreased because of the drought, and thus production decreased as well, though the protein and dough properties were enhanced. Production of hard red spring wheat decreased by 25.1 percent between 2001/02 and 2002/03 and by 29.0 percent between 2000/01 and 2002/03 (see table C-2). Hard red winter wheat production declined in 2002/03 as both the area harvested and per acre yields decreased. The largest single-year drops were in Kansas, Colorado, Oklahoma, and Texas. Production of hard red winter wheat decreased by 20.6 percent between 2001/02 and 2002/03 and by 28.0 percent between 2000/01 and 2002/03 (see table C-3).

Ending inventories of durum and hard red winter wheat each decreased in all three marketing years from 2000/01 to 2002/03, and inventories of hard red spring wheat increased between marketing years 2000/01 and 2001/02 but fell in marketing year 2002/03 below the level in marketing year 2000/01. The ending inventory quantity of durum wheat in 2002/03 was only 15 million bushels. Although apparently not the case for these marketing years, low inventories are, sometimes, a signal that future prices will rise, and farmers will be induced to increase plantings in the upcoming marketing year. For 2003/04, the USDA projects price increases of approximately 30¢ per bushel.[1] Although the domestic area planted in durum and hard red spring wheat is down in 2003/04 compared 2002/03, the projected acreage harvested is 1.3 percent higher for durum wheat, 0.5 percent higher for hard red spring wheat, and 31.2 percent higher for hard red winter wheat.[2]

U.S. wheat acreage and wheat production peaked in the 1980s. Since then, farmers have taken some land out of production or switched to crops with higher returns. Some of the acreage taken out of wheat production could be reverted to wheat use. Weather has large short-term effects on production. Agronomic conditions limit the area suitable for durum and hard red spring wheat production. Barley and oil seeds are alternative crops that can be grown in much of the northern plains. Despite the recent downturn in U.S. wheat production, the potential still exists to expand production if prices, costs, and government policies are favorable to wheat production compared with other production alternatives.

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[1] USDA/ERS, *Wheat Outlook*, August 14, 2003, p. 1.

[2] Ibid., table 2.

Government Programs

U.S. Government programs have aided U.S. growers of wheat and the other principal field crops during times of low prices and adverse growing conditions, and decoupled payments have increased wealth.[3] The Farm Security and Rural Investment Act of 2002 (the 2002 Farm Act) provides support to wheat growers mainly through direct fixed payments, counter-cyclical payments that are affected by prevailing market prices, marketing loans (MLA) based on fixed loan rates, and crop insurance.[4] Direct payments, which under the 1996 Farm Act (the Federal Agriculture Improvement and Reform Act of 1996) were called "production flexibility contract payments" (PFC), provide fixed payments to the farmer based on 85 percent of the historic base acreage and yield and a payment rate of $0.62 per bushel of wheat. Participating farmers establish historic base acreage and yield for their farms using average experience during 1998-2001. The farmer is not obligated to grow wheat and can plant any eligible program crops, such as peas and lentils or soybeans, or not plant at all. Counter-cyclical payments are made whenever the effective market price plus the direct payment rate is less than the fixed target price. Nonrecourse loans continued under the 2002 Farm Act, and the loan rate for wheat increased slightly.

Although the U.S. wheat support program changed from the 1996 Farm Act to the 2002 Farm Act, the underlying policy structure under the 2002 Act was largely the same for wheat, except for the addition of a target price and slightly higher loan rates. Indirectly, more acreage included in the Conservation Reserve Program (CRP) and the addition of peas and lentils as program crops (attractive alternative crops compared to wheat) may eventually reduce wheat acreage.[5] Direct and counter-cyclical payments increase expected farm income and reduce risk, but have little impact on the planting decision for a particular year because these payments are decoupled from current production and planting.[6] Major provisions of the wheat program under the two Farm Acts are shown in table II-1.

Under the 2002 Farm Act, Congress directed the USDA to adjust loan rates, particularly those for wheat and feed grains, by variety and county level. The loan rates under the 1996 Farm Act had failed to reflect price differences among wheat classes, were based on conditions existing in 1995, and distorted producer decisions about what commodities to plant and produce and to market.[7] In June 2002, the USDA established wheat loan rates by county and state and by wheat variety.[8]

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[3] Decoupled payments are lump-sum income transfers to farm operators that do not depend upon current production, factor use, or commodity prices. USDA, *http://www.ers.usda.gov/catalog/OneProductAtATime.asp?*, retrieved September 23, 2003.

[4] USDA, *http://www.ers.usda.gov/features/farmbill/titles/titleIcommodities.htm*, retrieved June 19, 2002.

[5] Under the voluntary CRP, farmland owners may retire environmentally sensitive cropland from production for a 10-15-year period. The maximum acreage under the CRP increased by 8 percent to 39.2 million acres under the 2002 Farm Act from the 1996 Act. Over 10 million acres already enrolled under the 1996 Act had been planted previously in wheat. Philip Sronce, USDA, FSA, *2002 Act Cost-Benefit Assessment*, September 19, 2002, and Paul Westcott, C. Edwin Young, and J. Michael Price, USDA, ERS, *The 2002 Farm Act: Provisions and Implications for Commodity Markets*, November 2002, p. 9.

[6] Philip Sronce, USDA, FSA, *2002 Act Cost-Benefit Assessment*, September 19, 2002, p. 2

[7] Ibid., p. 10.

[8] *http://www.fsa.usda.gov/dafp/psd/LoanRate.htm*, July 24, 2003.

Table II-1
Summary of wheat program under the 2002 Farm Act and under the 1996 Farm Act

Support mechanism	1996 Farm Act	2002 Farm Act	
	1996-2002	2002-03	2004-07
	Dollars (*per bushel*)		
Decoupled direct payments	$0.62	$0.52	$0.52
Loan rates	2.58	2.80	2.75
Target price	No provision	3.86	3.92

Source: Phillip Sronce, USDA FAS, *2002 Act Cost-Benefit Assessment*, September 19, 2002, pp. 2 and 10; and Paul Westcott, C. Edwin Young, and J. Michael Price, USDA, ERS, *The 2002 Farm Act: Provisions and Implications for Commodity Markets*, November 2002, pp. 4-6.

Under the Federal Crop Insurance Program, farmers can purchase yield insurance or crop revenue (CRC) insurance through private companies at 40 to 50 percent of the total cost, with the USDA paying the remainder.[9] In 2000, roughly two-thirds or about 45 million acres of the 62 million acres planted in all types of U.S. wheat were insured. USDA has indicated that the net effect of the insurance program, although it lowers the risk to crop failure and price fluctuations to the farmer, amounted to less than a 0.5 percent increase of total U.S. wheat production from 1996/97 to 2000/01.[10]

However, the USDA did indicate that the crop insurance program had an effect on durum production in North Dakota during 1999-2000. In 1999, in spite of the fact that durum prices were at a 5-year low, planted durum acreage in North Dakota rose by 450,000 acres to 3.45 million acres as farmers apparently responded to guaranteed higher durum prices under the CRC. In the following year, 2000, durum acreage dropped slightly to 3.25 million acres.[11] In March 2001, the USDA dropped CRC insurance coverage for durum wheat, and the North Dakota planted durum acreage dropped by 1 million acres to 2.2 million acres in 2001. North Dakota growers may have shifted some acreage to HRS wheat given that the acreage planted in hard red spring wheat in the State rose by 300,000 acres from 2000 to 2001.[12]

Government payments for wheat support declined from about $3.6 billion in 2000 to a forecasted $1.17 billion in 2003, as shown in table II-2. With market prices rising since 2000, the decoupled payments in 2003 account for virtually all government payments for wheat; payments for the loan program and the MLA/CCP programs almost stopped.

[9] *Wheat Trading Practices,* inv. No. 332-429, USITC Pub. 3465, December 2001, p. 2-13.

[10] Monte Vandeveer and C. Edwin Young, ERS, USDA, "The Effects of the Federal Crop Insurance Program on Wheat Acreage," *Wheat Situation and Outlook Yearbook*, March 2001, pp. 21-30.

[11] USDA, NASS, *Crop Production, 2001 Summary*, January 2002, p. 16.

[12] USDA, NASS, *Crop Production, 2001 Summary*, January 2002, p. 17.

Table II-2
U.S. Government payments for wheat, by type, crop years 2000-03

Crop year	Decoupled payment PFC/direct[1]	Disaster/counter-cyclical MLA/CCP[2]	Loan program MLG/LDP[3]	Total
	Payments (*$1 million*)			
2000	1,337.3	1,444.4	824.5	3,606.2
2001	1,076.0	1,223.4	174.3	2,473.7
2002[4]	1,166.6	0.0	15.8	1,182.4
2003[5]	1,166.6	0.0	1.1	1,167.7

[1] Production flexibility payment (PFC) and direct payments.
[2] Marketing loss assistance (MLA) and counter-cyclical payment (CCP).
[3] Marketing loan gains (MLG) and loan deficiency payments (LDP).
[4] Preliminary estimate.
[5] Forecast estimate, as of June 12, 2003.

Source: Phillip Sronce (e-mail), USDA, FSA, "Wheat Government Payments," June 12, 2003.

Three studies compared the 2002 Farm Act to the 1996 Farm Act and concluded that the 2002 Act will likely reduce U.S. wheat production and planted acreage. A Farm Service Agency (FSA) USDA study indicated that, on average, the 2002 Farm Act would reduce the planted wheat acreage by 0.3 percent and production would fall by 0.4 percent, as compared to what would have happened if the 1996 Farm Act had remained.[13] As farmers switch to alternative crops like lentils and dry peas and enroll more land in the CRP, wheat production may fall, despite rising USDA outlays during 2002-07.

An Economic Research Service (ERS) USDA study in November 2002 indicated that the 2002 Farm Act might initially increase the planted wheat acreage by 1 million acres in 2003, but by 2007 would result in an annual decline of nearly 0.8 million acres over the scenario under the 1996 Farm Act.[14] However, the 2002 Act may provide indirect incentives that influence production decisions because the base acreage and payment yields were updated and increased from the 1996 Act.[15] Furthermore, the counter-cyclical payments may lower risks to producers and thus raise production.[16]

An OECD study in 2003 also emphasized that the counter-cyclical payments and higher loan rates lead to a significant reduction in the risk faced by U.S. grain producers.[17] However, the area planted in wheat declines on average by 1 percent under the 2002 Farm Act (as compared to the 1996 Farm Act scenario), but the area in other grain and oilseeds rises.[18] The OECD analysis shows a 0.2 percent gain in U.S. wheat production in 2003, but thereafter U.S. wheat production falls and, by 2007, would be 1.2 percent below the scenario under the 1996 Farm Act.[19] The OECD study indicated that the rate of U.S. production subsidies (PSE) for all U.S. crops rises only slightly from 23.4 percent based on

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[13] Philip Sronce, USDA, FSA, *2002 Act Cost-Benefit Assessment*, September 19, 2002, p. 29.

[14] Paul C. Westcott, C. Edwin Young, and J. Michael Price, USDA, ERS, *The 2002 Farm Act: Provisions and Implications for Commodity Markets*, November 2002, app. table B-15.

[15] Ibid., p. 27.

[16] Ibid., p. 28.

[17] OECD, Working Party on Agricultural Policies and Markets, *Agricultural Policies in OECD Countries: Monitoring and Evaluation 2003, Analysis of the 2002 Farm Act in the United States*, March 31-April 2, 2003, p. 12.

[18] Ibid., p. 13.

[19] Ibid., p. 34.

the 1996 Farm Act (along with the ad hoc support disaster/market loss assistance actually provided) to 24.9 percent under the 2002 Farm Act.[20]

Export Markets

The United States is the world's largest exporter of wheat. In past three marketing years, exports as a ratio to the domestic food use have ranged from 46 to 69 percent for durum wheat, from 85 to 118 percent for hard red spring wheat, and from 81 to 105 percent for hard red winter wheat.[21] The USDA states that wheat exports in 2002/03 are expected to be the lowest since 1971/72. Relatively high prices, increased competition from "minor exporters," and major U.S. customers turning to competitors have contributed to the decline. Over the past ten years, Egypt, Japan, Mexico, the Philippines, and South Korea have been the largest purchasers of U.S. wheat. However, in the 2001/02 marketing year, Nigeria moved ahead of the Philippines and South Korea, and, in the 2002/03 marketing year, Egypt reduced its purchases of U.S. wheat to about a third of the previous year's level. Egypt is likely to change from being the United States' largest customer to being somewhere between the fourth and sixth largest. Egypt is buying mainly from the Black Sea area and the European Union. Japan was the largest purchaser in 2002/03, but its commitments are 4 percent below those of a year ago. European Union purchases of U.S. wheat have also fallen. The United States remains the world's largest exporter of wheat, although competition has increased from a number of countries, particularly those of the former Soviet Union. In marketing year 2002/03, Russia may be the second largest exporter, and Ukraine is expected to be the fifth or sixth largest. However, supplies from some major competitors are down, as Australia and Canada have suffered from droughts, and Argentina has experienced financial problems. Thus, ability to access foreign markets remains, but it is somewhat diminished, although overall wheat export prospects are forecast to be higher in 2003/04 than in 2002/03.[22]

Respondents stated that U.S. farmers sell wheat primarily to local elevators or to small local mills and do not directly compete with the CWB.[23] As such, U.S. farmers are not exporters because they sell their wheat to elevators that, in turn, sell to grain trading companies, which do compete with the CWB and which also export wheat. There were some reports that farmers are unaware whether their wheat is exported or consumed domestically.[24] [25] This viewpoint implies that exports by the grain trading companies should not be counted as exports for purposes of calculating apparent domestic consumption because these transactions occur subsequent to farmers' sales of all U.S.-grown wheat to U.S. companies.

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[20] Ibid., p. 19.

[21] USDA, ERS, *Wheat Situation and Outlook Yearbook*, March 2003, pp. 23-26; and *Wheat Outlook*, July 15, 2003, p. 7. Domestic uses of wheat besides food are seed and feed and residuals.

[22] USDA/ERS, *Wheat Outlook*, August 14, 2003, pp. 5-6. Most of the increase is projected to be in hard red winter wheat; hard red spring wheat exports are projected to be steady; and durum wheat exports are projected to decrease slightly.

[23] Hearing transcript, pp. 47-48 and CWB's posthearing brief, pp. 5-6.

[24] ***. NAMA's posthearing brief, exh. 2.

[25] There was contrary testimony from one farmer who indicated an elevator operator informed him of bidding driving the price of wheat and of the origin of the bid. Hearing transcript, p. 105.

SUPPLY OF IMPORTED CANADIAN WHEAT

Production conditions in Canada, the relative attractiveness of different markets, and any government interventions affect the supply of Canadian wheat in the U.S. market. Information on these factors suggest that Canadian exporters are likely to respond to changes in the U.S. demand for wheat with moderate changes in the quantity of shipments of durum and hard red spring wheat to the U.S. market.

Canadian durum production dropped by *** percent between its marketing years 2000/01 and 2001/02, increased *** percent between 2001/02 and 2002/03, but production in 2002/03 was still *** percent below that of 2000/01 (see table VII-1). Exports of durum to the United States grew by *** percent between 2000/01 and 2001/02 but fell by *** percent between 2001/02 and 2002/03. Exports to third-country markets fell by *** percent between 2000/01 and 2001/02 and by *** percent between 2001/02 and 2002/03. Total home market consumption ranged between *** percent and *** percent of total shipments.

Canadian western red spring wheat production dropped by *** percent between its marketing years 2000/01 and 2001/02 and by *** percent between 2001/02 and 2002/03 due to low rainfall and adverse growing conditions (see table VII-2). Exports of Canadian western red spring wheat to the United States grew by *** percent between 2000/01 and 2001/02 but fell by *** percent between 2001/02 and 2002/03. Exports to third-country markets fell by *** percent between 2000/01 and 2001/02 and by *** percent between 2001/02 and 2002/03. Home market consumption as a share of total shipments increased from *** percent in 2000/01 to *** percent in 2001/02 and to *** percent in 2002/03.

Petitioners allege that the CWB withheld stocks from the market despite low harvests in 2002/03 in order to avoid a pool deficit.[26] The petitioners also allege that imports are lower as a result of the trade case.[27] The CWB alleged that the drought was responsible for decreased exports, both to the United States and the rest of the world, that it did not withhold stocks from the market to avoid a pool deficit, and that its stocks are the lowest in 40 years.[28]

Under the more normal favorable growing conditions, Canada has considerable potential to produce wheat. The petitioners state that the CWB is capable of increasing exports to the United States and that acres Canadian farmers had shifted into other crops could be shifted back to durum and western red spring wheat.[29] Both durum production and western red spring wheat production are projected to recover in marketing year 2003/04, although hot temperatures and spotty rains in some areas, especially durum regions, could result in lower than average exports.[30]

Alternative Markets

The CWB is the sole exporter and marketer for wheat grown in the prairie provinces, where over 90 percent of Canadian durum and western red spring wheat is grown. The CWB is the largest single seller of wheat and barley in the world and holds a sizeable share of world durum exports.[31] During 2000/01 and 2002/03, Canada exported over *** of its durum and hard red spring shipments. Most

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[26] Hearing transcript, p. 39 and petitioners' posthearing brief, p. 3.

[27] Petitioners' posthearing brief, p. 3.

[28] Hearing transcript, pp. 308-309.

[29] Petitioners' posthearing brief, p. 3.

[30] ERS/USDA, *Wheat Outlook*, August, 14, 2003, pp. 5-6.

[31] In 2000/01, Canadian durum exports accounted for approximately 55 percent of world exports.

Canadian durum exports are shipped through the Great Lakes to foreign buyers in North Africa, Europe, and South America, and most Canadian western red spring wheat is shipped from ports on its West Coast. Canadian exports mainly enter the United States through the Minnesota/Great Lakes region. As indicated, Canada has many third-country markets; it exported *** percent of its durum shipments and *** percent of its western red spring shipments to these markets during the period examined.

Government Intervention

Canada has several agricultural programs at the federal and provincial levels to assist its agricultural sector, including wheat producers.[32] Some government interventions were the subject of Commerce's countervailing duty investigations. For example, programs determined to be countervailable relate primarily to the provision of government-owned and leased railcars and related issues; the final net subsidy rate for both durum and hard red spring wheat that applies to the CWB and all other exporters is 5.29 percent.[33]

U.S. DEMAND

Demand Characteristics

Most durum wheat is ground into either semolina or durum flour and used to make pasta, although a small quantity of durum is made into couscous, and there are some mill-feed by-products. In 2002/03, the food use of durum wheat is estimated at approximately 100 percent of total domestic use, as compared to 95 percent in 2000/01 and approximately 100 percent in 2001/02.[34] The level of food consumption of durum wheat was relatively steady over the three marketing years.

Hard red spring wheat is milled into bread flour and other specialty flours. It is used to make certain products and is also blended with lesser protein flours to make all-purpose flour. Hard red spring wheat's baking properties and protein levels make it well-suited for hearth bread, yeast bread, croissants, bagels, pizza crust, and hard rolls. In 2002/03, food use of hard red spring wheat is estimated to be approximately 100 percent of total domestic use, as compared to 78 percent in 2000/01 and 82 percent in 2001/02.[35] Because production declined between 2000/01 and 2002/03, the quantity of hard red spring wheat in food use was relatively steady despite an increasing share of hard red spring devoted to food use.

More hard red winter wheat is consumed in the U.S. market than any other type of wheat. It is used to produce all-purpose flour, other flours, and ultimately a variety of bread products. In 2002/03, food use of hard red winter wheat is estimated at 80 percent of total domestic use, as compared to 75 percent in 2000/01 and 78 percent in 2001/02.[36] The level of hard red winter wheat in food use was at

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[32] Some of these programs are summarized in *Durum and Hard Red Spring Wheat from Canada*, Investigations Nos. 701-TA-430A and 430B and 731-TA-1019A and 1019B (Preliminary), USITC Pub. 3563, December 2002, p. II-7.

[33] 68 FR 52747-52749, September 5, 2003.

[34] USDA/ERS, *Wheat Situation and Outlook Yearbook*, March 2003, p. 26 and *Wheat Outlook*, August 14, 2003, table 2.

[35] USDA/ERS, *Wheat Situation and Outlook Yearbook*, March 2003, p. 24 and *Wheat Outlook*, August 14, 2003, table 2.

[36] USDA/ERS, *Wheat Situation and Outlook Yearbook*, March 2003, p. 23 and *Wheat Outlook*, August 14, 2003, table 2.

375 million bushels in 2000/01, fell to 366 million bushels in 2001/02, and increased to 383 million bushels in 2002/03.

The quality of the wheat crop fluctuates annually depending upon rainfall, harvest conditions, and the presence of crop pests or diseases, such as wheat smut (vomitoxin or fusarium head blight (FHB)).[37] Although some purchasers reported high levels of damage in durum purchases, the quality of durum harvested in 2002 from North Dakota and Montana, where 80 to 85 percent of the durum crop is grown, was better than that harvested in 2001. Approximately 54 percent of the 2002 crop graded No. 2 hard amber durum or better;[38] the average test weight was up; the percentage of damaged kernels was down; and protein levels were steady, although slightly down from the previous year. Overall quality of the 2002 durum crop was characterized as average to good with significant differences among crop growing regions.[39]

Similarly, the 2002 hard red spring crop had better qualitative characteristics, such as higher protein, stronger dough properties, and improved bread-making performance.[40] The small 2002 hard red spring wheat crop in the Dakotas, Minnesota, and Montana averaged at the grade No. 1 northern spring; the vitreous kernel count and test weight were slightly lower than in 2001; the percentage of damaged kernels was lower than average; and the average protein level was high.[41] There was less fusarium head blight in the 2002 crop than in the previous crop.[42] A wet harvest raised concerns about sprouting, but flour extraction rates were high, and dough properties were improved from the 2001 harvest.

Purchasers were asked to comment on any changes in demand that occurred since the beginning of 2000. *** and *** reported that per-capita consumption of bread products was down due to the popularity of low carbohydrate diets. USDA data show that consumption of wheat flour was at 146.3 pounds per capita in 2000, which was near its 40-year high of 146.8 pounds per capita in 1997.[43] Consumption fell to 140.9 pounds per capita in 2001 and to 136.9 pounds per capita in 2002.[44] *** and *** reported a need for more durum due to increased market share. *** reported that demand for its products resulted in an increased need for hard red spring wheat.

Supply and demand conditions in the rest of the world influence wheat purchases by U.S. exporting firms. The USDA projects that global use in 2003/04 will be 582.9 million metric tons, which is 1.3 million tons less than in 2002/03.[45] Lower world production and higher prices are projected to increase the proportion consumed by humans and to decrease feed and residual use.[46]

Purchasers reported the values and quantities of their wheat purchases. Unit values of durum from Canada and the United States increased between the 2000/01 and 2002/03 marketing years (table

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[37] Petitioners contend that FHB has significantly decreased in U.S. hard red spring wheat because of the introduction of resistant wheat varieties, such as Alsen wheat in 2000 and that FHB has actually increased in Canada. Petitioners' posthearing brief, p. 13 and prehearing brief, pp. 78-81 and exhs. 25-30. The CWB contends that FHB has had a substantial negative impact on the production and quality of durum and hard red spring crops during 1998-2001 in North Dakota. CWB's postconference brief, October 16, 2002, pp. 36-41.

[38] *U.S. Northern Grown Durum Wheat: 2002 Regional Quality Report*, p. 1; and U.S. Wheat Associates, *Crop Quality Report 2002*, pp. 22-24.

[39] Ibid.

[40] U.S. Wheat Associates, *Crop Quality Report 2002*, p. 12.

[41] *U.S. Hard Red Spring Wheat: 2002 Regional Quality Report*, p. 1.

[42] U.S. Wheat Associates, *Crop Quality Report 2002*, p. 12.

[43] USDA/ERS, *Wheat Situation and Outlook Yearbook*, March 2003, p. 80.

[44] USDA/ERS, *Wheat Outlook*, August 14, 2003, p. 3.

[45] Ibid., p. 5.

[46] Ibid., pp. 1 and 5.

II-3). The quantity of purchases of U.S. durum declined between 2000/01 and 2001/02 but increased between 2001/02 and 2002/03, while the movements were reversed for purchases of Canadian durum. Purchasers reported buying small quantities of desert durum from Mexico. Unit values of Canadian and U.S. hard red spring wheat increased between 2000/01 and 2002/03. The quantity of purchases of Canadian hard red spring wheat were markedly lower in 2002/03. Although the vast majority of purchases of hard red winter wheat were of U.S. origin, purchasers reported buying some hard red winter wheat from Canada in 2002/03.

Table II-3
Durum, hard red spring (HRS), and hard red winter (HRW) wheats: Unit values and quantities as reported by purchasers, by market year, 2000/01, 2001/02, and 2002/03

Wheat source and type	2000/01		2001/02		2002/03	
	Unit value ($ per MT)	Quantity (MT)	Unit value ($ per MT)	Quantity (MT)	Unit value ($ per MT)	Quantity (MT)
U.S. durum	$154.86	1,237,865	$164.80	1,219,505	$185.19	1,412,426
Canadian durum	174.57	307,423	177.91	510,719	180.76	404,426
Mexican durum	***	***	***	***	***	***
U.S. HRS	132.44	6,522,583	144.11	5,893,143	157.23	5,943,790
Canadian HRS	127.97	1,340,838	141.34	1,140,011	150.88	265,358
U.S. HRW	125.19	9,988,148	123.50	10,433,028	156.06	11,618,792
Canadian HRW	-	-	-	-	***	***

Note.–MT=metric ton.

Source: Compiled from data submitted in response to Commission questionnaires.

Substitute Products

Most purchasers reported that durum had no substitutes. ***'s comment was typical: "Good pasta requires the use of durum wheat." However, *** stated hard white wheat could be used for pasta, and *** stated that some pasta products are also made with spring wheat and winter wheat.

Eight purchasers reported that other products could be substituted for hard red spring wheat, and six purchasers stated that there were no substitutes. Purchasers narrative responses concerning substitutes for hard red spring wheat are reported in table II-4.

Table II-4
Hard red spring wheat: Purchasers' responses to the question, Are there other products, such as different types of wheat, that could be substituted for hard red spring wheat in its end uses?

* * * * * * *

Nine purchasers reported that there were substitutes for hard red winter wheat and five reported that there were no substitutes. *** stated that, if the price gap narrowed, hard red spring wheat, if available, would probably be used for all yeast-raised baked goods. *** stated that low strength spring wheat is substituted for hard red winter wheat in less than 10 percent of the cases. *** stated that high protein soft red winter wheat, low protein hard red spring wheat, or hard white winter wheat could all be substituted for hard red winter wheat.

Several purchasers noted that gluten prices had decreased since June 1, 2000. *** noted that the lower gluten prices and recent high protein winter wheat made it attractive to shift away from hard red spring wheat. *** stated that prices had moved proportionately for all products, but that the availability of high protein hard red winter wheat in 2002 led to increased use of this product.

The Commission's questionnaire asked if hard red spring wheat and hard red winter wheat were comparable for purposes of producing the flour types used in the production of similar baked goods. Nine purchasers responded affirmatively and five negatively. *** stated that they were comparable, but that the degree of comparability depended on the crop year and on the product. *** noted that it used a 65-percent hard red winter, 35-percent hard red spring blend in 2001/02 to make bread flour, but that it made the same product in 2002/03 with 100-percent hard red winter wheat because of its higher protein level in that year. *** stated that the higher absorption and other baking characteristics made hard red spring and hard red winter wheats incomparable.

The Commission's questionnaire asked if firms purchased hard red spring and hard red winter wheats and blended them to achieve customer requirements for a particular flour. Ten purchasers responded in the negative and ten in the affirmative. The questionnaire also asked if firms blended hard red spring wheat with wheats other than hard red winter wheat. Four purchasers responded in the affirmative and 15 in the negative. *** stated that it blended a small amount of soft red wheat with hard red spring wheat to achieve the specific needs of a customer. *** stated that it blended hard red spring wheat with durum to produce a type of noodle. *** stated that it occasionally blended hard red spring wheat with durum or white wheat. *** reported that it blended hard red spring wheat with soft red winter wheat to make pizza dough flour and all-purpose flour.

Purchasers were asked to report the average protein content of their wheat purchases. Purchasers' responses were weighted by the quantity of their purchases of each wheat type in each of the three marketing years (table II-5). The protein content of durum was relatively steady. Hard red spring wheat had the highest protein content, and the gap between hard red spring wheat and hard red winter wheat narrowed in 2002/03.

Table II-5
Durum, hard red spring (HRS), and hard red winter (HRW) wheats: Protein level, by marketing year, 2000/01-2002/03

Wheat type	2000/01	2001/02	2002/03
	Protein (*percent*)		
Durum	13.3	13.4	13.8
HRS	14.2	14.4	14.7
HRW	11.7	11.9	12.7

Source: Compiled from data submitted in response to Commission questionnaires.

Millers reported that the protein content of hard red spring and hard red winter wheats overlap. They reported that 71 percent and 45 percent of the hard red spring wheat crops and 57 percent and 74

percent of the hard red winter wheat crops harvested, respectively, in 2001 and 2002 were between 12.0 and 14.9 percent protein.[47] Available data indicate that hard red spring wheat consistently has a higher protein level than hard red winter wheat (table II-6). Hard red winter wheat appeared to be distributed in higher protein levels in 2002 than in 2000 and 2001. However, some overlap of protein levels occurred each year between the 12 and 14 percent protein levels, but the degree of overlap varied by year. There was very limited overlap at the 11 and 15 percent protein levels and no overlap at the 10 and 16 percent protein levels.

Table II-6
Hard red spring (HRS) wheat and hard red winter (HRW) wheat: Share (in percent) of export shipments, by protein levels and by products 2000-2002

Protein level	2000		2001		2002	
	HRW	HRS	HRW	HRS	HRW	HRS
	Gulf ports and/or Gulf ports and Great Lakes ports[1]					
10 percent	23	0	16	0	3	0
11 percent	34	0	39	0	16	0
12 percent	26	7	31	8	24	0
13 percent	12	30	10	23	25	5
14 percent	4	39	2	42	21	40
15 percent	1	20	1	23	11	39
16 percent	0	4	0	4	0	16
	Pacific Northwest ports					
10 percent	18	0	5	0	3	0
11 percent	25	4	30	6	5	2
12 percent	35	11	33	7	22	4
13 percent	14	25	16	18	36	14
14 percent	7	21	8	30	16	34
15 percent	1	23	9	26	18	17
16 percent	0	16	0	13	0	29

[1] HRW shipments are entirely out of Gulf ports; HRS data are for Gulf ports and Great Lakes ports combined.

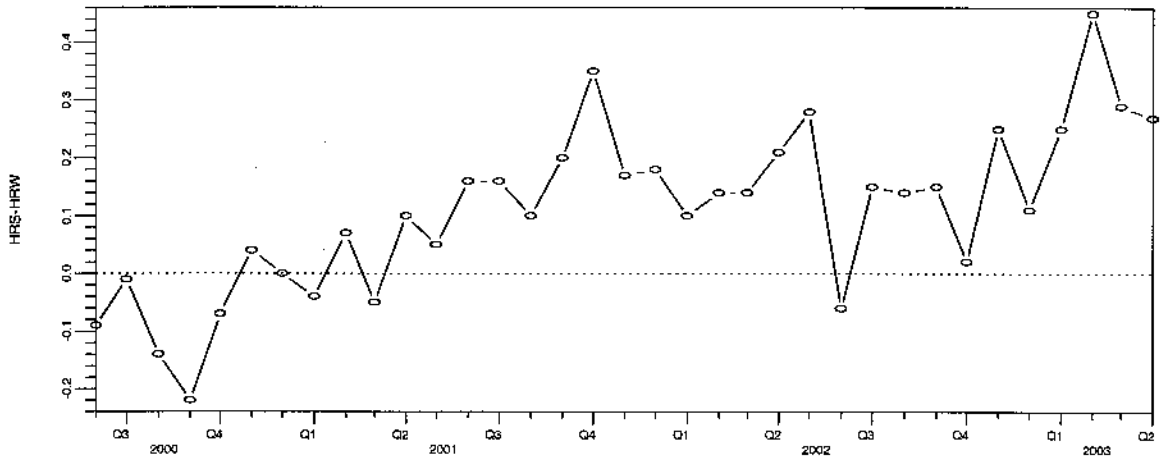
Note.–Because of rounding, figures may not total to 100 percent.

Source: U.S. Wheat Associates, 2000 Crop Quality Report, 2001 Crop Quality Report, and 2002 Crop Quality Report.

[47] NAMA's posthearing brief, p. 3.

Staff gathered data on the cash prices of hard red spring wheat and hard red winter wheat, both at the 13-percent protein level, at the Minneapolis Grain Exchange. The price of hard red winter wheat was subtracted from the price of hard red spring wheat. Usually, but not always, hard red spring wheat was priced higher, as shown by the positive difference (figure II-1); the mean of this series of differences was $0.11.

Figure II-1
Price of hard red spring wheat minus the price of hard red winter wheat in dollars per bushel, both with 13 percent protein content, by months, June 2000-April 2003



Source: USDA/ERS, *Wheat Situation and Outlook Yearbook*, March 2003 and *Wheat Outlook*, July 15, 2003.

Millers that blend hard red spring and hard red winter wheats to make flour or some other product reported that they typically set the proportions of hard red winter wheat and hard red spring wheat once a year based on protein level, availability, overall quality, and price.[48] Petitioners allege that, because millers purchase in "fixed proportions" during a given year, hard red spring wheat and hard red winter wheat are complements, although they acknowledge some degree of substitution.[49] Millers also reported that it is not difficult to alter the blend. If hard red spring and hard red winter wheats were complements, it implies that output would be fixed if one of the two inputs were fixed, even though supplies of the other input were amply available. For example, if hard red spring wheat suddenly became unavailable, then additional production of flour requiring a certain proportion of hard red spring wheat would become impossible. Over some range of the production and availability of inputs, it is likely that flour meeting certain common specifications could not be produced without hard red spring wheat. However, the more normal situation is that there is flexibility in how certain flours are produced. For example, some, but not all, millers reported that they were able to use blends with different protein levels of hard red winter wheat. In addition, wheat gluten can be used to bolster protein levels. The facts that

[48] For example, see the testimony of John Hillman of Bay State, hearing transcript, pp. 237-239.

[49] Petitioners state in their posthearing brief (p. 11) that there is fixed proportion in blends and not substitution. However, they reported that there is some technical substitution between hard red spring and hard red winter wheat in their prehearing brief (p. 25).

millers have produced the same product in different years with different combinations of hard red winter and hard red spring wheats and that price is a factor in determining the proportions are consistent with the view that these two types of wheat are substitutes within the common range of prices and protein levels.

When two inputs are perfect substitutes, usually only the lower priced substitute is used. The fact that both types of wheat are typically blended suggests that hard red spring wheat and hard red winter wheat are imperfect substitutes in the production of certain products.

Cost Share

Purchasers reported that durum wheat accounted for approximately 80 percent of the total cost of semolina and about 50 percent of the total production cost of pasta. Although responses varied, hard red spring wheat and hard red winter wheat typically represented from 75 to 90 percent of the cost of flour.

SUBSTITUTABILITY ISSUES

The substitution between domestic and imported durum and hard red spring wheat depends upon relative prices, quality, and the conditions of sale. Available data on these factors suggests that imported Canadian western red spring wheat is highly, although not perfectly, substitutable with U.S.-grown hard red spring wheat and, similarly, that imported Canadian durum wheat is highly, although not perfectly, substitutable with U.S.-grown durum wheat.

Factors Affecting Purchasing Decisions

Purchasers were asked to identify the three most important factors (in order of importance) in their purchase decision. For purchasers of durum, quality and price were the most important factors, followed by availability and consistency (table II-7). Price, followed by quality, were most frequently mentioned as important factors in the decision to purchase hard red spring wheat (table II-8). Similarly, purchasers cited price and quality as the most important factors regarding their purchases of hard red winter wheat (table II-9).

Table II-7
Durum wheat: Ranking of factors used in purchasing decisions, as reported by U.S. purchasers

Factor	Number of firms reporting		
	Number one factor	Number two factor	Number three factor
Availability	2	2	0
Consistency	2	1	1
Price	3	2	5
Protein	1	0	0
Quality	3	4	0
Other[1]	1	3	6

[1] Other includes supplier performance, delivery period, logistics, deferred positions, transportation, and milling characteristics.

Source: Compiled from data submitted in response to Commission questionnaires.

Table II-8
Hard red spring wheat: Ranking of factors used in purchasing decisions, as reported by U.S. purchasers

Factor	Number of firms reporting		
	Number one factor	Number two factor	Number three factor
Availability	1	1	2
Consistency	3	1	0
Price	5	4	6
Protein	0	3	0
Quality	4	3	0
Other[1]	2	3	6

[1] Other includes supplier performance, vomitoxin, logistics, transportation, meets specifications, shipment period, and integrity.

Note.–One purchaser who responded to factors one and two did not report on factor three.

Source: Compiled from data submitted in response to Commission questionnaires.

Table II-9
Hard red winter wheat: Ranking of factors used in purchasing decisions, as reported by U.S. purchasers

Factor	Number of firms reporting		
	Number one factor	Number two factor	Number three factor
Availability	2	1	2
Consistency	2	1	0
Price	3	5	6
Protein	1	3	0
Quality	4	2	1
Other[1]	3	3	4

[1] Other includes shipment period, meets specifications, protein content, stability, delivery execution, firm history, vomitoxin, and logistics.

Note.--Two purchasers who responded to factors one and two did not report on factor three.

Source: Compiled from data submitted in response to Commission questionnaires.

Purchasers were asked to rate the importance of 19 factors in their decisions to purchase durum, hard red spring, and hard red winter wheat. For durum wheat, purchasers rated most factors as very important or somewhat important (table II-10). Availability, test weight, moisture-adjusted protein content, and reliability of supply garnered the greatest number of very important responses. *** added that customer service orientation, disease-related damage, durum ash levels, and durum pigmentation were also very important. For hard red spring wheat, availability, delivery terms, product consistency, and reliability of supply had the greatest number of very important ratings (table II-11). For hard red

Table II-10
Durum wheat: Importance ranking of purchase factors, as reported by U.S. purchasers

Factor	Number of firms reporting		
	Very important	Somewhat important	Not important
Availability	9	1	0
Delivery terms	5	5	0
Delivery time	6	4	0
Discounts offered	1	9	0
Lowest spot price	4	6	0
Lowest forward price	5	5	0
Minimum quantity requirements	0	6	3
Packaging	0	4	3
Dockage	3	7	0
Test weight	8	2	0
Moisture-adjusted protein content	7	3	0
Vitreous kernel count	6	4	0
Product range	2	5	3
Product consistency	6	4	0
Reliability of supply	7	2	0
Technical support/service	1	6	3
Transportation network	2	7	0
U.S. transportation costs	5	5	0
Availability of forward contracts	5	5	0

Source: Compiled from data submitted in response to Commission questionnaires.

winter wheat, availability, delivery terms, delivery time, reliability of supply, and availability of forward contracts had the greatest number of very important ratings (table II-12).

Table II-11
Hard red spring wheat: Importance ranking of purchase factors, as reported by U.S. purchasers

Factor	Number of firms reporting		
	Very important	Somewhat important	Not important
Availability	10	1	0
Delivery terms	9	3	0
Delivery time	8	4	0
Discounts offered	4	8	0
Lowest spot price	7	5	0
Lowest forward price	8	3	1
Minimum quantity requirements	3	5	3
Packaging	4	2	4
Dockage	8	4	0
Test weight	7	5	0
Moisture-adjusted protein content	7	4	1
Vitreous kernel count	4	6	1
Product range	5	4	3
Product consistency	9	2	1
Reliability of supply	9	2	0
Technical support/service	1	8	3
Transportation network	5	6	1
U.S. transportation costs	8	3	1
Availability of forward contracts	8	3	1

Source: Compiled from data submitted in response to Commission questionnaires.

Table II-12
Hard red winter wheat: Importance ranking of purchase factors, as reported by U.S. purchasers

Factor	Number of firms reporting		
	Very important	Somewhat important	Not important
Availability	6	1	0
Delivery terms	6	1	0
Delivery time	6	1	0
Discounts offered	2	5	0
Lowest spot price	4	3	0
Lowest forward price	5	2	0
Minimum quantity requirements	2	3	2
Packaging	3	1	2
Dockage	4	3	0
Test weight	4	3	0
Moisture-adjusted protein content	5	2	0
Vitreous kernel count	2	5	0
Product range	2	4	1
Product consistency	5	2	0
Reliability of supply	6	0	0
Technical support/service	0	4	3
Transportation network	4	3	0
U.S. transportation costs	5	2	0
Availability of forward contracts	6	1	0

Source: Compiled from data submitted in response to Commission questionnaires.

Comparisons of U.S. and Canadian Wheat

Purchasers were asked to compare U.S. and Canadian durum and hard red spring wheat on the 19 purchase factors. Purchasers' perceptions that U.S. durum was superior to Canadian durum were strongest with respect to discounts offered, lowest spot price, and moisture-adjusted protein content (table II-13). U.S. durum was rated inferior to Canadian durum with respect to dockage, product consistency, reliability of supply, and availability of forward contracts. Millers stated that forward contracting plays an important role in risk management, but does not affect price and that the risk-reduction features of U.S. government programs reduce the incentives for U.S. producers to participate in

Table II-13
Comparisons between U.S.-produced and imported Canadian durum wheat, as reported by U.S. purchasers

Factor	Number of firms reporting		
	U.S. superior	Comparable	U.S. inferior
Availability	0	4	3
Delivery terms	1	5	1
Delivery time	0	5	2
Discounts offered	3	4	0
Lowest spot price	2	4	1
Lowest forward price	1	6	0
Minimum quantity requirements	0	6	0
Packaging	0	5	0
Dockage	0	3	4
Test weight	0	5	2
Moisture-adjusted protein content	2	5	0
Vitreous kernel count	0	6	1
Product range	1	5	1
Product consistency	0	2	5
Reliability of supply	0	4	3
Technical support/service	0	5	2
Transportation network	0	6	1
U.S. transportation costs	0	7	0
Availability of forward contracts	0	3	4

Source: Compiled from data submitted in response to Commission questionnaires.

forward contracting[50]. *** rated U.S. durum inferior with respect to customer service orientation, disease-related damage, durum ash levels, and durum pigmentation. Purchasers usually rated U.S.-produced hard red spring wheat superior or comparable on most factors (table II-14). The Canadian product was usually rated comparable or better with respect to dockage and product consistency.

[50] NAMA's posthearing brief, pp. 8-11.

Table II-14
Hard red spring wheat: Importance ranking of purchase factors, as reported by U.S. purchasers

Factor	Number of firms reporting		
	U.S. superior	Comparable	U.S. inferior
Availability	2	8	0
Delivery terms	2	8	0
Delivery time	2	7	1
Discounts offered	0	10	0
Lowest spot price	2	8	0
Lowest forward price	2	7	1
Minimum quantity requirements	2	8	0
Packaging	1	5	0
Dockage	1	4	5
Test weight	1	9	0
Moisture-adjusted protein content	2	7	1
Vitreous kernel count	1	9	0
Product range	2	7	1
Product consistency	1	5	3
Reliability of supply	1	8	0
Technical support/service	1	6	1
Transportation network	1	9	0
U.S. transportation costs	1	9	0
Availability of forward contracts	1	7	1

Source: Compiled from data submitted in response to Commission questionnaires.

Purchasers were asked if imported Canadian wheat and domestically grown wheat could be used in the same applications. All 12 responding purchasers replied in the affirmative. *** responded that wheat from both sources is used for bread making and other yeast-raised baked goods. *** reported that there were some limitations; for instance, Canada produces virtually no hard red winter wheat.

Purchasers were asked if they specifically ordered durum or hard red spring wheat from one country in particular over other possible sources of supply. Out of 17 responding purchasers, 11 responded affirmatively and six responded negatively. *** stated that each year wheat in different locations has different baking and milling characteristics and it purchases wheat based on qualities available from specific locations. *** stated that Canadian durum has less damage and dockage, greater uniformity, better color, and lower ash levels and that Mexican durum provides strong gluten and lower moisture, damage, and ash levels. *** reported that some customers require wheat of U.S. origin; therefore, its first choice is to purchase wheat of U.S. origin.

Purchasers were asked if certain grades or types of durum and hard red spring wheat were available from only a single source. Seven purchasers responded in the affirmative and nine in the negative. *** reported that over the last several years No. 1 and No. 2 Canadian western amber durum have had distinct attributes useful to its milling operations. *** reported that its durum mill is set up for desert durum and that northern durum, whether U.S. or Canadian, is less efficient. *** added that higher protein hard red spring wheat can only be purchased from northern plains states, in particular, North Dakota, and that Kansas is the primary source of hard red winter wheat based equally on quality, price, and availability. ***, which responded affirmatively, stated that less than 1 percent of its total purchases of hard red spring and hard red winter wheat was available from a single source; some spring wheat from Canada had an exceptionally high falling number. *** stated that Canada and the United States have different varieties of wheat, such as Canadian western extra strong and Canadian western red spring. *** stated that Canadian western extra strong (a variety of Canadian western red spring) has very high gluten strength but only accounts for about 1 percent of its hard red spring wheat requirements.

Purchasers were asked their reasons for purchasing from only one source. *** stated that the better quality of Canadian durum justifies the typical premium for the Canadian product. It added that forward contracting is important and Canada has been more active in long-term contracting, but certain U.S. groups have taken longer positions over the last 12 to 18 months. *** stated that it occasionally bought durum from one source at a premium because of the ability to forward contract. *** stated that the ability to forward contract and the consistency of spring wheat from Canada tend to be better. Also, Canadian wheat tends to be cleaner, and delivery is more reliable on rail shipments. *** stated that Canadian and U.S. wheat is approximately the same, but that it prefers to purchase from certain entities based on consistency over entire shipment, transportation arrangements, and a "no-hassle" relationship. *** reported that it has always purchased from the lowest-price origin that has the required service, characteristics, and availability. *** stated that it purchases U.S.-origin wheat.

ELASTICITY ESTIMATES AND WELFARE MODELS

The estimates of elasticities, as discussed in the report for the preliminary phase of the investigations,[51] have only been slightly modified. Petitioners presented an econometric model that concerns the effect of Canadian imports on U.S. producers income, which is discussed at the end of this section.

Supply Elasticities

The domestic supply elasticity indicates how U.S. producers will respond to changes in the market prices of durum wheat and hard red spring wheat. Research at the USDA[52] and North Dakota State University[53] found the own-price supply elasticity of U.S. wheat to range between about 0.3 and 1.0. The supply elasticity for durum wheat was higher than that of hard red spring wheat. A range of 0.5 to 1.0 is suggested for both products, with durum being in the upper part of that range.

The import supply elasticity for Canadian wheat reflects production possibilities in Canada and also how easily it can shift shipments from one market to another. Although transportation advantages

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[51] *Durum and Hard Red Spring Wheat from Canada*, invs. Nos. 701-TA-430A and 430B and 731-TA-1019A and 1019B (Preliminary), USITC Pub. 3563, December 2002, pp. II-13-II-14.

[52] Walter Gardiner, Vernon Roninger, and Karen Liu, *Elasticities in the Trade Liberalization Database*, ERS/USDA, May 1989, table 5.

[53] Won Koo, et al., *Economic Analysis of the Proposed North Dakota Wheat Pool*, Dept. of Agricultural Economics, North Dakota State University, January 1999, p. 44.

influence the choice of export markets, it nevertheless appears that the CWB could switch to different export markets without tremendous difficulty. An import supply elasticity in the range of 5 to 10 is suggested.

U.S. Demand Elasticity

The U.S. demand elasticity shows how consumers will respond to changes in the U.S. market prices of durum and hard red spring wheat. Petitioners cited research that shows the own-price elasticity of demand for hard red spring wheat to range from -1.87 to -0.21.[54] Barnes and Shields found own-price demand elasticities to range from -0.47 to -0.21 for hard red spring wheat and from -0.15 to -0.16 for durum.[55] Available information suggests that the demand is inelastic; a range of -0.6 to -0.2 is suggested for both durum and hard red spring wheat.

Substitution Elasticities

The elasticity of substitution, as usually referred to in trade cases, is a measure of the substitution possibilities between the imported and similar domestic products. As discussed, Canadian western amber durum and U.S. hard amber durum appear to be close substitutes, and Canadian western red spring wheat and U.S. hard red spring wheat appear to be close substitutes. The substitution elasticity is likely to range from 10 to 15.

There is a limited amount of empirical work on estimates of cross-price elasticities that indicate how easily different types of wheat can be substituted for each other. Barnes and Shields found positive cross-price elasticities for hard red winter wheat and for hard red spring wheat while estimating demand equations, respectively, for hard red spring wheat and for hard red winter wheat. Positive coefficients are an indication that the two products are substitutes. Because the coefficient was larger (0.75) for hard red spring wheat in the hard red winter wheat equation than for hard red winter wheat in the hard red spring wheat equation (0.19), they concluded that hard red spring wheat was more substitutable for hard red winter wheat than hard red winter wheat is for hard red spring wheat.[56]

Welfare Models

Without presenting a formal model, key facts are summarized and some possible outcomes of the less-than-fair-value pricing and countervailable subsidies are discussed. The Canadian market share for durum wheat (see table C-1) was 18.0 percent in 2000/01, 29.3 percent in 2001/02, and 20.8 percent in 2002/03. The Canadian market share for hard red spring wheat (see table C-2) was 12.8 percent in 2000/01, 15.9 percent in 2001/02, and 5.8 percent in 2002/03. These market shares, in a sense, represent upper bounds of the effects on U.S. producers if Canadian imports were eliminated from the market. Commerce's margins total 13.55 percent for durum wheat and 14.16 percent for hard red spring wheat (see footnotes 4 and 5, Part I). If these margins had been applied as duties in recent marketing years, they likely would have greatly reduced imports, although not completely shutting imports out of the U.S. market. With higher import prices, demand for the similar domestic products would shift out. Given the inelastic nature of both U.S. supply and demand, the resulting equilibrium would likely show a very

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[54] Petitioners' prehearing brief, exh. 7.

[55] James N. Barnes and Dennis Shields, "The Growth in U.S. Wheat Food Demand," *Wheat Yearbook*, March 1998, USDA, pp. 27-28.

[56] Barnes and Shields, pp. 18-26. These were the results from ordinary least squares estimation. Using other estimation techniques sometimes reversed the magnitudes of the coefficients.

small increase in quantity and a larger increase in price relative to the quantity change.[57] The CWB upon finding barriers to exporting to the United States would likely increase shipments to third-country markets. Because Canada is a large exporter, particularly of durum, its increased exports may be enough to affect price in some markets; thus, a slightly lower world price could result. Also, U.S. exporting firms, after discovering relatively higher domestic prices compared to the rest of the world, would likely divert some export shipments to domestic consumption.

Petitioners presented a model to examine the effects of Canada wheat imports on the income of U.S. wheat producers.[58] Their model is briefly summarized and then some comments are made. A profit-like function is posited (equation 1) and set equal to income. The cost portion of this equation is specified as a linear function of production quantity and inserted into equation 1, and then they divide this equation by production quantity (equation 6). The U.S. supply of durum and hard red spring wheat is defined as beginning stocks plus production quantity plus imports (equation 7). The U.S. demand is defined as domestic consumption plus exports. The farm price of wheat is asserted to be a linear function of supply and demand (equation 10). Equation 7 is substituted into equation 10 (equation 11). Equation 10 is substituted into equation 6 (equation 12). Equation 11 is substituted into equation 6 (equation 13). Equations 11 and 12 are estimated empirically. The following claims are made: (1) supply and demand conditions accurately explain wheat farmers' income; (2) increases in domestic wheat supply do not decrease wheat farmers' income as much as increases in imports; and (3) each 10 million bushels of Canadian wheat imports decreases wheat farmers incomes by about $107 million.

While specifying farm costs as a simple linear function of production costs might be adequate for theoretical work, and would imply constant marginal costs, it is inadequate for empirical work. An empirically specified profit or cost function should include input prices, such as prices of labor, land rent, and other inputs and either output or output price. A typical specification of demand would include the own price, prices of substitutes, and income or quantity or price of some product produced from wheat, such as flour. Not including these factors risks mis-specification and could seriously bias estimates of the included variables. It is interesting to note that domestic demand was defined to include exports, although imports into the United States would not directly affect the price of exports. Income per bushel is an unusual dependent variable; it is unclear whether it is net income (costs subtracted out) or gross income. In either case, wheat price is a prominent factor in the left-hand side variable. Right-hand side variables include supply and demand, which are endogenously determined with price. There are no tests for endogeneity, and simultaneous equation bias is likely. Also, time series data were used from 1990 to 2002, and these data are typically autocorrelated. Regressions using such time-series data typically lead to autocorrelated residuals and spurious regression results. No tests or adjustments were made for autocorrelation. Besides these problems, the statistical results were not encouraging; R-squares range from 0.356 to 0.365. Based on these problems, their conclusions 2 and 3 are totally unsupported from this work.

[57] Models presented by petitioners and respondents regarding price effects are discussed in app. E.

[58] Petitioners' prehearing brief, exh. 17.

PART III: U.S. PRODUCERS' PRODUCTION, SHIPMENTS, AND EMPLOYMENT[1]

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 final 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 publicly available data. Official statistics as published by USDA and unrevised by staff are presented in appendix D.

U.S. PRODUCERS

According to the *1997 Census of Agriculture*,[2] there were 243,568 farms growing all types of wheat; 46,268 farms growing spring wheat;[3] 6,887 farms growing durum wheat; 40,737 farms growing winter wheat;[4] and 161,324 farms growing non-specified wheat in 1997.[5] Table III-1 shows the number of durum wheat farms, acres harvested, and quantity grown by state in 1997. Table III-2 shows the number of spring wheat farms, acres harvested, and quantity grown by state in 1997. Table III-3 shows the number of winter wheat farms, acres harvested, and quantity grown by state in 1997. Table III-4 shows the number of unspecified wheat farms, acres harvested, and quantity grown by state in 1997. Table III-5 shows the number of farms of all types of wheat, acres harvested, and quantity grown, arrayed by size in 1997.[6] With regard to land tenure of the 243,000 wheat farms in the United States, 71,000, 138,000, and 34,000 wheat farms were operated by full owners, part owners, and tenants (rented), respectively.[7] Part owners own some of the land farmed and rent the remainder. In 1997, part owners produced about two-thirds of wheat production in the United States, while full owners and tenants each produced about one-sixth of wheat production in the United States. Thus, most wheat is typically grown in the United States by farmers who both own and rent.

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[1] Some of the USDA data presented in this report do not match data presented in the staff report of the preliminary phase of the investigations due to changes in its historical data.

[2] The USDA conducts a Census of Agriculture survey every five years. The 2002 Census of Agriculture is not expected to be published until 2004.

[3] The variations of spring wheat consist of hard red spring and hard white spring. The *1997 Census of Agriculture* does not present data on the number of farms growing red vs. white spring wheat. Petitioners estimate that there are 40,407 U.S. producers of hard red spring wheat. Petition, p. 5.

[4] The variations of winter wheat consist of hard red winter, hard white winter, soft red winter, and soft white winter. USDA does not present data on the number of farms by type of winter wheat.

[5] USDA, *1997 Census of Agriculture*, vol. 2, Part 51, ch. 2, table 26. Non-specified wheat was shown when a type not commonly produced in a State was reported on a form not intended for use in that State or when reporting errors were suspected. The large number of non-specified wheat farms indicates that the actual number of durum, spring, and/or winter wheat farms may be substantially understated.

[6] The number of farms arrayed by size is not available by type of wheat.

[7] USDA, *1997 Census of Agriculture*, table 46, p. 60. USDA does not provide data separately for farms that are cash rented and/or share rented.

Table III-1
Durum wheat: Number of U.S. growers, acres harvested, and quantity grown, by state, 1997

State	Number of farms	Acres harvested	Quantity (*in bushels*)
Arizona	272	92,412	8,208,026
California	353	134,710	12,490,437
Minnesota	30	3,823	142,151
Montana	631	289,211	7,483,240
North Dakota	5,457	2,540,885	56,415,384
South Dakota	144	38,691	1,063,228
Total--United States	6,887	3,099,732	85,802,466

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

Table III-2
Spring wheat: Number of U.S. growers, acres harvested, and quantity grown, by state, 1997

State	Number of farms	Acres harvested	Quantity (*in bushels*)
Arizona	2	(1)	(1)
California	187	32,108	2,244,963
Colorado[2]	373	49,674	3,857,762
Idaho[2]	2,708	567,369	45,270,813
Michigan	119	4,574	211,185
Minnesota[2]	9,051	2,329,490	72,702,523
Montana[2]	6,536	3,835,928	111,027,909
Nevada[2]	25	(1)	(1)
New Mexico	20	3,972	293,140
North Dakota[2]	16,915	8,270,597	202,714,112
Oregon[2]	786	117,363	6,401,636
South Dakota[2]	7,093	1,852,380	51,327,468
Utah[2]	278	18,779	910,295
Washington[2]	1,723	379,142	20,973,057
Wisconsin[2]	298	6,393	256,716
Wyoming[2]	154	14,979	487,188
Total--United States	46,268	17,488,113	519,176,940

[1] Data withheld by USDA to avoid disclosing information of individual firms.
[2] Identified as a state producing hard red spring wheat in 2002.

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

Table III-3
Winter wheat: Number of U.S. growers, acres harvested, and quantity grown, by state, 1997

State	Number of farms	Acres harvested	Quantity (*in bushels*)
Arizona[1]	47	([2])	([2])
California[1]	1,554	414,253	27,636,777
Colorado[1]	5,166	2,465,426	72,798,764
Idaho[1]	3,593	843,609	63,671,036
Michigan[1]	8,896	495,168	28,220,974
Minnesota[1]	906	58,285	1,686,400
Montana[1]	3,229	1,477,197	53,703,333
Nevada	59	([2])	([2])
New Mexico[1]	694	260,218	8,311,917
North Dakota[1]	352	62,644	1,392,764
Oregon[1]	2,217	765,499	48,293,267
South Dakota[1]	4,461	1,286,456	37,080,115
Utah[1]	981	163,593	6,922,018
Washington[1]	3,677	2,043,364	130,151,086
Wisconsin	4,334	144,076	7,826,934
Wyoming[1]	571	206,062	6,033,475
Total--United States	40,737	10,710,228	496,041,365

[1] Identified as a state producing hard red winter wheat in 2002. Illinois, Iowa, Kansas, Kentucky, Louisiana, Missouri, Nebraska, New York, Oklahoma, and Texas were listed as states producing hard red winter wheat in 2002, but were not listed as winter-wheat-producing states in 1997.
[2] Data withheld by USDA to avoid disclosing information of individual firms.

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

Table III-4
Nonspecified wheat: Number of U.S. growers, acres harvested, and quantity grown, by state, 1997

State	Number of farms	Acres harvested	Quantity (*in bushels*)
Alabama	732	82,440	3,326,421
Alaska	3	(1)	(1)
Arkansas	3,361	763,388	35,361,702
Connecticut	2	(1)	(1)
Delaware	652	75,265	4,987,739
Florida	189	16,231	585,557
Georgia	2,115	299,188	12,691,834
Illinois	14,822	983,556	53,954,013
Indiana	10,658	545,027	29,209,090
Iowa	719	22,123	905,333
Kansas	30,392	9,560,615	407,515,802
Kentucky	3,180	408,771	21,658,648
Louisiana	528	98,911	3,755,759
Maine	15	551	32,881
Maryland	2,339	199,351	12,711,370
Mississippi	697	155,049	6,547,211
Missouri	12,394	1,055,664	52,178,347
Nebraska	9,826	1,772,069	61,578,806
New Jersey	541	38,104	2,191,141
New York	1,887	120,927	6,339,980
North Carolina	5,949	616,397	30,357,728
Ohio	18,747	994,276	55,105,157
Oklahoma	13,935	4,825,074	141,302,977
Pennsylvania	6,381	167,488	8,526,375
South Carolina	2,138	306,935	14,500,101
Tennessee	2,360	305,175	13,482,402
Texas	13,669	3,860,325	108,242,787
Vermont	14	448	21,695
Virginia	2,888	257,063	15,504,394
West Virginia	191	7,620	421,453
Total--United States	161,324	27,538,271	1,103,005,913

[1] Data withheld by USDA to avoid disclosing information of individual firms.

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

Table III-5
Wheat: Number of U.S. growers, acres harvested, and quantity grown, by size of farm, 1997

Farm size	Number of farms	Acres harvested	Quantity (*in bushels*)
1 to 14 acres	28,965	248,698	11,216,066
15 to 24 acres	24,665	465,940	21,666,119
25 to 49 acres	37,785	1,315,505	61,697,015
50 to 99 acres	39,246	2,692,636	121,738,637
100 to 249 acres	49,304	7,637,971	317,088,525
250 to 499 acres	29,308	10,206,821	389,975,533
500 to 999 acres	21,514	14,684,021	530,083,445
1,000 to 1,999 acres	9,998	13,211,391	464,776,868
2,000 to 2,999 acres	1,848	4,296,531	144,195,078
3,000 to 4,999 acres	736	2,631,362	88,925,050
5,000 acres or more	199	1,445,468	52,664,348
Total	243,568	58,836,344	2,204,026,684

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

ACREAGE PLANTED, ACREAGE HARVESTED, PRODUCTION, AND YIELD[8]

Data on acreage planted, acreage harvested, production, and yield for durum, hard red spring, hard red winter, and hard red spring and hard red winter wheat, combined, are presented in table III-6. Approximately 90 percent of spring wheat (excluding durum wheat) produced in the United States was accounted for by the production of hard red spring wheat in 2002. Approximately 53 percent of winter wheat produced in the United States was accounted for by the production of hard red winter wheat in 2002.[9]

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[8] The Commission requested all parties and several state extension services to provide information or sources of information on the following 5 factors concerning the U.S. durum and hard red spring industries if they had any such information or sources of information: (1) the extent to which U.S. farmers switch between growing durum and non-durum wheat; (2) factors that affect acres of durum and hard red spring wheat planted and harvested in the United States; (3) the effect of government support programs on U.S. farmers' durum and hard red spring wheat planting decisions; (4) the reasons for any reduction in acreage of durum and hard red spring wheat planted in the United States; and (5) factors other than imports that may bear on the state of the U.S. durum and hard red spring wheat industries, such as product quality and availability. Responses were received from counsel to petitioners, counsel to the CWB, the Montana Wheat & Barley Committee, the South Dakota Wheat Commission, and the American Italian Pasta Co.

None of the responses to the Commission's inquiry included any published data on the extent to which U.S. farmers switch between growing durum and non-durum wheat. It is believed that no such literature and precise data on this issue exist. Therefore, this information is unknown. However, all responses stated that U.S. farmers have the ability to switch between growing durum and non-durum wheat, but several noted numerous reasons against such an action including weather, environmental restrictions, soil conditions, the problem of "add mixture," transportation costs to elevators, and profitability.

Prices, environmental factors, weather, crop rotation, and growing alternative crops were reported as factors that affect the acres of durum and hard red spring wheat planted and harvested in the United States. However, higher seeding and fertilizing costs and the delisting of durum wheat futures contracts on the Minneapolis Grain Exchange which eliminated hedging on durum wheat make durum wheat a riskier wheat to produce.

Counsel to the CWB stated that the marketing assistance loan program, the Crop Revenue Coverage (CRC) program, and the 1996 Farm bill have influenced durum and hard red spring wheat planting decisions in the United States. The CRC program became no longer available for durum wheat planted in 2001. The Montana Wheat and Barley Committee and the South Dakota Wheat Commission stated that, although the higher government loan rates for alternative crops can possibly affect planting decisions for farmers in Montana and South Dakota, no government support programs have had any effect on planting decisions in those States due to environmental factors and other risks that limit them from growing other alternative crops. Petitioners stated that current U.S. government support programs do not impact the planting decisions of durum and hard red spring wheat producers due to "de-coupled" programs and the lag in payments that typically come after the crop season is over. See Part II for further information on government programs.

Cyclical factors mentioned such as weather, crop rotations, and soil conditions were reported as factors that affect acreage of durum and hard red spring wheat planted in the United States. Other reported factors include low prices, risk of growing alternative crops, increased production of alternative crops, and quality risk due to major diseases.

Reported factors other than imports that bear on the state of the durum and hard red spring wheat industries include the cyclical factors mentioned above, wheat farmers' inability to move in and out of production due to high capital investments made, inventories of wheat held in the United States, supply of wheat in the world market, and wheat diseases such as Fusarium Head Blight.

[9] USDA, ERS, *Wheat Situation and Outlook Yearbook*, WHS-2003, March 2003, p. 34.

Table III-6
Durum, hard red spring, and hard red winter wheat: U.S. producers' acreage planted, acreage harvested, production, and yield, marketing years 2000/01, 2001/02, 2002/03, and 2003/04

Item	Marketing year[1]			
	2000/01	2001/02	2002/03[2]	2003/04[3]
Durum wheat:				
Acreage planted (*million acres*)	3.9	2.9	2.9	2.8
Acreage harvested (*million acres*)	3.6	2.8	2.7	2.7
Production (*million bushels*)	110	84	79	87
Yield (*bushels per acre harvested*)	30.7	30.0	29.4	34.1[4]
Hard red spring wheat:				
Acreage planted (*million acres*)	14.4	14.8	14.9	13.0
Acreage harvested (*million acres*)	13.6	13.8	12.6	12.7
Production (*million bushels*)	502	476	357	460
Yield (*bushels per acre harvested*)	37.0	34.6	28.2	36.7[4]
Hard red winter wheat:				
Acreage planted (*million acres*)	30.4	29.0	29.8	32.0
Acreage harvested (*million acres*)	23.6	20.9	19.6	25.7
Production (*million bushels*)	846	767	609	1,093
Yield (*bushels per acre harvested*)	35.9	36.7	31.1	42.4
Hard red spring and hard red winter wheat:				
Acreage planted (*million acres*)[3]	44.8	43.8	44.7	45.1
Acreage harvested (*million acres*)[3]	37.2	34.7	32.3	38.4
Production (*million bushels*)[3]	1,348	1,243	966	1,553
Yield (*bushels per acre harvested*)	36.2	35.8	29.9	40.4

[1] The U.S. marketing year begins June 1 and ends May 31.
[2] Marketing year 2002/03 data are estimates.
[3] Marketing year 2003/04 data are projections.
[4] Yield figure as reported by USDA.

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

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

U.S. PRODUCERS' DOMESTIC SHIPMENTS AND EXPORT SHIPMENTS

U.S. producers' shipments data, *per se*, are not available. Shipment data for domestic durum, hard red spring, hard red winter, and hard red spring and hard red winter wheat, combined, are shown in table III-7.[10]

U.S. PRODUCERS' INVENTORIES

U.S. producers' end-of-period inventories of durum wheat and end-of-period inventories of domestic hard red spring, hard red winter, and hard red spring and hard red winter wheat, combined, are shown in table III-8 (although inventories held by the farmers are available for durum wheat, other wheat inventory data are available only as a combined figure encompassing inventories held at all levels of trade).

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Employment data related to the production of durum and hard red spring wheat are limited.[11] Estimated data on wages and productivity for all wheat producers in the United States (table III-9), durum wheat producers in North Dakota (table III-10), and hard red spring wheat producers in Minnesota (table III-11), North Dakota (table III-12), and South Dakota (table III-13) are presented.[12]

Data on the total number of workers, hours worked, and wage rates do not exist for U.S. wheat growers for reasons intrinsic to farming. Wheat is grown on cash-grain farms that employ both the farmer, often unpaid family members, hired laborers, and contracted service workers. The farmer provides most of the farm labor, and is compensated through a combined single economic return for the labor provided and management at the end of the year. Most wheat farmers employ contract (custom) services, such as wheat combining or farm chemical application, but some choose to do these tasks themselves. These cash-grain farms[13] also grow other crops such as sunflower-seed, barley, canola, soybeans, or forage crops, and sometimes raise livestock which also occupy the time of the farmer and hired laborers. As a result, there is no meaningful way to allocate employment data solely to wheat production, and no such data are collected.

The USDA does collect information on wages and the number of "hired field and livestock workers and agricultural service workers," but such data exclude farmers.[14] In October 2002, for example, total employment of hired field and livestock workers on farms and ranches amounted to 1.2

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[10] USDA does not collect data on the value of shipments of domestic product. Average unit values of shipments of domestic product also are not available.

[11] The petition included employment data for hired workers and wage rates for field crop and livestock workers. Petition, exh. I-42. However, such data are not specific to wheat farmers.

Petitioners claim that employment in the domestic industries is down. Hearing transcript, pp. 42-43.

Staff contacted state extension services of the major wheat producing states for employment information, but none were available. It is believed that data on the number of employees and hours worked do not exist.

[12] These data are derived from the financial data obtained from USDA and the appropriate States, as discussed in Part VI of this report.

[13] The term "cash-grain farms" is drawn from the Standard Industrial Classification (SIC #0111). It is defined under the 1997 North American Industry Classification System (NAICS) as the following: this industry group comprises establishments primarily engaged in (1) growing oilseed and/or grain crops and/or (2) producing oilseed and grain seeds. NAICS, 1997, p. 38.

[14] USDA, NASS, *Farm Labor*, November 15, 2002, pp. 3 and 11.

Table III-7
Durum, hard red spring, and hard red winter wheat: Shipments of domestic product, by types, marketing years 2000/01, 2001/02, 2002/03, and 2003/04

Item	Marketing year[1]			
	2000/01	2001/02	2002/03[2]	2003/04[3]
	Quantity (*million bushels*)			
Durum wheat:				
U.S. shipments[4]	55	43	47	49
Export shipments[5]	56	50	37	35
Total shipments	111	93	85	84
Hard red spring wheat:				
U.S. shipments[4]	282	244	171	205
Export shipments[5]	227	216	254	255
Total shipments	509	460	425	460
Hard red winter wheat:				
U.S. shipments[4]	500	466	472	485
Export shipments[5]	393	349	311	460
Total shipments	893	815	783	945
Hard red spring and hard red winter wheat:				
U.S. shipments[4]	782	711	643	690
Export shipments[5]	620	565	565	715
Total shipments	1,402	1,276	1,209	1,405

[1] The U.S. marketing year begins June 1 and ends May 31.
[2] Marketing year 2002/03 data are estimates.
[3] Marketing year 2003/04 data are projections.
[4] USDA does not collect the quantities of U.S. producers' U.S. shipments, U.S. producers' U.S. inventories (except for durum wheat), and U.S. producers' exports. Quantities of U.S. shipments of domestic product were derived by subtracting U.S. export shipments and U.S. end-of-period inventories (adjusted for hard red wheats to exclude inventories of imports) from the sum of U.S. beginning-of-period inventories (adjusted for hard red wheats to exclude imports) and U.S. production. For wheats other than durum, U.S. imports were excluded from U.S. inventories by multiplying U.S. inventories by a factor of U.S. production to U.S. production plus U.S. imports. Official USDA and Commerce statistics, which do not include flour and wheat products, were used as import data.
[5] U.S. export data published by the USDA include flour and wheat products. Approximately 96 and 97 percent of all wheat exports were accounted for by unmilled wheat in marketing years 2000/01 and 2001/02, respectively. Approximately 92 percent of durum wheat exports were accounted for by unmilled durum wheat in marketing year 2001/02. Data received from ***, USDA, September 30, 2002 and October 7, 2002. Exports can include imported products. However, these quantities are believed to be immaterial.

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

Source: Compiled from official Commerce statistics and official USDA statistics.

Table III-8
Durum, hard red spring, and hard red winter wheat: End-of-period inventories of U.S. product, marketing years 2000/01, 2001/02, 2002/03, and 2003/04

Item	Marketing year[1]			
	2000/01	2001/02	2002/03[2]	2003/04[3]
Durum wheat:[4]				
Inventories (*million bushels*)	29	21	15	19
Ratio to production (*percent*)	26.5	24.5	19.0	21.5
Ratio to U.S. shipments[5] (*percent*)	52.7	48.5	31.8	38.6
Ratio to total shipments[5] (*percent*)	26.2	22.3	17.8	22.5
Hard red spring wheat:[6]				
Inventories (*million bushels*)	194	210	141	141
Ratio to production (*percent*)	38.6	44.1	39.5	30.7
Ratio to U.S. shipments[5] (*percent*)	68.7	85.8	82.1	69.0
Ratio to total shipments[5] (*percent*)	38.1	45.6	33.1	30.7
Hard red winter wheat:[6]				
Inventories (*million bushels*)	411	362	188	336
Ratio to production (*percent*)	48.6	47.2	30.9	30.8
Ratio to U.S. shipments[5] (*percent*)	82.2	77.7	39.9	69.3
Ratio to total shipments[5] (*percent*)	46.0	44.4	24.1	35.6
Hard red spring and hard red winter wheat:[6]				
Inventories (*million bushels*)	605	572	329	477
Ratio to production (*percent*)	44.9	46.0	34.1	30.7
Ratio to U.S. shipments[5] (*percent*)	77.3	80.5	51.2	69.2
Ratio to total shipments[5] (*percent*)	43.1	44.8	27.2	34.0

[1] The U.S. marketing year begins June 1 and ends May 31.
[2] Marketing year 2002/03 data are estimates.
[3] Marketing year 2003/04 data are projections.
[4] USDA collects data for on-farms inventory of durum wheat. However, it does not publish projections of these data. Therefore, durum wheat inventory data for U.S. producers in marketing years 2000/01, 2001/02, and 2002/03 are based on on-farms inventory data already collected by USDA. Projections for U.S. producers' durum wheat inventory in marketing year 2003/04 are adjusted to exclude USDA projected imports. U.S. producers' end-of-period inventories of durum wheat were derived by multiplying end-of-period inventories, including imports, by a factor of U.S. production to U.S. production plus U.S. imports. Because durum wheat inventory data for marketing year 2003/04 include inventory held at all levels of trade including mills, elevators, warehouses, terminals, and processors, inventory data for durum wheat in marketing year 2003/04 are believed to be greatly overstated. Official USDA on-farms and off-farms inventory data for durum wheat are presented in table D-2.
[5] Data on U.S. shipments and total shipments used in the ratios to inventories were also adjusted to exclude imports.
[6] USDA does not collect quantities of U.S. producers' end-of-period inventories of hard red spring and hard red winter wheat. In addition, on-farms inventory data are not available for hard red spring and hard red winter wheat. U.S. producers' end-of-period inventories of hard red spring and hard red winter wheat were derived by multiplying end-of-period inventories, including imports, by a factor of U.S. production to U.S. production plus U.S. imports. Because data on hard red spring and hard red winter wheat inventory collected by USDA include inventory held at all levels of trade including mills, elevators, warehouses, terminals, and processors, such data are believed to be greatly overstated. It is not believed that USDA inventory data collected for hard red spring and hard red winter wheat either follow or do not follow the same trend as that of on-farms inventory data for all wheat. Official USDA on-farms and off-farms inventory data for all wheat are presented in table D-2.

Note.--Ratios are computed from the unrounded inventory figures.

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

Table III-9
All wheat: Production, hired labor expense, planted acres, harvested acres, wages,[1] and productivity,[2] marketing years 2000/01, 2001/02, and 2002/03

Item	Marketing year[3]		
	2000/01	2001/02	2002/03[4]
Production (*million bushels*)	2,232	1,957	1,616
Hired labor (*per planted acre*)	$2.30	$2.45	$2.49
Planted acres (*millions*)	62.6	59.6	60.4
Harvested acres (*millions*)	53.1	48.6	45.8
Wages (*millions of dollars*)	143.98	146.02	150.40
Productivity (*per bushel*)	$0.06	$0.07	$0.09

[1] Wages are not published by the U.S. Department of Commerce. These figures were calculated by multiplying the dollars of hired labor per planted acre by the number of planted acres.
[2] Productivity data are not published by the U.S. Department of Commerce. These figures were calculated by dividing wages by production.
[3] The U.S. marketing year begins June 1 and ends May 31.
[4] Marketing year 2002/03 data are estimates.

Source: Compiled from official USDA statistics and commodity costs and returns at *http://www.ers.usda.gov/data/costsandreturns/data*.

Table III-10
Durum wheat: North Dakota's production, hired labor expense,[1] planted acres, harvested acres, wages,[2] and productivity,[3] 2000-2002

Item	Year[4]		
	2000	2001	2002
Production (*million bushels*)	78.30	54.60	48.75
Hired labor (*per harvested acre*)	$2.60	$2.93	$2.74
Planted acres (*millions*)	3.25	2.20	2.10
Harvested acres (*millions*)	2.90	2.10	1.95
Wages (*millions of dollars*)	7.54	6.15	5.34
Productivity (*per bushel*)	$0.10	$0.11	$0.11

[1] The hired labor rates presented are the simple averages of hired costs for owned land and cash rented land for durum wheat in North Dakota. Neither the USDA nor North Dakota keeps records on the percentages of land owned versus rented for durum wheat.
[2] Wages are not published by the U.S. Department of Commerce. These figures were calculated by multiplying the dollars of hired labor per harvested acre by the number of harvested acres.
[3] Productivity data are not published by the U.S. Department of Commerce. These figures were calculated by dividing wages by production.
[4] Production, planted acres, and harvested acres are based on marketing years. Hired labor data are based on calendar years.

Source: North Dakota Farm Business Management Education Program, Crop Enterprise Analysis, and the USDA.

Table III-11
Hard red spring wheat: Minnesota's production, hired labor expense,[1] planted acres, harvested acres, wages,[2] and productivity,[3] 2000-2002

Item	Year[4]		
	2000	2001	2002
Production (*million bushels*)	95.55	79.20	61.20
Hired labor (*per harvested acre*)	$4.10	$4.28	$3.16
Planted acres (*millions*)	2.00	1.85	2.00
Harvested acres (*millions*)	1.95	1.80	1.80
Wages (*millions of dollars*)	8.00	7.70	5.69
Productivity (*per bushel*)	$0.08	$0.10	$0.09

[1] The hired labor rates presented are the simple averages of hired costs for owned land and cash rented land for hard red spring wheat in Minnesota. Neither the USDA nor the state extension services of Minnesota keeps records on what percentage of land is owned versus rented for hard red spring wheat.
[2] Wages are not published by the U.S. Department of Commerce. These figures were calculated by multiplying the dollars of hired labor per harvested acre by the number of harvested acres.
[3] Productivity data are not published by the U.S. Department of Commerce. These figures were calculated by dividing wages by production.
[4] Production, planted acres, and harvested acres are based on marketing years. Hired labor data are based on calendar years.

Source: Northwestern Farm Business Management Averages, Crop Enterprise Analysis, and the USDA.

million, 14 percent of whom were employed on field crop farms, like wheat, soybean, corn, rice, and cotton farms. USDA does not report the number of hired farm workers employed only on wheat farms.

Petitioners used the reported total number of hired field and livestock and agricultural workers to estimate the employment of hired workers on durum and hard red spring wheat farms in four leading states during 1999-2001.[15] Petitioners estimated that in 2001 there were 47 hired agricultural workers on durum farms in the four-state area, and 263 employees on hard red spring wheat farms, a decline from 65 and 314 employees, respectively in 1999. These data are based on reported agricultural labor employment including farmworkers and laborers involved in farming, fishing, forestry, crop, nursery, greenhouses, and ranch animals.[16]

[15] Petitioners' posthearing brief, exh. 32. The four States are North Dakota, South Dakota, Minnesota and Montana.

[16] Given the widely varying types and activities of the agricultural workers included in these data, no reliable conclusions on employment trends of hired labor on durum and hard red spring wheat farms can be drawn from this work.

Table III-12
Hard red spring wheat: North Dakota's production, hired labor expense,[1] planted acres, harvested acres, wages,[2] and productivity,[3] 2000-2002

Item	Year[4]		
	2000	2001	2002
Production (*million bushels*)	233.60	234.60	165.20
Hired labor (*per harvested acre*)	$3.20	$3.10	$2.83
Planted acres (*millions*)	6.80	7.10	6.90
Harvested acres (*millions*)	6.40	6.90	5.90
Wages (*millions of dollars*)	20.48	21.39	16.70
Productivity (*per bushel*)	$0.09	$0.09	$0.10

[1] The hired labor rates presented are the simple averages of hired costs for owned land and cash rented land for hard red spring wheat in North Dakota. Neither the USDA nor North Dakota keeps records on the percentages of land owned versus rented for hard red spring wheat.
[2] Wages are not published by the U.S. Department of Commerce. These figures were calculated by multiplying the dollars of hired labor per harvested acre by the number of harvested acres.
[3] Productivity data are not published by the U.S. Department of Commerce. These figures were calculated by dividing wages by production.
[4] Production, planted acres, and harvested acres are based on marketing years. Hired labor data are based on calendar years.

Source: North Dakota Farm Business Management Education Program, Crop Enterprise Analysis, and the USDA.

Table III-13
Hard red spring wheat: South Dakota's production, hired labor expense, planted acres, harvested acres, wages,[1] and productivity,[2] 2000-2002

Item	Year[3]		
	2000	2001	2002
Production (*million bushels*)	60.04	64.35	24.00
Hired labor (*per harvested acre*)	$6.63	$4.65	$7.01
Planted acres (*millions*)	1.65	1.70	1.70
Harvested acres (*millions*)	1.58	1.65	1.00
Wages (*millions of dollars*)	10.48	7.67	7.01
Productivity (*per bushel*)	$0.17	$0.12	$0.29

[1] Wages are not published by the U.S. Department of Commerce. These figures were calculated by multiplying the dollars of hired labor per harvested acre by the number of harvested acres. South Dakota does not breakout hired labor by land tenure.
[2] Productivity data are not published by the U.S. Department of Commerce. These figures were calculated by dividing wages by production.
[3] Production, planted acres, and harvested acres are based on marketing years. Hired labor data are based on calendar years.

Source: Compiled from data derived from *South Dakota Annual Reports*, Farm/Ranch Business Management Averages, Crop Production by Enterprise.

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

U.S. IMPORTERS

The Commission sent questionnaires to 55 firms and received 27 responses, 11 of them indicating that they do not import durum and/or hard red spring wheat from any source. On the basis of Bureau of Customs and Border Protection (Customs) data, *** accounted for ***, ***, ***, and *** percent of imports of durum,[1] hard red spring,[2] hard red winter,[3] and hard red spring and hard red winter wheat combined from Canada, respectively, in marketing year 2001/02.[4] It was the largest importer of durum and hard red spring wheat from Canada in marketing year 2001/02 and the ***.

***. No importers reported imports of durum wheat under temporary import bond.

[1] Twenty-six firms imported durum wheat from Canada in marketing year 2001/02. All but the following four importers individually accounted for less than 1 percent of imports of durum wheat from Canada in marketing year 2001/02: ***.

[2] Fifty-three firms imported hard red spring wheat from Canada in marketing year 2001/02. All but the following nine importers accounted for less than 1 percent of imports of hard red spring wheat from Canada in marketing year 2001/02: ***.

[3] Six firms imported hard red winter wheat from Canada in marketing year 2001/02. The three largest importers, ***, accounted for more than *** percent of the hard red winter wheat imports from Canada in marketing year 2001/02.

[4] Full marketing year 2002/03 Customs data will not become available until October 2003.

U.S. IMPORTS[5]

USDA end-use certificate data are used for imports of durum and hard red spring wheat from Canada and official Commerce statistics are used for all other imports. These are the best available data because coverage of questionnaire data is incomplete.[6]

The quantity and value of U.S. imports of durum wheat are presented in table IV-1.[7] Hard red spring wheat data are presented in table IV-2.[8] Hard red winter wheat data are presented in table IV-3;[9]

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[5] The CWB argues that based on a comparison of U.S. import data on durum and hard red spring wheat from Canada as reported in official Commerce statistics, and Canada's export data on hard red spring wheat to the United States maintained by the Canadian Grains Commission, U.S. imports of wheat from Canada contain transshipments to Latin America and the Caribbean. Such transshipments reported by the CWB equal ***, ***, and *** bushels of durum wheat and ***, ***, and *** bushels of hard red spring wheat in U.S. marketing years 2000/01, 2001/02, and 2002/03, respectively. CWB's postconference brief, exh. 8 and foreign producer/exporter questionnaire response, exh. 1. End-use certificate data received from the USDA confirm that there are transhipments of Canadian wheat through the United States. All parties were requested on whether the Commission should use these data to estimate the volume of transshipments. Petitioners claim that official Commerce statistics accurately reflect imports of wheat from Canada and argue that official Commerce statistics should be used. Petitioners' posthearing brief, app. 1, p. 5. U.S. import, U.S. apparent consumption, and U.S. market share data using USDA end-use certificate data for imports of durum and hard red spring wheat from Canada are presented in tables C-1 to C-4. The same data including U.S. exports in apparent U.S. consumption are presented in tables C-1A to C-4A. U.S. import, U.S. apparent consumption, and U.S. market share data using official Commerce statistics as imports data are presented in tables C-5 to C-7. The same data including U.S. exports in apparent U.S. consumption are presented in tables C-5A to C-7A.

[6] The CWB stated that USDA end-use certificate data are the best option for determining imports of wheat from Canada. CWB's posthearing brief, exh. A-17, p. 146. Petitioners stated that the Commission should use official Commerce statistics to determine the imports of wheat from Canada. Petitioners' posthearing brief, app. 1, p. 5. However, since official Commerce statistics do not reflect transhipments of Canadian goods through the United States and thus do not account for differences in imports for consumption and general imports, USDA end-use certificate data are used to present imports of durum and hard red spring wheat imports from Canada for consumption in the United States.

[7] Import data on durum wheat are based on HTS statistical reporting numbers 1001.10.0010, 1001.10.0091, 1001.10.0092, 1001.10.0095, 1001.10.0096, and 1001.10.0099. Imports of durum wheat from Canada as shown in this part of the report and in tables C-1 and C-1A are based on USDA data.

[8] Import data on hard red spring wheat from Canada are based on HTS statistical reporting numbers 1001.90.1000, 1001.90.2005, 1001.90.2011, 1001.90.2012, 1001.90.2013, 1001.90.2014, 1001.90.2016, 1001.90.2019, 1001.90.2021, 1001.90.2022, 1001.90.2023, 1001.90.2024, 1001.90.2026, 1001.90.2029, and 1001.90.2035. Imports of hard red spring wheat from Canada as shown in this part of the report and in tables C-2 and C-2A are based on USDA data. Imports of hard red spring wheat from Canada and all other sources based on official Commerce statistics are slightly understated because HTS statistical reporting number 1001.90.2096, a basket category mostly containing nonsubject imports, was not included for purposes of calculating hard red spring imports. On an annual basis, approximately *** of wheat imported from Canada entered under HTS number 1001.90.2096 is believed to be hard red spring. Phone interview with ***, USDA, October 10, 2002. The two largest importers of wheat imported under HTS number 1001.90.2096 from all sources other than Canada, ***, account for the vast majority of wheat imported under that HTS number during June 2002 to March 2003 according to Customs data. *** did not import hard red spring wheat. It imported soft red winter wheat. Telephone interview with ***, July 16, 2003. ***. Telephone interview with ***, August 12, 2003.

[9] Import data on hard red winter wheat are based on HTS statistical reporting number 1001.90.2050. The HTS describes this category as "Canadian" western red winter wheat. Given its physical characteristics, all "Canadian" western red winter wheat is a hard wheat. Therefore, imports of hard red winter wheat are believed to account for all

(continued...)

Table IV-1
Durum wheat: U.S. imports, by sources, marketing years 2000/01, 2001/02, and 2002/03

Source	Marketing year[1]		
	2000/01	2001/02	2002/03
	Quantity (*bushels*)[2]		
Canada	12,228,230	17,947,129	12,577,809
All others	350,082	910,003	545,979
Total	12,578,312	18,857,132	13,123,788
	Share of quantity (*percent*)		
Canada	97.2	95.2	95.8
All others	2.8	4.8	4.2
Total	100.0	100.0	100.0

[1] The U.S. marketing year begins June 1 and ends May 31.
[2] To convert from kilograms to bushels, kilograms were multiplied by 0.0367437. *World Agricultural Production*, USDA, June 2003, p. 5.

Note.–Because of rounding, figures may not add to the totals shown. Shares are calculated from the unrounded figures.

Source: Compiled from official Commerce statistics and USDA end-use certificate data.

[9] (...continued)
of the merchandise imported under HTS number 1001.90.2050. Since that HTS number captures imports only from western Canada, data on U.S. imports of hard red winter wheat from Canada are believed to be understated by the quantity of any imported hard red winter wheat from eastern Canada. Imports of hard red winter wheat from all sources other than western Canada (including eastern Canada) are classified under HTS number 1001.90.2096. On an annual basis, approximately 15 percent (or 1,063,659 bushels in marketing year 2002/03) of wheat imported from Canada under HTS number 1001.90.2096 is believed to be hard red winter. Telephone interview with ***, USDA, October 10, 2002. Therefore, 15 percent of the quantities imported under HTS number 1001.90.2096, a basket category mostly containing nonsubject imports, was included for purposes of calculating hard red winter wheat imports.

Table IV-2
Hard red spring wheat: U.S. imports, by sources, marketing years 2000/01, 2001/02, and 2002/03

Source	Marketing year[1]		
	2000/01	2001/02	2002/03
	Quantity (*bushels*)[2]		
Canada	41,425,913	46,109,669	10,560,837
All others	709	993	3 ,155
Total	41,426,622	46,110,662	10,563,992
	Share of quantity (*percent*)		
Canada	100.0	100.0	100.0
All others	(3)	(3)	(3)
Total	100.0	100.0	100.0

[1] The U.S. marketing year begins June 1 and ends May 31.
[2] To convert from kilograms to bushels, kilograms were multiplied by 0.0367437. *World Agricultural Production*, USDA, June 2003, p. 5.
[3] Less than 0.05 percent.

Note.–Because of rounding, figures may not add to the totals shown. Shares are calculated from the unrounded figures.

Source: Compiled from official Commerce statistics and USDA end-use certificate data.

Table IV-3
Hard red winter wheat: U.S. imports from Canada,[1] marketing years 2000/01, 2001/02, and 2002/03

Source	Marketing year[2]		
	2000/01	2001/02	2002/03
	Quantity (*bushels*)[3]		
Canada	470,676	1,264,747	1,299,457

[1] HTS statistical reporting numbers 1001.90.2050 and 1001.90.2096 were used to calculate imports of hard red winter wheat. Statistical reporting number 1001.90.2050 contains only hard red winter wheat imports from western Canada. Therefore, all quantities imported under that number were applied to imports of hard red winter wheat presented in this table and throughout the report. Only 15 percent of statistical reporting number 1001.90.2096 is believed to represent for hard red winter wheat from Canada. Therefore, that share of quantities imported under that number was applied to hard red winter wheat presented in this table and throughout the report.
[2] The U.S. marketing year begins June 1 and ends May 31.
[3] To convert from kilograms to bushels, kilograms were multiplied by 0.0367437. *World Agricultural Production*, USDA, June 2003, p. 5.

Source: Compiled from official Commerce statistics.

data for hard red spring and hard red winter wheat, combined, are presented in table IV-4. Imports of durum, hard red spring, and hard red spring and hard red winter combined from Canada and all sources increased from marketing year 2000/01 to 2001/02 and then fell in marketing year 2002/03. Imports of durum wheat from Canada, which accounted for over 95 percent of total imports of durum wheat throughout the period examined, increased by 2.9 percent (based on USDA end use certificate data and increased by 15.0 percent based on Commerce data) from marketing year 2000/01 to marketing year 2002/03. Imports of durum wheat from all other sources were from Germany, Mexico, Taiwan, and Thailand, with imports from Mexico accounting for the vast majority of imports from nonsubject sources. Imports of hard red spring wheat from Canada decreased by 74.5 percent (based on USDA end use certificate data and decreased by 69.4 percent based on Commerce data) from marketing year 2000/01 to marketing year 2002/03 while imports from all other sources increased by 345 percent but still captured less than 1 percent of the share of total imports in marketing year 2002/03. Imports of hard red spring wheat from all other sources were from Egypt, France, Germany, Jordan, Mexico, Turkey, and the United Kingdom. Imports of hard red winter wheat from Canada increased by 176.1 percent from marketing year 2000/01 to marketing year 2002/03.

Table IV-4
Hard red spring and hard red winter wheat: U.S. imports, by sources, marketing years 2000/01, 2001/02, and 2002/03

Source	Marketing year[1]		
	2000/01	2001/02	2002/03
	Quantity (*bushels*)[2]		
Canada	41,896,589	47,374,416	11,860,294
All others	709	993	3,155
Total	41,897,298	47,375,409	11,863,449
	Share of quantity (*percent*)		
Canada	100.0	100.0	100.0
All others	(3)	(3)	(3)
Total	100.0	100.0	100.0

[1] The U.S. marketing year begins June 1 and ends May 31.
[2] To convert from kilograms to bushels, kilograms were multiplied by 0.0367437. *World Agricultural Production*, USDA, June 2003, p. 5.
[3] Less than 0.05 percent.

Note.--Because of rounding, figures may not add to the totals shown. Shares are calculated from the unrounded figures.

Source: Compiled from official Commerce statistics and USDA end-use certificate data.

APPARENT U.S. CONSUMPTION

The volume of apparent U.S. consumption of durum, hard red spring, hard red winter, and hard red spring and hard red winter wheat combined are presented in tables IV-5, IV-6, IV-7, and IV-8, respectively. With respect to these tables, imports from Canada are based on USDA end-use certificate data which reflect transshipments of Canadian wheat through the United States and imports from all

Table IV-5
Durum wheat: U.S. shipments of domestic product, U.S. imports, by sources, and apparent U.S. consumption, marketing years 2000/01, 2001/02, and 2002/03

Item	Marketing year[1]		
	2000/01	2001/02	2002/03
	Quantity (*million bushels*)		
U.S. producers' shipments	55	43	47
U.S. imports from--			
Canada	12	18	13
All other sources	0.4	1	1
Total imports	13	19	13
Apparent U.S. consumption	68	61	61

[1] The U.S. marketing year begins June 1 and ends May 31.

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

Source: Compiled from official USDA statistics and official Commerce statistics.

Table IV-6
Hard red spring wheat: U.S. shipments of domestic product, U.S. imports, by sources, and apparent U.S. consumption, marketing years 2000/01, 2001/02, and 2002/03

Item	Marketing year[1]		
	2000/01	2001/02	2002/03
	Quantity (*million bushels*)		
U.S. producers' shipments	282	244	171
U.S. imports from--			
Canada	41	46	11
All other sources	(2)	(2)	(2)
Total imports	41	46	11
Apparent U.S. consumption	324	290	182

[1] The U.S. marketing year begins June 1 and ends May 31.
[2] Less than 500,000 bushels.

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

Source: Compiled from official USDA statistics and official Commerce statistics.

Table IV-7
Hard red winter wheat: U.S. shipments of domestic product, U.S. imports, by sources, and apparent U.S. consumption, marketing years 2000/01, 2001/02, 2002/03

Item	Marketing year[1]		
	2000/01	2001/02	2002/03
	Quantity (*million bushels*)		
U.S. producers' shipments	500	466	472
U.S. imports from Canada[2]	([3])	1	1
Apparent U.S. consumption	500	468	473

[1] The U.S. marketing year begins June 1 and ends May 31.
[2] Imports from all other sources are unavailable, but are believed to be minimal.
[3] Less than 500,000 bushels.

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

Source: Compiled from official USDA statistics and official Commerce statistics.

Table IV-8
Hard red spring and hard red winter wheat: U.S. shipments of domestic product, U.S. imports, by sources, and apparent U.S. consumption, marketing years 2000/01, 2001/02, 2002/03

Item	Marketing year[1]		
	2000/01	2001/02	2002/03
	Quantity (*million bushels*)		
U.S. producers' shipments	782	711	643
U.S. imports from--			
Canada	42	47	12
All other sources	([2])	([2])	([2])
Total imports	42	47	12
Apparent U.S. consumption	824	758	655

[1] The U.S. marketing year begins June 1 and ends May 31.
[2] Less than 500,000 bushels.

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

Source: Compiled from official USDA statistics and official Commerce statistics.

other sources are based on official Commerce statistics. Apparent U.S. consumption of durum, hard red spring, and hard red spring and hard red winter wheat combined continued to fall from marketing year 2000/01 to 2002/03. Volume of imports as percentages of U.S. production are presented in appendix C.

The CWB has argued that exports made by the purchasers of domestic wheat should be added to apparent U.S. consumption because U.S. export shipments are not directly made by the farmers.[10] Apparent U.S. consumption reflecting exports included in apparent U.S. consumption are presented in appendix C, tables C-1A to C-7A.

U.S. MARKET SHARES

Shares of consumption of durum, hard red spring, hard red winter, and hard red spring and hard red winter wheat combined are presented in tables IV-9, IV-10, IV-11, and IV-12, respectively. With respect to these tables, imports from Canada are based on USDA end-use certificate data which reflect transshipments of Canadian wheat through the United States and imports from all other sources are based on official Commerce statistics.

Table IV-9
Durum wheat: Apparent U.S. consumption and market shares, marketing years 2000/01, 2001/02, and 2002/03

Item	Marketing year[1]		
	2000/01	2001/02	2002/03
	Quantity (*million bushels*)		
Apparent consumption	68	61	61
	Share of quantity (*percent*)		
U.S. producers' shipments	81.4	69.3	78.3
U.S. imports from--			
Canada	18.0	29.3	20.8
All other sources	0.5	1.5	0.9
Total import shipments	18.6	30.7	21.7

[1] The U.S. marketing year begins June 1 and ends May 31.

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

Source: Compiled from official USDA statistics and official Commerce statistics.

[10] Hearing transcript, pp. 47, 204-205 and CWB's posthearing brief, pp. 5-6.

Table IV-10
Hard red spring wheat: Apparent U.S. consumption and market shares, marketing years 2000/01, 2001/02, and 2002/03

Item	Marketing year[1]		
	2000/01	2001/02	2002/03
	Quantity (*million bushels*)		
Apparent consumption	324	290	182
	Share of quantity (*percent*)		
U.S. producers' shipments	87.2	84.1	94.2
U.S. imports from--			
Canada	12.8	15.9	5.8
All other sources	(2)	(2)	(2)
Total import shipments	12.8	15.9	5.8

[1] The U.S. marketing year begins June 1 and ends May 31.
[2] Less than 0.05 percent.

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

Source: Compiled from official USDA statistics and official Commerce statistics.

Table IV-11
Hard red winter wheat: Apparent U.S. consumption and market shares, marketing years 2000/01, 2001/02, and 2002/03

Item	Marketing year[1]		
	2000/01	2001/02	2002/03
	Quantity (*million bushels*)		
Apparent consumption	500	468	473
	Share of quantity (*percent*)		
U.S. producers' shipments	99.9	99.7	99.7
U.S. imports from Canada[2]	0.1	0.3	0.3

[1] The U.S. marketing year begins June 1 and ends May 31.
[2] Imports from all other sources are unavailable, but are believed to be minimal.

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

Source: Compiled from official USDA statistics and official Commerce statistics.

Table IV-12
Hard red spring and hard red winter wheat: Apparent U.S. consumption and market shares, marketing years 2000/01, 2001/02, 2002/03

Item	Marketing year[1]		
	2000/01	2001/02	2002/03
	Quantity (*million bushels*)		
Apparent consumption	824	758	655
	Share of quantity (*percent*)		
U.S. producers' shipments	94.9	93.8	98.2
U.S. imports from--			
Canada: Hard red spring wheat	5.0	6.1	1.6
Hard red winter wheat	0.1	0.2	0.2
Total Canada	5.1	6.2	1.8
All other sources	(2)	(2)	(2)
Total import shipments	5.1	6.2	1.8

[1] The U.S. marketing year begins June 1 and ends May 31.
[2] Less than 0.05 percent.

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

Source: Compiled from official USDA statistics and official Commerce statistics.

PART V: PRICING AND RELATED INFORMATION

FACTORS AFFECTING PRICES[1]

Transportation Costs

The costs for Canadian exporters of durum and hard red spring wheat to access the U.S. market were estimated by calculating the increment that insurance and freight add to customs value. For 2002, these access costs were estimated at 6.2 percent of the customs value of imported Canadian durum wheat and 5.6 percent of the customs value of imported Canadian hard red spring wheat.

Farmers usually truck their wheat to a grain elevator. The grain elevator stores wheat and eventually sells to millers or exporters. Rail is the major mode of inland transport for both Canadian and U.S. wheat, and wheat typically moves from the grain elevator to the miller or port by this mode. Rail service can be purchased directly from the railroad by auction for guaranteed service or by tariff for non-guaranteed service; some purchasers of guaranteed service resell freight service on the secondary rail market.[2] Some wheat also travels by barge down the Mississippi River. Fuel costs are a major determinant of freight rates, and some traders monitor the long-term relationship between grain prices at different locations and fuel costs in order to profit from temporary anomalies in the system. Bid prices at various locations for selected recent dates are shown in table V-1. As expected, prices at the ports exceed those at the grain elevator.

Table V-1
Durum, hard red spring (HRS), and hard red winter wheat (HRW): Grain bid summary at various locations by selected dates

Location	April 10, 2003			May 29, 2003			July 24, 2003		
	Durum ($/bu)	HRS ($/bu)	HRW ($/bu)	Durum ($/bu)	HRS ($/bu)	HRW ($/bu)	Durum ($/bu)	HRS ($/bu)	HRW ($/bu)
North Dakota elevator[1]	$4.27	$3.54	-	$4.12	$3.46	-	$4.15	$3.35	-
Nebraska elevator[1]	-	-	$3.29	-	-	$3.17	-	-	$3.01
Portland, OR[2]	-	4.70	4.17	-	4.57	4.17	-	4.36	3.70
Great Lakes Duluth[2]	5.36	4.17	-	5.31	4.09	-	5.42	4.00	-
Gulf Louisiana[2]	5.85	4.57	3.91	5.71	4.41	3.92	5.82	4.40	3.98

[1] Elevator bid.
[2] 30-day-to-arrive price.

Source: USDA/AMS, Grain Transportation Report, various issues.

[1] Both petitioners and respondents presented econometric models on the effects of imports on U.S. wheat prices. Those models are discussed in app. E.

[2] USDA/AMS, *Grain Transportation Report*, May 29, 2003, p. 4.

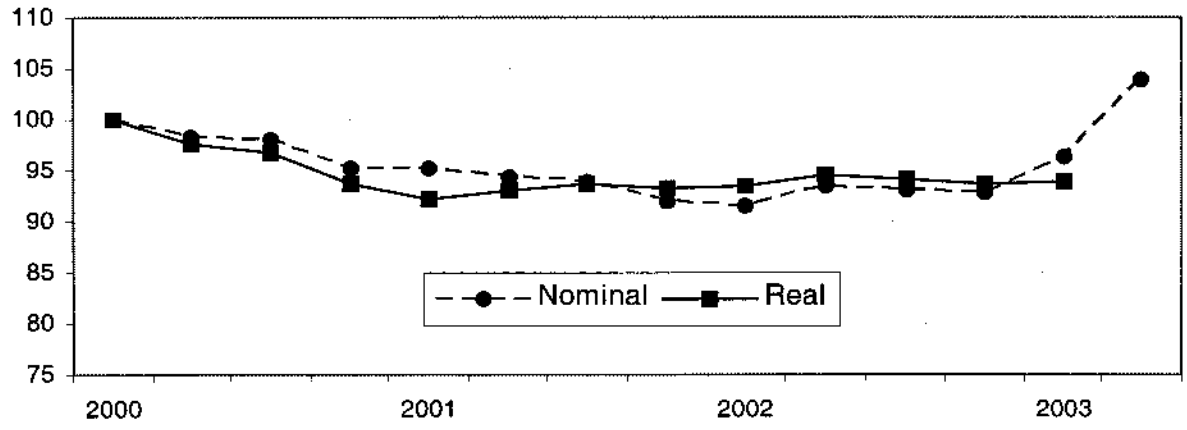
*** reported in its questionnaire that transportation costs account for approximately *** percent of the total delivered costs of both durum and hard red spring wheat. It added that this cost was ***. ***, another importer of Canadian wheat, reported that its transportation costs accounted for *** percent of the cost of durum wheat.

Many purchasers reported not knowing transportation costs because they bought on a delivered basis. Some purchasers, however, make transportation arrangements themselves and reported transportation costs with their pricing data (discussed later in this section). Transportation costs, for the reporting purchasers, averaged 5.6 percent, 6.3 percent, 4.9 percent, and 7.9 percent of the total delivered prices of, respectively, Canadian western amber durum, Canadian western red spring, U.S. hard amber durum, and U.S. hard red spring wheats.

Exchange Rates

The nominal value of the Canadian dollar relative to the U.S. dollar depreciated by 8.6 percent between the first quarter of 2000 and the first quarter of 2002 and then began to increase irregularly. In the second quarter of 2003, it was 3.9 percent above its first quarter 2000 value (figure V-1). The real value of the Canadian dollar in U.S. dollar terms fell by 7.8 percent between the first quarter of 2000 and the first quarter of 2001; it has since fluctuated but trended slightly upward.

Figure V-1
Exchange rates: Indexes (first quarter 2000=100) of the nominal and real U.S. dollar price of the Canadian dollar, by quarters, first quarter 2000 to second quarter 2003



Note.–Data are not available to calculate a real-exchange rate for the second quarter of 2003.

Source: International Monetary Fund, *International Financial Statistics*, August, 2003.

Level of Trade

In the preliminary phase of the investigations, the petitioner alleged that differences in the level of trade camouflaged price differences between Canadian and U.S. wheat.[3]

The Commission's purchaser questionnaire asked if the terms of sale (protein level, test, weight, transportation costs, delivery points, etc.) differed between purchases of domestically grown and imported Canadian wheat. Concerning durum wheat, three purchasers responded in the affirmative and four in the negative. *** stated that it prepays 90 percent for Canadian wheat shipments in contrast to 50 to 90 percent for U.S. shipments. It added that damage and dockage levels are usually lower for the Canadian product than for the domestic product, but U.S. suppliers commit to higher minimum protein levels, and freight costs to ship wheat to its mill are higher for the Canadian product. Concerning both durum and hard red spring wheat, *** replied that there are different customary forms of contracts and government standards in Canada and in the United States. Six purchasers reported that there were no differences in terms of sale between the Canadian and U.S. hard red spring wheat, and one purchaser (***) replied that there were differences.

The Commission's purchaser questionnaire asked if differences in the point in the distribution system (country elevator, grain merchandiser, cooperative, grain exchange, etc.) at which Canadian wheat and U.S. wheat are purchased affect its price. Concerning durum wheat, two purchasers responded in the affirmative and five in the negative. ***, which responded affirmatively, stated that more handling of grain adds to its cost. ***, which also responded affirmatively, stated that quality, specific point of origin, and many other factors affect price. Concerning hard red spring wheat, four purchasers responded in the affirmative and six in the negative. Both *** and *** responded affirmatively and made the same comments for hard red spring wheat that they made for durum wheat. *** reported that milling and baking qualities and flour extraction rates differed by point of origin and that it valued wheat accordingly. *** reported that it preferred to purchase from a grain elevator.

Price Leadership

The petitioners alleged that the CWB is a price leader and that it is able to do so through forward contracting.[4] The Commission's purchaser questionnaire asked if durum, hard red spring, and hard red winter wheat markets had price leaders. Eight purchasers reported that there were no price leaders in the durum wheat market, and three purchasers reported that there was a price leader. *** reported that, at times, a farmer-owned cooperative in the United States is unwilling to sell the durum wheat that it owns and by neutralizing offers can influence price. It added that the durum market is not as liquid as other markets and purchasers need more liquidity. *** and *** reported that *** was a price leader in the durum market. All 13 responding purchasers reported that there was no price leader in the hard red spring wheat market. Similarly, all 13 responding purchasers reported that there were no price leaders in the hard red winter wheat market.

The Commission's purchaser questionnaire asked if the Canadian Wheat Board, any other foreign exporter, or any U.S. grain company influenced prices in the U.S. markets for durum wheat, hard red spring wheat, or hard red winter wheat. Responses were as follows: four affirmative and seven negative for durum wheat; four affirmative and nine negative for hard red spring wheat; and three affirmative and ten negative for hard red winter wheat. *** reported that many factors influence price including actions by the Canadian Wheat Board, the Australian Wheat Board, U.S. farmers, U.S. millers and bakers, and speculators. *** stated that the Canadian Wheat Board provides liquidity to the durum

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

[4] Hearing transcript, pp. 85 and 117-118.

market and that it almost always offers product, although its prices may be unfavorable. *** stated that Canada could sometimes offer less expensive durum because of its subsidies. *** stated that the Canadian Wheat Board, other exporters, and the U.S. grain companies affect supply and demand and thus influence price.

Product Attributes

Contracts for wheat typically specify protein content, test weight, dockage, vitreous kernel content, and possibly other factors because these attributes affect the milling and baking characteristics and thus market price. For example, cash prices of western red spring wheat at the Minneapolis Grain Exchange at the 15 percent protein level averaged 26.9 percent more than cash prices of the similar product at the 13 percent protein level over the last three marketing years. The data were variable, however, with a maximum positive difference of 74¢ per bushel and the lower protein product was priced higher than the higher protein product in several months.

The Commission's purchaser questionnaire asked what adjustments are made when the attributes of the delivered product do not match those of the contract. *** stated that, for durum, if the delivered quality is less than contracted quality, the price is discounted but higher-than-contracted quality is accepted at no premium. It added that suppliers in southwest North Dakota generally over-deliver protein because that is a characteristic of the crop in that region. *** added that, for hard red spring wheat and hard red winter wheat, the origin may be changed for quality purposes. *** stated that the purchase will be rejected if it is under the contracted specifications. *** stated the price may be adjusted or the purchase rejected if a problem is severe enough, but that price was generally not adjusted for overperformance. *** reported that overdelivery of protein can happen and that it negotiates price adjustments case by case.

Price data gathered in response to the Commission's purchaser questionnaire provide information on price changes when the delivered protein content does not match the contracted protein content (table V-2). The available data show that Canadian suppliers overdelivered protein on 50 percent of sales and that U.S. suppliers overdelivered protein on 65 percent of sales. When protein was overdelivered, the delivered price as compared to the contract price increased in 33 percent of purchases from Canadian suppliers and in 38 percent of purchases from U.S. suppliers. Underdelivery of protein was more

Table V-2
Durum and hard red spring wheat: Contracts with overdelivery and underdelivery of wheat

Item	Number of purchases reported	
	Canada	United States
Purchases with sufficient data	224	1,168
Delivered protein matches contract	97	215
Overdelivery of protein	113	760
Overdelivery of protein and price increases	37	285
Underdelivery of protein	14	193
Underdelivery of protein and price decreases	5	35

Source: Compiled from data submitted in response to Commission questionnaires.

unusual, occurring in 6 percent of purchases of Canadian wheat and in 17 percent of purchases of U.S. wheat. When protein was underdelivered, the delivered price was reportedly reduced in 36 percent of purchases of the Canadian product and in 18 percent of purchases of the U.S. product.

Publicly Available Information

A large amount of information concerning wheat prices and other factors is publicly available on a daily or even more frequent basis. Respondents have alleged that public information and few barriers to trade result in the law of one price holding in wheat markets.[5] Staff notes that much, although not all, published research supports the law of one price in world wheat markets after taking into account transactions costs, transportation costs, and perhaps of a period of adjustment.[6] Petitioners objected to the law of one price and stated that it is an exaggeration and that markets are not unified.[7]

One function of the public information is to aid the industry in price discovery. The Minneapolis Grain Exchange is a primary source of information regarding hard red spring wheat. It has a cash market, a futures market with five futures contracts (based on five different delivery months), and an options market. Previously the Minneapolis Grain Exchange had a futures contract for durum wheat, but the durum contract was closed in February 2003 after some months of inactivity. The Minneapolis Grain Exchange stated that durum is a small volume commodity with very specific uses. The durum futures contract traded sporadically for several years, and the Exchange declared the durum futures market dormant after there were no trades and no open interest in any futures contracts.[8] Also, in recent months, there have been no quotes in the durum cash market at the Minneapolis Grain Exchange. Petitioners state that the large CWB influence contributed to the downfall of the durum futures market. Millers state that the lack of participation by U.S. farmers contributed to the downfall.[9] Usually a futures price is greater than a current cash price because if the grain were actually held, there would be a carry charge. Millers assert that the CWB does include a carrying charge in forward contracts for wheat and that forward contracts do not depress current market prices.[10]

In May 2003, the Minneapolis Grain Exchange began offering hard red winter wheat index futures and options contracts. The Minneapolis Grain Exchange stated that the hard winter index contract offers unique risk management alternatives because it is financially settled and hard red winter has the greatest number of cash price reporting points of any U.S. wheat product.[11] However, the primary market for standard futures and options for hard red winter wheat remains the Kansas City Board of Trade. Wheat is also traded at the Chicago Board of Trade and several smaller markets.

The Commission's questionnaire asked whether the public availability of price information resulted in the same types of U.S.-grown and imported Canadian wheat being priced the same when the

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[5] CWB's prehearing brief, exh. 20. Staff note that the co-integration of two prices alone does not establish co-integration. The so-called strong law of one price is discussed in exh. 20 but apparently was not tested.

[6] See, for example, Barry K. Goodwin, "Multivariate Cointegration Tests and the Law of One Price in International Wheat Markets," *Review of Agricultural Economics*, v. 14(1), January 1992, pp. 117-124; Goodwin, Grennes and Wohlgenant, "Testing the Law of One Price when Trade Takes Time," *Journal of International Money and Finance*, v. 9, 1990, pp. 21-40; and Protopapadakis, "The Law of One Price in International Commodity Markets: A Reformulation and Some Formal Tests, *Journal of International Money and Finance*, v. 5, 1986, pp. 335-360.

[7] Petitioners' posthearing brief, pp. 8-9 and att. 2, pp. 11-13.

[8] Letter from the Minneapolis Grain Exchange, July 23, 2003.

[9] Hearing transcript, pp. 269-270.

[10] NAMA's posthearing brief, p. 8.

[11] Letter from the Minneapolis Grain Exchange, July 23, 2003.

attributes are similar. Purchasers were equally split regarding whether the same types of durum from Canada and the United States were priced the same. *** and *** stated that Canadian durum is usually priced higher. Seven purchasers reported that hard red spring wheat from Canada and the United States are similarly priced if the attributes are the same. *** stated that it sometimes pays more than the perceived market price for wheat from certain areas because the milling and baking characteristics are superior, although the standard specifications may be the same.

PRICING PRACTICES

Purchasers reported that 36 percent of their purchases of durum wheat were in the spot market and 64 percent were by forward contract and that 30 percent of their purchases of hard red spring wheat were in the spot market and 70 percent were by contract.[12]

Purchasers were asked to report the length of contracts as short (under 30 days), medium (between 30 and 90 days), or long (over 90 days). Generally, contracts for U.S. durum and hard red spring wheat tended to be for shorter terms than the contracts for the similar Canadian product (table V-3).

Table V-3
Durum and hard red spring wheat: Percentage of U.S. purchasers' contracts that are of short, medium, and long duration[1]

Source and wheat type	Short (*percent*)	Medium (*percent*)	Long (*percent*)
U.S. durum	35	46	19
U.S. hard red spring	42	36	22
Canadian durum	28	44	27
Canadian western red spring	27	38	35

[1] Short is defined as under 30 days; medium as between 30 and 90 days; and long as over 90 days.

Note.–Some rows may not total 100 due to rounding.

Source: Compiled from data submitted in response to Commission questionnaires.

Many producers, merchandisers, and grain millers buy and sell wheat futures as a way of hedging expected price movements. The futures markets are linked to the commodity markets but respond differently to information. Basis trading is a commonly used method of hedging. Basis equals the difference between the futures price and the cash price in a particular location. For example, if a merchant buys wheat at the local cash price and simultaneously sells a futures contract, the difference between the two contracts is the basis. Later, when the merchant sells the wheat and offsets the futures contract with a buy, the merchant has profited if the basis has narrowed between the two times and otherwise has a loss. Basis trading is a way of shifting risk from commodity price movements to basis movements, which are believed to be steadier and follow certain patterns throughout the year.

[12] These percentages of weighted by the quantities of purchases of durum wheat and hard red spring wheat, respectively.

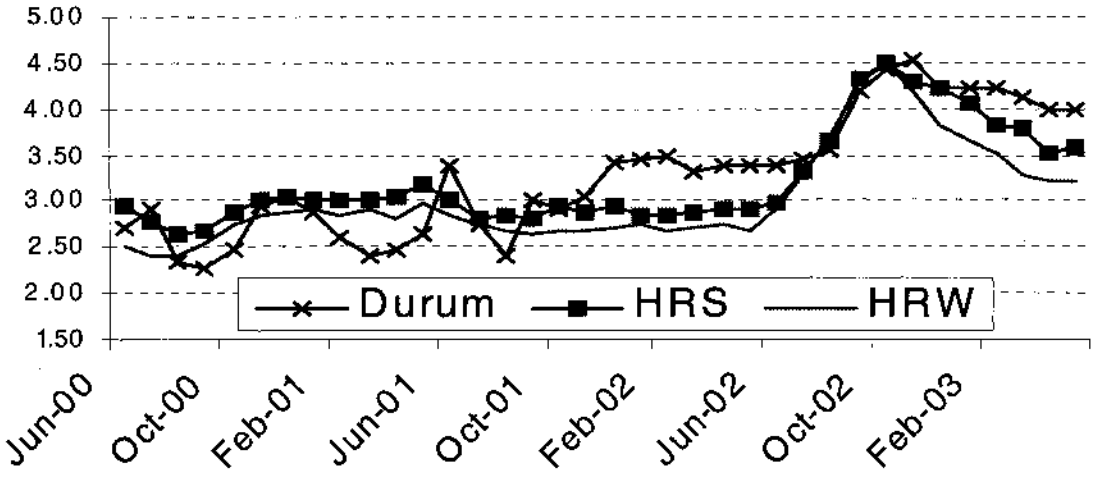
***, a purchaser for ***, stated that contract prices for the future delivery of wheat are usually set as a certain number of cents above or below the futures price at the Minneapolis Grain Exchange.[13] He may simultaneously hold a futures contract which is offset to pay for the wheat when delivery is due.

PRICE DATA

Public Data

Although durum is often regarded as the highest priced wheat, national average prices received by farmers, as reported by the USDA, showed that durum wheat was priced higher than hard red spring only about half of the time (figure V-2). In marketing year 2000/01, durum reached a low of $2.26 per bushel in September and a high of $3.04 per bushel in December. In marketing year 2001/02, durum prices reached a low of $2.40 per bushel in August and a high of $3.49 per bushel in February. In marketing year 2002/03, durum prices were at a low of $3.40 per bushel in June, increased sharply between August and November when they reached a high of $4.53 per bushel, and have since decreased somewhat.

Figure V-2
Durum, hard red spring (HRS), and hard red winter wheat (HRW): National average prices received by farmers in $/bushel, by months, June 2000-May 2003



Source: ERS/USDA, *Wheat Situation and Outlook Yearbook*, WHS-2003 March 2003 and Wheat Outlook, WHS-0603, July 15, 2003.

In marketing year 2000/01 hard red spring wheat prices were at a low of $2.63 per bushel in August and at a high of $3.17 per bushel in May. In marketing year 2001/02 hard red spring wheat prices were at a low of $2.80 per bushel in July and at a high of $3.03 per bushel in June. In marketing year

[13] Telephone conversation with ***, June 10, 2003.

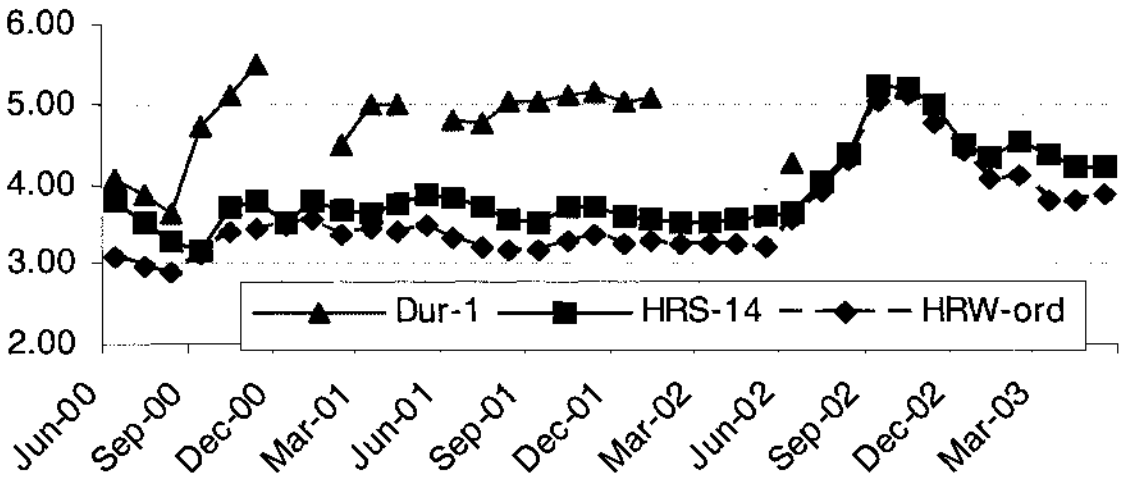
2002/03, hard red spring wheat prices increased sharply from a low of $2.97 per bushel in June to a high of $4.49 per bushel in October.

In marketing year 2000/01 hard red winter wheat prices were at a low of $2.40 per bushel in August and at a high of $2.97 per bushel in May. In marketing year 2001/02 hard red winter wheat prices were at a low of $2.63 per bushel in September and at a high of $2.86 per bushel in June. In marketing year 2002/03, hard red winter wheat prices increased sharply from a low of $2.92 per bushel in June to a high of $4.49 per bushel in October. Prices for hard red spring wheat were greater than those for hard red winter wheat in 34 out of 36 months.

From June 2000 to May 2003, the mean price of durum ($3.28 per bushel) was greater than that of hard red spring ($3.22 per bushel) and hard red winter ($3.02). The durum series was also more variable than the other two series. All series were positively coordinated, with the following correlation coefficients: durum and hard red spring, 0.841; durum and hard red winter, 0.794; and hard red spring and hard red winter, 0.971.

Cash prices for durum wheat and hard red spring wheat at the Minneapolis Grain Exchange and hard red winter wheat at the Kansas City Board of Trade are also available. These prices series were less variable than the series to farmers (figure V-3). Prices for No. 1 hard amber durum ranged from $3.62 per bushel to $5.51 per bushel June 2000 and May 2003. In 18 of these months, there were no quotes for durum in this cash market. Prices for No. 1 dark northern spring wheat (a subclass of hard red spring wheat) ranged between $3.17 per bushel and $5.24 per bushel. Prices for No. 1 ordinary hard red winter wheat ranged between $2.89 per bushel and $5.10 per bushel.

Figure V-3
Durum, hard red spring (HRS), and hard red winter wheat (HRW): Cash prices at major markets in $/bushel, by months, June 2000-May 2003



Note.–Dur-1 is No. 1 hard amber durum at the Minneapolis Grain Exchange; HRS-14 is No. 1 dark northern spring wheat (a subclass of hard red spring wheat) with a 14-percent protein content at the Minneapolis Grain Exchange; and HRW-ord is No. 1 hard red winter wheat (ordinary protein) at the Kansas City Board of Trade.

Source: ERS/USDA, *Wheat Situation and Outlook Yearbook*, WHS-2003 March 2003 and Wheat Outlook, WHS-0603, July 15, 2003.

Questionnaire Price Data

The Commission requested that U.S. importers of durum and hard red spring wheat provide data for the total quantity and value of shipments to unrelated customers in the U.S. market. Purchasers were asked to report data on their three largest purchases based on total weight of each product each month. They were asked to identify the location of their U.S. facility receiving the product; the following contracted characteristics: quantity, net delivered price, contract execution data, contract date of delivery, dockage, test weight, vitreous kernel count, and moisture-adjusted protein content; and the following characteristics as actually delivered: dockage, test weight, vitreous kernel count, moisture-adjusted protein content, total quantity, transportation costs, and total delivered price. Monthly data were requested from June 2000 through May 2003 from both importers and purchasers. The products for which pricing data were requested are as follows:

Canadian wheat items with a protein content between 12.8 and 14.3 percent at a moisture basis of 13.5 percent:

Product 1: No. 1 Canadian western red spring wheat
Product 2: No. 2 Canadian western red spring wheat
Product 3: No. 1 Canadian western amber durum wheat
Product 4: No. 2 Canadian western amber durum wheat

U.S. wheat items with a protein content between 13.0 and 14.5 percent at a moisture basis of 12.0 percent:

Product 5: U.S. No. 1 hard red spring wheat
Product 6: U.S. No. 2 hard red spring wheat
Product 7: U.S. No. 1 hard amber durum wheat
Product 8: U.S. No. 2 hard amber durum wheat

*** provided usable importer pricing data.[14] These data totaled *** metric tons between June 2000 and May 2003. Data by *** represented *** percent of this total.

*** provided usable purchaser pricing data. Many purchasers complained that providing all of the requested pricing data was extremely burdensome. Although much useful information was received, many purchasers were unable to provide all of the requested information. Purchaser pricing data for U.S. durum represented about 53.7 percent of U.S. shipments during June 2000-May 2003, and purchaser pricing data for U.S. hard red spring represented about 10.2 percent of U.S. shipments. Purchaser pricing data for Canadian durum represented 74.5 percent of Canadian imports during the period examined, and purchaser pricing data for Canadian western red spring represented 21.2 percent of Canadian imports. Almost no pricing data were reported for the Canadian products after August or September 2002. Partial data were received for several purchases of Canadian wheat, whose contracts were executed during the later months of the reporting period, that had not yet been delivered. These purchases were not used because the final levels of price and quantity were not set.

[14] *** and *** also provided pricing data but were unable to present the data in the requested categories.

Price Trends

Importer pricing data showed no clear trend between June 2000 and April 2003, the last month for which importer pricing was reported (figure V-4). Prices for the two durum wheats (product 3 and product 4) were almost always higher than those for the Canadian western red spring wheat. The available data are very limited after November 2002. For No. 1 Canadian western red spring wheat (product 1), prices ranged between *** and *** per metric ton, and the April 2003 price was *** percent higher than the June 2000 price. For No. 2 Canadian western red spring wheat (product 2), prices ranged between *** and *** per metric ton, and the October 2002 price (the last month for which data were available for this product) was *** percent higher than the June 2000 price. For No. 1 Canadian western amber durum wheat (product 3), prices ranged between *** and *** per metric ton, and the January 2003 price (the last month for which data were available for this product) was *** than the June 2000 price after prices dropped *** between December 2002 and January 2003. For No. 2 Canadian western amber durum wheat (product 4), prices ranged between *** and *** per metric ton, and the December 2003 price (the last month for which data were available for this product) was *** percent higher than the June 2000 price.

Figure V-4
Durum and hard red spring wheat: Importer pricing data (dollars per metric ton), by months, June 2000 to April 2003

* * * * * * *

Price Comparisons

Regular price comparisons, not considering the additional attributes, are made using data from the purchaser questionnaires based on the reported delivered prices and discussed in the following paragraph. To address problems arising from different plant locations having different transportation costs, comparisons on a company or place-specific basis are discussed next. Appendix E presents a statistical approach to the price comparisons that takes the additional attributes into consideration.

Canadian No. 1 western amber durum oversold U.S. No. 1 hard amber durum in 25 months (all available comparisons) by margins ranging from 8.8 percent to 41.9 percent (table V-4). Canadian No. 2 western amber durum undersold U.S. No. 2 hard amber durum in 5 months and oversold the similar domestic product in 13 months (table V-5). Underselling margins ranged from less than 0.05 percent to 3.7 percent, and overselling margins ranged from 0.5 percent to 14.2 percent. Canadian No. 1 western red spring wheat undersold U.S. No. 1 hard red spring wheat in 10 months and oversold the similar domestic product in 8 months (table V-6). Underselling margins ranged from less than 0.05 percent to 9.3 percent, and overselling margins ranged from 0.4 percent to 25.9 percent. Canadian No. 2 western red spring wheat undersold U.S. No. 2 hard red spring wheat in 18 months and oversold the similar domestic product in 4 months (table V-7). Underselling margins ranged from 0.4 percent to 23.1 percent, and overselling margins ranged from 0.3 percent to 19.7 percent.

Table V-4
Weighted-average net delivered prices and quantities of U.S.-grown No. 1 hard amber durum and imported Canadian No. 1 western amber durum wheat and margins of overselling, by months, June 2000-May 2003

* * * * * * *

Table V-5
Weighted-average net delivered prices and quantities of U.S.-grown No. 2 hard amber durum and imported Canadian No. 2 western amber durum wheat and margins of underselling/overselling, by months, June 2000-May 2003

* * * * * * *

Table V-6
Weighted-average net delivered prices and quantities of U.S.-grown No. 1 hard red spring and imported Canadian No. 1 western red spring wheat and margins of underselling/overselling, by months, June 2000-May 2003

* * * * * * *

Table V-7
Weighted-average net delivered prices and quantities of U.S.-grown No. 2 hard red spring and imported Canadian No. 2 western red spring wheat and margins of underselling/overselling, by months, June 2000-May 2003

* * * * * * *

No. 1 hard amber durum

Plant-specific comparisons of the delivered prices for No. 1 hard amber durum wheat from the United States and Canada were made. Comparisons were available from ***.

*** often did not buy from both Canadian and U.S. sources in the same month. At its *** plant in September 2000, *** metric tons of Canadian No. 1 western amber durum undersold *** metric tons of U.S. No. 1 hard amber durum by a margin of 6.1 percent. Also at the *** plant, *** metric tons of Canadian product oversold *** metric tons of the domestic product by 1.8 percent in October 2000, *** metric tons of Canadian product oversold *** metric tons of the domestic product by 9.0 percent in February 2001, and *** metric tons of the Canadian product were priced exactly the same as *** metric tons of the domestic product in December 2000. At its plant in ***, *** metric tons of the Canadian product undersold *** metric tons of the U.S. product by 4.3 percent in July 2001.

At ***, Canadian No. 1 western amber durum undersold the similar domestic product in three months by margins ranging from 1.1 to 8.4 percent on Canadian volumes ranging from *** metric tons to *** metric tons and U.S. volumes ranging from *** metric tons to *** metric tons.

At ***, Canadian No. 1 western amber durum oversold the similar domestic product in three months by margins ranging from 6.8 to 14.4 percent on Canadian volumes ranging from *** metric tons to *** metric tons and U.S. volumes ranging from *** metric tons to *** metric tons.

***.

*** purchased Canadian No. 1 western amber durum at prices greater than the comparable U.S. product in nine months by margins ranging from 3.1 percent to 39.8 percent (table V-8). *** purchased Canadian No. 1 western amber durum at prices less than the comparable U.S. product in three months by margins ranging from 0.2 to 0.8 percent and at prices greater than the comparable domestic product in eight months by margins ranging from 0.7 percent to 5.5 percent (table V-9). There was one month with a price tie.

Table V-8
Weighted-average net delivered prices and quantities of U.S.-grown No. 1 hard amber durum and imported Canadian No. 1 western amber durum wheat as reported by * and margins of underselling/overselling, by months, June 2000-May 2003**

* * * * * * *

Table V-9
Weighted-average net delivered prices and quantities of U.S.-grown No. 1 hard amber durum and imported Canadian No. 1 western amber durum wheat as reported by * and margins of underselling/overselling, by months, June 2000-May 2003**

* * * * * * *

No. 2 hard amber durum

*** purchased Canadian No. 2 western amber durum for less than the comparable U.S. product in one month by a margin of 0.2 percent and for more than the comparable U.S. product in nine months by margins ranging from 0.4 to 11.6 percent (table V-10). *** purchased Canadian No. 2 western amber durum for less than the comparable U.S. product in one month by a margin of 0.8 percent and for more than the comparable U.S. product in seven months by margins ranging from 0.7 to 8.6 percent (table V-11).

Table V-10
Weighted-average net delivered prices and quantities of U.S.-grown No. 2 hard amber durum and imported Canadian No. 2 western amber durum wheat as reported by * and margins of underselling/overselling, by months, June 2000-May 2003**

* * * * * * *

Table V-11
Weighted-average net delivered prices and quantities of U.S.-grown No. 2 hard amber durum and imported Canadian No. 2 western amber durum wheat as reported by * and margins of underselling/overselling, by months, June 2000-May 2003**

* * * * * * *

No. 1 hard red spring

*** presented price data on No. 1 hard red spring wheat for purchases for ***. *** presented information so that its purchases of hard red spring wheat could be put on a Minneapolis basis.[15] Comparisons of these companies' data show eight months of underselling with margins ranging from less than 0.05 percent to 8.4 percent and seven months of overselling with margins ranging from 1.9 to 17.5 percent (table V-12).

[15] Letter from ***. He stated that freight costs from Minneapolis, through which both Canadian and U.S. hard red spring wheat pass, is ***.

Table V-12
Weighted-average net delivered prices and quantities of U.S.-grown No. 1 hard red spring and imported Canadian No. 1 western red spring wheat on a Minnesota basis and margins of underselling/overselling, by months, June 2000-May 2003

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*** presented data on both the Canadian and U.S. product. The ***-specific data show underselling in four months by margins ranging from 0.5 percent to 3.9 percent and three months of overselling by margins ranging from 3.6 percent to 8.1 percent (table V-13). In June 2000 *** bought *** metric tons of Canadian product for 8.2 percent less than it paid for *** metric tons of the similar U.S. product. In January 2001 *** bought *** metric tons of Canadian product for 3.6 percent more than it paid for *** metric tons of the similar U.S. product.

Table V-13
Weighted-average net delivered prices and quantities of U.S.-grown No. 1 hard red spring and imported Canadian No. 1 western red spring wheat as reported by * and margins of underselling/overselling, by months, June 2000-May 2003**

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No. 2 hard red spring

After adjusting *** data as explained in the previous footnote, its data for No. 2 hard red spring wheat could be compared. There were nine months of underselling with margins ranging from 1.5 to 7.0 percent and five months of overselling with margins ranging from 1.3 to 18.0 percent (table V-14). *** reported data for plants in ***. The *** data can be put on a *** basis by subtracting out the transportation costs. The only match was in June 2000 when *** metric tons of the Canadian product oversold *** metric tons of the similar domestic product by 6.4 percent.

Table V-14
Weighted-average net delivered prices and quantities of U.S.-grown No. 2 hard red spring and imported Canadian No. 2 western red spring wheat as reported by * and margins of underselling/overselling, by months, June 2000-May 2003**

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Data for No. 2 hard red spring wheat were put on a Minneapolis basis where possible. *** U.S. and Canadian pricing data were adjusted as previously explained. *** presented one sale of Canadian No. 2 western red spring wheat from *** that did not require adjustment. *** presented data for U.S. No. 2 hard red spring wheat that included transportation costs from Minneapolis to their plants that permitted their price data to be adjusted to a Minneapolis basis (table V-15). Canadian No. 2 western red spring wheat undersold U.S. No. 2 hard red spring wheat in 6 months by margins ranging from 0.1 percent to 5.6 percent. The Canadian product oversold the similar domestic product in 10 months by margins ranging from 0.5 percent to 21.8 percent.

Table V-15
Weighted-average net delivered prices and quantities of U.S.-grown No. 2 hard red spring and imported Canadian No. 2 western red spring wheat on a Minnesota basis and margins of underselling/overselling, by months, June 2000-May 2003

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

BACKGROUND

The financial information presented in this section is primarily derived from USDA sources for all wheat grown in the United States and the Northern Great Plains, and from state Farm Business Management Programs for durum and hard red spring wheat. USDA data are projected on the basis of survey year 1998, whereas state data are collected on an annual basis. The Commission did not send producer questionnaires in these investigations because producers number in the thousands and any data collected would likely not be representative of the industry.[1] The data presented differ from the typical income and loss data that the staff usually presents in the financial section. In addition, there are no data available for producers' assets, capital expenditures, or research and development expenses, and no narrative information on the impact of imports on the growers of durum and hard red spring wheat.

WHEAT OPERATIONS

Wheat is grown under a wide range of conditions in the United States. Wheat production costs vary widely across the country because of regional differences in cropping practices, yields, and costs of land, labor, and capital. The low proportion of farms covering all their costs raises concerns about the long-term sustainability of many wheat producers. Although government program payments are not included in the USDA's Economic Research Service (ERS) data on costs and returns, wheat growers who participated in the program received additional receipts through the marketing assistance loan program, production flexibility contracts, and crop insurance. In addition, some wheat producers received income from secondary products such as grazing and wheat straw. While these additional revenues vary widely among wheat growers, the revenues offset some production costs. Nevertheless, if wheat prices remain low, producers may look for alternative crops that offer higher returns, such as corn, soybeans, and sorghum in areas where they can be grown. This substitution of competing crops for wheat has been facilitated by legislation passed in the 1990s, allowing crop-planting decisions to be more market-oriented.[2]

ERS publishes wheat cost and return estimates for the United States and for major production regions. The costs and returns estimation program uses surveys conducted every 5-8 years for each commodity, and methods that conform to standards endorsed by the American Agricultural Economics Association. The latest Agricultural Resource Management Study for wheat farms was done in 1998.

With respect to all wheat, the gross value of production less cash expenses of U.S. wheat producers declined from $31.43 per acre in 1999 to $20.00 per acre in 2001 (table VI-1). U.S. wheat producers used about 69 percent of their total acres planted for winter wheat, about 26 percent for spring wheat, and about 5 percent for durum wheat in 2003.[3]

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[1] The parties filed comments on the Commission's draft questionnaires. No party advocated that the Commission mail out producers' questionnaires.

[2] USDA, ERS, *Wheat Situation and Outlook Yearbook/WHS-2002/March 2002: How wheat production costs vary,* by Mir Ali and Gary Vocke, pp. 36-42.

[3] USDA, NASS, Field Crops - Graphics, found at *http://www.usda.gov/nass/aggraphs/crops.htm*, downloaded July 30, 2003.

Table VI-1
Estimated U.S. wheat production cash costs and returns, 1999-2002[1]

Item	1999	2000	2001	2002
	Per planted acre			
Gross value of production:				
Primary product: Wheat grain	$95.80	$92.57	$95.22	[3]
Secondary product: Straw/grazing	3.05	3.20	3.18	[3]
Total, gross value of production	98.85	95.77	98.40	[3]
Cash expenses:				
Seed	6.38	6.14	6.34	6.74
Fertilizer	16.95	17.28	23.90	22.93
Chemicals	7.22	7.13	7.20	7.28
Custom operations	6.47	6.50	6.37	6.28
Fuel, lube, and electricity	6.53	9.13	9.19	8.60
Repairs	9.44	9.97	10.24	10.67
Purchased irrigation water	0.57	0.59	0.62	0.61
Hired labor	2.17	2.30	2.45	2.49
Total, variable cash expenses	55.73	59.04	66.31	65.60
General farm overhead	6.69	6.84	7.10	7.14
Taxes and insurance	3.74	3.82	3.91	3.97
Interest	1.26	1.64	1.08	0.48
Total, fixed cash expenses	11.69	12.30	12.09	11.59
Total, cash expenses	67.42	71.34	78.40	77.19
Gross value of production less cash expenses	31.43	24.43	20.00	[3]
Supporting information:				
Yield (bushels per planted acre)	38.63	37.63	34.50	[3]
Price (dollars per bushel at harvest)	2.48	2.46	2.76	[3]
Enterprise size (planted acres)[2]	296	296	296	[3]
Production practices:[2]				
Winter wheat (percent of acres)	67	67	67	[3]
Spring wheat (percent of acres)	27	27	27	[3]
Durum wheat (percent of acres)	6	6	6	[3]
Irrigated (percent of acres)	5	5	5	[3]
Dryland (percent of acres)	95	95	95	[3]
Fallow (percent of acres)	9	9	[3]	[3]
Double-cropped (percent of acres)	[4]	[4]	[3]	[3]
Straw (percent of acres)	7	7	7	[3]
Home-grown seed (percent of seed)	60	60	[2]	[3]

[1] Data through 2001 are estimated and projected on the basis of a survey conducted in 1998. Cost data for 2002 are projected by applying changes in indexes of prices paid for farm inputs to the 2001 production costs.
[2] Developed for survey base year, 1998, and assumed to be constant during the period.
[3] Not available.
[4] 0.1 to less than 5 percent.

Note.--Data do not include direct government payments.

Source: USDA, ERS, Commodity costs and returns at *http://www.ers.usda.gov/data/costsandreturns/data.*

Estimated wheat production cash costs and returns for the Northern Great Plains are presented in table VI-2. The Northern Great Plains region was selected because hard red spring wheat accounts for 66 percent and durum wheat accounts for 15 percent of total wheat production in that region. The Northern Great Plains region consists of all of North Dakota and portions of South Dakota, Minnesota, Nebraska, Montana, Wyoming, and Colorado. The gross value of production less cash expenses for the Northern Great Plains region wheat producers declined from $27.00 per acre in 1999 to $10.70 per acre in 2001.

DURUM WHEAT OPERATIONS

Durum production is geographically concentrated in North Dakota and the surrounding area because it demands a special agronomic environment. North Dakota produced 61 percent of the U.S. durum crop in 2002.[4] Other domestic durum wheat producers can be found in Montana (16 percent), Arizona (11 percent), California (11 percent), Minnesota (0.2 percent), and South Dakota (0.1 percent). These states do not maintain actual revenue and cost data for durum wheat production; in recent years, South Dakota and Minnesota have grown very little durum wheat.

North Dakota State University publishes data collected from farms across North Dakota, excluding the Red River Valley, for durum wheat production on an average per-acre basis for (1) all reporting farms, (2) farms in the low 20 percent based on return, and (3) farms in the high 20 percent based on return. Detailed data are presented by type of land tenure in appendix F. The key data for these farms are shown in table VI-3.

Total durum wheat return to growers (dollars per acre) for owned land rose from 1999 to 2001, then declined slightly in 2002. Total durum wheat return for both cash rented and share rented land rose throughout the 1999-2002 period. Miscellaneous income, which includes crop insurance and/or disaster payments for crops, declined continually during the 1999-2002 period for both cash rented and share rented land and decreased during 1999-2001 before increasing in 2002 for owned land. Net return (including government payments) declined each year during 1999-2002 for both cash rented land and share rented land. For owned land, net return was highest in 1999 and lowest in 2001.

HARD RED SPRING WHEAT OPERATIONS

North Dakota leads the nation in the production of hard red spring wheat, with the state's farmers growing 44 percent of U.S. production.[5] Montana is the second-largest hard red spring wheat-producing state, followed by Minnesota and South Dakota.[6] Staff were able to obtain revenue and cost data for North Dakota, Minnesota, and South Dakota; Montana did not collect revenue and cost data for its hard red spring production during 1999-2003.

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[4] USDA, NASS, *Crop Production, 2002 Summary*, January 2003, p. 16.

[5] North Dakota Wheat Commission, information on wheat at *http://www.ndwheat.com/wi/*, downloaded July 30, 2003.

[6] North Dakota accounts for 46 percent and Montana accounts for about 21 percent of hard red spring wheat acres planted in the United States during crop year 2003. Minnesota and South Dakota account for 13 and 10 percent of the acres planted in crop year 2003, respectively. Farms in Washington, Idaho, and Oregon produce most of the remainder of the U.S. hard red spring wheat crop. See USDA, NASS, Field Crops - Graphics, found at *http://www.usda.gov/nass/aggraphs/crops.htm*, downloaded July 31, 2003.

Table VI-2
Estimated wheat production cash costs and returns for the Northern Great Plains, 1999-2001[1]

Item	1999	2000	2001
	Per planted acre		
Gross value of production:			
Primary product: Wheat grain	$85.49	$83.98	$77.94
Secondary product: Straw/grazing	1.42	1.67	1.85
Total, gross value of production	86.91	85.65	79.79
Cash expenses:			
Seed	6.36	6.19	6.34
Fertilizer	13.46	13.91	19.66
Chemicals	10.28	10.15	10.14
Custom operations	3.82	4.00	3.77
Fuel, lube, and electricity	4.16	6.06	6.03
Repairs	8.85	9.85	9.66
Purchased irrigation water and baling	0.16	0.16	0.17
Hired labor	1.48	1.60	1.67
Total, variable cash expenses	48.57	51.92	57.44
General farm overhead	6.42	6.49	6.76
Taxes and insurance	3.81	3.85	3.95
Interest	1.11	1.45	0.94
Total, fixed cash expenses	11.34	11.79	11.65
Total, cash expenses	59.91	63.71	69.09
Gross value of production less cash expenses	27.00	21.94	10.70
Supporting information:			
Yield (bushels per planted acre)	31.90	33.59	29.30
Price (dollars per bushel at harvest)	2.68	2.50	2.66
Enterprise size (planted acres)[2]	527	527	527
Production practices:[2]			
Winter wheat (percent of acres)	19	19	19
Spring wheat (percent of acres)	66	66	66
Durum wheat (percent of acres)	15	15	15
Irrigated (percent of acres)	[3]	[3]	[3]
Dryland (percent of acres)	99	99	99
Fallow (percent of acres)	22	22	[4]
Double-cropped (percent of acres)	0	0	[4]
Straw (percent of acres)	8	8	8
Home-grown seed (percent of seed)	70	70	[4]

[1] Data are estimated and projected on the basis of a survey conducted in 1998.
[2] Developed for survey base year, 1998, and assumed to be constant during the period.
[3] 0.1 to less than 5 percent.
[4] Not available.

Note.--Data do not include direct government payments. 2002 data are not available.

Source: USDA, ERS, Commodity costs and returns at *http://www.ers.usda.gov/data/costsandreturns/data*.

Table VI-3
Net return on production of durum wheat, by land tenure[1] in North Dakota, 1999-2002

Item	1999	2000	2001	2002
	Value (per acre)			
Owned:				
Total product return[2]	$56.08	$80.18	$90.68	$86.94
Miscellaneous income	49.83	18.43	9.95	23.62
Gross return	105.91	98.61	100.62	110.56
Total direct and overhead expenses	93.67	95.40	99.54	88.67
Net return	12.24	3.21	1.09	21.90
Government payments[3]	22.24	20.79	16.07	9.35
Net return with government payments	34.48	24.00	17.16	31.25
Cash rented:				
Total product return[2]	53.62	66.32	82.04	85.97
Miscellaneous income	53.54	36.92	17.17	15.32
Gross return	107.16	103.24	99.21	101.29
Total direct and overhead expenses	110.42	106.07	107.29	103.95
Net return	(3.26)	(2.83)	(8.09)	(2.66)
Government payments[3]	21.58	20.86	16.16	7.26
Net return with government payments	18.32	18.03	8.07	4.60
Share rented:				
Total product return[2]	41.87	53.87	58.60	61.98
Miscellaneous income	27.78	17.62	14.78	5.66
Gross return	69.65	71.49	73.38	67.64
Total direct and overhead expenses	69.68	74.61	78.58	70.85
Net return	(0.04)	(3.12)	(5.20)	(3.21)
Government payments[3]	15.15	14.65	11.30	5.12
Net return with government payments	15.11	11.53	6.10	1.91

[1] Data from the North Dakota Farm Business Management Education Program for North Dakota farms growing wheat indicate that farms reporting acreage for the cost-return survey held 31.1 percent owned acreage, 50.8 percent cash rented acreage, and 18.1 percent share rented acreage in 1999. In 2002, those percentages were 28.9 percent owned, 55.2 percent cash rented, and 15.9 share rented. For each year during 1999-2002, the percentages of owned and share rented acreage declined, while cash rented acreage increased. Although the data are for North Dakota farms growing any type of wheat, land tenure for durum wheat in North Dakota should be roughly equivalent. E-mails from, ***, North Dakota State University, Sept. 11, 2003 and Sept. 12, 2003.

[2] Includes loan deficiency payments.

[3] Government payments include decoupled payments known as production flexibility contract or Agricultural Market Transition Act payments and market loss assistance payments. For each type of land tenure, 1999 government payments were estimated by multiplying the ratio of total decoupled payments in each of those years to total decoupled payments in 2000 by the amount of government payments per acre in 2000, as per telephone conversation with, and e-mail from, ***, North Dakota State University.

Source: Compiled from data derived from North Dakota Farm Business Management Education Program, Crop Enterprise Analysis, 1999-2002 at *http://www.ag.ndsu.nodak.edu/aginfo/farmmgmt/ndfbm/fbm.htm.*

The North Dakota Farm Business Management Education Program of North Dakota State University publishes data collected from farms across North Dakota, excluding the Red River Valley, for hard red spring wheat production on an average per-acre basis for (1) all reporting farms, (2) farms in the low 20 percent based on return, and (3) farms in the high 20 percent based on return. Detailed data are presented by type of land tenure in appendix F. The key data for these farms are shown in table VI-4. During 1999-2002, net returns (including government payments) for North Dakota growers for all three land tenures (owned, cash rented, and share rented lands) were lowest in 2001 before increasing in 2002.

Northland Community and Technical College publishes data collected voluntarily from farms in northwestern Minnesota, where most of the state's hard red spring wheat crop is grown. Similar to North Dakota, data for hard red spring wheat production were collected on an average per-acre basis for (1) all reporting farms, (2) farms in the low 20 percent based on return, and (3) farms in the high 20 percent based on return. Detailed data are presented by type of land tenure in appendix F, and the key data are shown in table VI-5. For both owned and cash rented land, total product return, which includes loan deficiency payments from the Federal government, declined in 2001 and 2002 when compared to the year before, but the total product return in each year from 2000 to 2002 was higher than in 1999. Net return with government payments was highest in 2000 for each type of land tenure.

The South Dakota Farm/Ranch Business Management Program publishes data collected from farms throughout South Dakota. Data for hard red spring wheat production in South Dakota were collected on an average per-acre basis, without regard to land tenure, for (1) all reporting farms, (2) farms with high return fields, and (3) farms with low return fields. Detailed data are presented in appendix F, with key data shown in table VI-6. Both total product return, which includes no payments from the Federal government, and net return were highest in 2000.

PRICE SUPPORT FOR WHEAT FARMERS[7]

The 1996 Farm Bill programs include nonrecourse marketing assistance loans and loan deficiency payments (LDPs) to assist farmers facing low market prices for the 1996-2002 wheat crops. Producers who enrolled in 7-year production flexibility contracts (PFCs) with USDA during the one-time signup held in 1996 are eligible to participate in these programs.

For each of the 1996-2002 crops, the 1996 Farm Bill allotted a fixed amount of funds to holders of wheat PFCs. Wheat PFC payment rates are based on the eligible contract quantities that are computed by multiplying a producer's wheat contract acres times the wheat program yield on the farm times 0.85. Additional payments for 1998-2000 were provided by special statute.

Nonrecourse marketing assistance loans provide interim financing to eligible producers of wheat. Producers pledge their wheat as collateral and obtain a loan equivalent to the loan rate established in their county by the Farm Service Agency (FSA) of USDA. The loan proceeds can cover short-term cash needs.

The loans may be forfeited to the Commodity Credit Corporation (CCC) at maturity or repaid at the loan repayment rate at, or before, maturity. The loan repayment rate may actually be less than the loan rate if the posted county price (PCP), a proxy for the local price, falls below the local loan rate. The PCP, calculated each day the Federal government is open, is based on terminal market prices and fixed differential to each county, largely reflecting transportation and other marketing factors. When a farmer repays the loan at a lower PCP, the difference between the loan rate and the PCP is called a "marketing loan gain."

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[7] USDA, Farm Service Agency, *Fact Sheet, Wheat, February 2001;* and USDA, ERS, *Wheat Situation and Outlook Yearbook/WHS-2002/March 2002*, p. 12.

Table VI-4
Net return on production of hard red spring wheat, by land tenure[1] in North Dakota, 1999-2002

Item	1999	2000	2001	2002
	Value (per acre)			
Owned:				
Total product return[2]	$91.47	$118.53	$100.87	$90.88
Miscellaneous income	5.45	5.36	3.56	20.53
Gross return	96.92	123.89	104.43	111.41
Total direct and overhead expenses	91.72	97.66	104.35	96.36
Net return	5.20	26.23	0.08	15.05
Government payments[3]	20.23	19.56	17.88	8.49
Net return with government payments	25.43	45.79	17.96	23.54
Cash rented:				
Total product return[2]	92.85	113.58	95.49	96.12
Miscellaneous income	5.44	9.42	6.35	19.88
Gross return	98.29	123.00	101.84	116.00
Total direct and overhead expenses	111.22	113.65	120.42	110.20
Net return	(12.93)	9.35	(18.58)	5.80
Government payments[3]	21.07	20.37	17.15	8.76
Net return with government payments	8.14	29.72	(1.43)	14.56
Share rented:				
Total product return[2]	61.39	73.98	64.59	71.52
Miscellaneous income	5.02	4.00	2.28	7.27
Gross return	66.42	77.98	66.87	78.80
Total direct and overhead expenses	71.51	76.62	82.12	70.09
Net return	(5.09)	1.36	(15.25)	8.71
Government payments[3]	15.13	14.63	12.26	6.02
Net return with government payments	10.04	15.99	(2.99)	14.73

[1] Data from the North Dakota Farm Business Management Education Program for North Dakota farms growing wheat indicate that farms reporting acreage for the cost-return survey held 31.1 percent owned acreage, 50.8 percent cash rented acreage, and 18.1 percent share rented acreage in 1999. In 2002, those percentages were 28.9 percent owned, 55.2 percent cash rented, and 15.9 share rented. For each year during 1999-2002, the percentages of owned and share rented acreage declined, while cash rented acreage increased. Although the data are for North Dakota farms growing any type of wheat, land tenure for hard red spring wheat in North Dakota should be roughly equivalent. E-mails from, ***, North Dakota State University, Sept. 11, 2003 and Sept. 12, 2003.

[2] Includes loan deficiency payments.

[3] Government payments include decoupled payments known as production flexibility contract or Agricultural Market Transition Act payments and market loss assistance payments. For each type of land tenure, 1999 government payments were estimated by multiplying the ratio of total decoupled payments in each of those years to total decoupled payments in 2000 by the amount of government payments per acre in 2000, as per telephone conversation with, and e-mail from, ***, North Dakota State University.

Source: Compiled from data derived from North Dakota Farm Business Management Education Program, Crop Enterprise Analysis; 1999-2001 at *http://www.ag.ndsu.nodak.edu/aginfo/farmmgmt/ndfbm/fbm.htm* and 2002 from ***, North Dakota State University.

Table VI-5
Net return on production of hard red spring wheat, by land tenure[1] in northwestern Minnesota, 1999-2002

Item	1999	2000	2001	2002
	Value (per acre)			
Owned:				
Total product return[2]	$82.83	$187.65	$127.57	$102.25
Miscellaneous income	37.82	2.41	10.20	30.92
Gross return	120.65	190.06	137.77	133.17
Total direct and overhead expenses	125.33	136.75	146.15	126.22
Net return	(4.67)	53.31	(8.38)	6.96
Government payments[3]	27.95	27.97	23.02	11.37
Net return with government payments	23.28	81.28	14.64	18.33
Cash rented:				
Total product return[2]	83.96	179.63	134.79	115.74
Miscellaneous income	43.01	3.48	14.45	22.39
Gross return	126.98	183.11	149.24	138.14
Total direct and overhead expenses	140.77	154.73	160.44	144.92
Net return	(13.79)	28.38	(11.21)	(6.78)
Government payments[3]	30.26	29.24	24.56	12.34
Net return with government payments	16.47	57.62	13.35	5.56

[1] Data from the Northwestern Farm Business Management Averages, Crop Enterprise Analysis, for Minnesota farms growing hard red spring wheat, indicate that farms reporting acreage for the cost-return survey held approximately 25 percent owned acreage and approximately 75 percent cash rented acreage in 1999. Land tenure for hard red spring wheat in Minnesota during 2000-2002 should be roughly equivalent. E-mail from ***, University of Minnesota, Sept. 10, 2003.

[2] Includes loan deficiency payments.

[3] Government payments include decoupled payments known as production flexibility contract or Agricultural Market Transition Act payments and market loss assistance payments.

Note.--Share rented data not available.

Source: Compiled from data derived from Northwestern Farm Business Management Averages, Crop Enterprise Analysis, 1999-2002 at *http://www.northland.cc.mn.us/FBM/Toolshed.htm.*

Table VI-6
Net return on production of hard red spring wheat in South Dakota, 1999-2002

Item	1999	2000	2001	2002
	Value (per acre)			
Total product return[1]	$104.26	$144.32	$131.00	$126.05
Miscellaneous income[2]	6.92	6.72	4.69	0.59
Gross return	111.18	151.04	135.69	126.64
Total direct and overhead expenses[3]	111.40	131.30	135.64	119.93
Net return (excluding government payments)	(0.22)	19.74	0.05	6.71

[1] Includes loan deficiency payments.
[2] Includes crop insurance receipts and stubble grazing.
[3] Includes actual land ownership or rental costs. Actual land ownership costs are real estate interest actually paid plus real estate taxes divided evenly over all of the operator's owned land. If the land was rented, then the real estate cost is the value of the landlord's share of the crop minus the value of the expenses or the cash rent paid.

Source: Compiled from data derived from *South Dakota Annual Reports*, Farm/Ranch Business Management Averages, Crop Production by Enterprise, 1999-2002.

If the PCP is below the county loan rate, eligible producers may opt for an LDP on part or all of the crop in lieu of securing a loan. The LDP rate is the amount by which the county loan rate exceeds the PCP on the date the application is made. The wheat cannot be placed under loan once an LDP is paid. If producers take the LDPs and immediately sell their crop, and if the PCP accurately reflects local prices, producers effectively receive a per-unit revenue equal to the loan rate, partly from the market and partly from the government. After an LDP is accepted, the farmer can sell the crop and avoid storage expense or hold it in the expectation of a price rally later in the marketing season.

The following tabulation shows the types of government payments per bushel of wheat on a crop year basis:

Item	1999	2000	2001	2002
Production flexibility contracts	$0.64	$0.59	$0.47	$0.52
Marketing loan gain	0.41	0.43	0.12	0.11
Loan deficiency payments	0.47	0.44	0.24	0.16

Source: Commodity Estimates Book, FY 2001 & 2002 President's Budget and *www.fsa.usda.gov*.

Detailed information on government support programs, including fact sheets on wheat prepared by FSA, dated February 2001 (describing government programs under the 1996 Farm Bill) and August 2003 (describing government programs under the 2002 Farm Bill), are presented in appendix G.

PART VII: THREAT CONSIDERATIONS

The Commission analyzes a number of factors in making threat determinations (see 19 U.S.C. § 1677(7)(F)(i)). Information on the nature of the subsidies 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 inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting;" any other threat indicators, if applicable; and any dumping in third-country markets, follows.

THE INDUSTRY IN CANADA[1]

The number of growers of durum, hard red spring, and hard red winter wheat in Canada is unknown. However, the CWB collects information concerning the number of individuals who hold permits to deliver grain to CWB elevators. In the Canadian marketing year 2002/03,[2] there were *** permit holders who indicated that they planned to grow non-durum wheat and *** permit holders who indicated that they planned to grow durum wheat. There were a total of *** permit holders for all types of wheat. More than one person at a particular farm can hold a permit. Also, there is some overlap of permit holders among the different types of wheat (e.g., durum, spring, and winter wheat). Therefore, the number of permit holders does not equal the actual number of farms growing wheat.[3]

Aggregate data on acreage planted, acreage harvested, production, shipments, and inventories of durum wheat in Canada[4] and hard red spring, hard red winter, and hard red spring and hard red winter wheat combined in western Canada,[5] are presented in tables VII-1, VII-2, VII-3, and VII-4, respectively.

Table VII-1
Durum wheat: Canada's acreage planted, acreage harvested, production, shipments, and inventories, marketing years 2000/01, 2001/02, and 2002/03 and projections for marketing year 2003/04

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Table VII-2
Hard red spring wheat: Western Canada's acreage planted, acreage harvested, production, shipments, and inventories, marketing years 2000/01, 2001/02, and 2002/03 and projections for marketing year 2003/04

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Table VII-3
Hard red winter wheat: Western Canada's acreage planted, acreage harvested, production, shipments, and inventories, marketing years 2000/01, 2001/02, and 2002/03 and projections for marketing year 2003/04

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[1] Data on the Canadian durum and hard red spring industries are based on the questionnaire response of the CWB.

[2] The Canadian marketing year is from August 1 to July 31.

[3] CWB's response to staff questions, August 11, 2003.

[4] The CWB reported that production of durum wheat for all of Canada and for western Canada were equal.

[5] Western Canada is defined by the CWB as consisting of Manitoba, Saskatchewan, Alberta, and the Peace River region of British Columbia. CWB's postconference brief, exh. 28, p. 3.

Table VII-4
Hard red spring and hard red winter wheat: Western Canada's acreage planted, acreage harvested, production, shipments, and inventories, marketing years 1999/00, 2000/01, and 2001/02

* * * * * * *

U.S. IMPORTERS' INVENTORIES OF PRODUCT FROM CANADA

Reported inventories of imported durum and hard red spring wheat are shown in tables VII-5 and VII-6. *** reported inventories of imported durum wheat from Canada. *** imports of durum wheat in marketing years 2000/01, 2001/02, and 2002/03 accounted for *** percent, respectively, of imports of durum wheat from Canada compared to official Commerce statistics. *** imports of durum wheat in marketing years 2000/01, 2001/02, and 2002/03 accounted for *** percent, respectively, of imports of durum wheat from Canada compared to official USDA statistics. *** reported inventories of imported hard red spring and eastern hard red winter wheat[6] from Canada. No other importers reported inventories of imported hard red spring and hard red winter wheat from Canada. *** imports of hard red spring wheat in marketing years 2000/01 and 2001/02 accounted for *** percent, respectively, of imports of hard red spring wheat from Canada compared to official Commerce statistics. *** imports of hard red spring wheat in marketing years 2000/01 and 2001/02 accounted for *** percent, respectively, of imports of hard red spring wheat from Canada compared to official USDA statistics. *** did not import any hard red spring wheat in marketing year 2002/03. There were no reported importers' inventories of imported western hard red winter wheat from Canada or of imported durum, hard red spring, or hard red winter wheat from all other sources.

Table VII-5
Durum wheat: U.S. importers' end-of-period inventories of imports, by source, marketing years 2000/01, 2001/02, and 2002/03

* * * * * * *

Table VII-6
Hard red spring wheat: U.S. importers' end-of-period inventories of imports, by source, marketing years 2000/01, 2001/02, and 2002/03

* * * * * * *

U.S. IMPORTERS' IMPORTS SUBSEQUENT TO MAY 2003

The Commission requested importers to indicate whether they imported or arranged for the importation of durum and/or hard red spring wheat from Canada after May 2003. *** reported that it arranged for the importation of *** bushels of durum wheat from Canada during October-December 2003. *** reported that it arranged for the importation of *** bushels of hard red spring wheat from Canada during June-July 2003.

DUMPING IN THIRD-COUNTRY MARKETS

The CWB reported no knowledge of import relief investigations regarding the subject product in any country other than the United States.

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[6] ***.

APPENDIX A

FEDERAL REGISTER NOTICES

INTERNATIONAL TRADE COMMISSION

[Investigations Nos. 701–TA–430A and 430B (Final) and 731–TA–1019A and 1019B (Final)]

Durum and Hard Red Spring Wheat From Canada

AGENCY: United States International Trade Commission.

ACTION: Scheduling of the final phase of countervailing duty and antidumping investigations.

SUMMARY: The Commission hereby gives notice of the scheduling of the final phase of countervailing duty investigations Nos. 701–TA–430A and 430B (Final) under section 705(b) of the Tariff Act of 1930 (19 U.S.C. 1671d(b)) (the Act) and the final phase of antidumping investigations Nos. 731–TA–1019A and 1019B (Final) under section 735(b) of the Act (19 U.S.C. 1673d(b)) to determine whether an industry in the United States is materially injured or threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of subsidized and less-than-fair-value imports from Canada of durum and hard red spring wheat, provided for in subheadings 1001.10.00, 1001.90.10, and 1001.90.20 of the Harmonized Tariff Schedule of the United States.[1]

For further information concerning the conduct of this phase of the investigations, hearing procedures, and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A and C (19 CFR part 207).

EFFECTIVE DATE: May 8, 2003.

FOR FURTHER INFORMATION CONTACT: D.J. Na (202–708–4727), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202–205–1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202–205–2000. General information concerning the Commission may also be obtained by accessing its Internet server (*http://www.usitc.gov*). The public record for these investigations may be viewed on the Commission's electronic docket (EDIS) at *http://edis.usitc.gov*.

SUPPLEMENTARY INFORMATION:

Background. The final phase of these investigations is being scheduled as a result of affirmative preliminary determinations by the Department of Commerce that certain benefits which constitute subsidies within the meaning of section 703 of the Act (19 U.S.C. 1671b) are being provided to manufacturers, producers, or exporters in Canada of durum and hard red spring wheat, and that such products are being sold in the United States at less than fair value within the meaning of section 733 of the Act (19 U.S.C. 1673b). The investigations were requested in petitions filed on September 13, 2002, by counsel on behalf of the North Dakota Wheat Commission (hard red spring wehat), Bismarck, ND; the Durum Growers Trade Action Committee (durum wheat), Bismarck, ND; and the U.S. Durum Growers Association (durum wheat), Bismarck, ND.

Participation in the investigations and public service list. Persons, including industrial users of the subject merchandise and, if the merchandise is sold at the retail level, representative consumer organizations, wishing to participate in the final phase of these 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, no later than 21 days prior to the hearing date specified in this notice. A party that filed a notice of appearance during the preliminary phase of the investigations need not file an additional notice of appearance during this final phase. The Secretary will maintain a public service list containing

[1] For purposes of these investigations, the Department of Commerce has defined durum wheat as "all varieties of durum wheat from Canada. This includes, but is not limited to, a variety commonly referred to as Canada Western Amber Durum." The Department of Commerce has defined hard red spring wheat as "all varieties of hard red spring wheat from Canada. This includes, but is not limited to, varieties commonly referred to as Canada Western Red Spring, Canada Western Extra Strong, and Canada Prairie Spring Red."

the names and addresses of all persons, or their representatives, who are parties to the investigations.

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 the final phase of these investigations available to authorized applicants under the APO issued in the investigations, provided that the application is made no later than 21 days prior to the hearing date specified in this notice. Authorized applicants must represent interested parties, as defined by 19 U.S.C. 1677(9), who are parties to the investigations. A party granted access to BPI in the preliminary phase of the investigations need not reapply for such access. 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 the final phase of these investigations will be placed in the nonpublic record on July 15, 2003, and a public version will be issued thereafter, pursuant to section 207.22 of the Commission's rules.

Hearing. The Commission will hold a hearing in connection with the final phase of these investigations beginning at 9:30 a.m. on July 28, 2003, 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 July 21, 2003. 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 July 23, 2003, 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 207.24 of the Commission's rules. Parties must submit any request to present a portion of their hearing testimony in camera no later than 7 days prior to the date of the hearing.

Written submissions. Each party who is an interested party shall submit a prehearing brief to the Commission. Prehearing briefs must conform with the provisions of section 207.23 of the Commission's rules; the deadline for filing is July 22, 2003. Parties may also file written testimony in connection with their presentation at the hearing, as provided in section 207.24 of the Commission's rules, and posthearing briefs, which must conform with the provisions of section 207.25 of the Commission's rules. The deadline for filing posthearing briefs is August 4, 2003; witness testimony must be filed no later than three 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 August 4, 2003. On August 18, 2003, 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 August 20, 2003, but such final comments must not contain new factual information and must otherwise comply with section 207.30 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. The Commission's rules do not authorize filing of submissions with the Secretary by facsimile or electronic means, except to the extent permitted by section 201.8 of the Commission's rules, as amended, 67 FR 68036 (November 8, 2002).

In accordance with sections 201.16(c) and 207.3 of the Commission's 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 title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.21 of the Commission's rules.

By order of the Commission.

Issued: May 19, 2003.

Marilyn R. Abbott,

Secretary to the Commission.

[FR Doc. 03–12934 Filed 5–22–03; 8:45 am]

BILLING CODE 7020–02–P

INTERNATIONAL TRADE COMMISSION

[Investigations Nos. 701–TA–430A and 430B and 731–TA–1019A and 1019B (Final)]

Durum and Hard Red Spring Wheat From Canada

AGENCY: United States International Trade Commission.

ACTION: Revised schedule for the subject investigations.

EFFECTIVE DATE: June 19, 2003.

FOR FURTHER INFORMATION CONTACT: D.J. Na (202–708–4727), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202–205–1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202–205–2000. General information concerning the Commission may also be obtained by accessing its internet server (*http://www.usitc.gov*). The public record for these investigations may be viewed on the Commission's electronic docket (EDIS) at *http://edis.usitc.gov*.

SUPPLEMENTARY INFORMATION: On May 8, 2003, the Commission established a schedule for the conduct of the final phase of the subject investigations (68 FR 28253, May 23, 2003). Subsequently, the Department of Commerce extended the date for its final countervailing duty and antidumping determinations in the investigations from July 21, 2003, to August 28, 2003 (68 FR 35381, June 13, 2003). The Commission, therefore, is revising its schedule to conform with Commerce's new schedule.

The Commission's new schedule for the investigations is as follows: Requests

to appear at the hearing must be filed with the Secretary to the Commission not later than August 28, 2003; the prehearing conference will be held at the U.S. International Trade Commission Building at 9:30 a.m. on September 2, 2003; the prehearing staff report will be placed in the nonpublic record on August 21, 2003; the deadline for filing prehearing briefs is August 28, 2003; the hearing will be held at the U.S. International Trade Commission Building at 9:30 a.m. on September 4, 2003; the deadline for filing posthearing briefs is September 11, 2003; the Commission will make its final release of information on September 26; and final party comments are due on September 30.

For further information concerning these investigations see the Commission's notice cited above and the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A and C (19 CFR part 207).

Authority: These investigations are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.21 of the Commission's rules.

Issued: June 24, 2003. By order of the Commission.

Marilyn R. Abbott,

Secretary to the Commission.

[FR Doc. 03–16363 Filed 6–26–03; 8:45 am]

BILLING CODE 7020–02–P

DEPARTMENT OF COMMERCE

International Trade Administration

[A–122–845, A–122–847]

Notice of Final Determinations of Sales at Less Than Fair Value: Certain Durum Wheat and Hard Red Spring Wheat from Canada

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

ACTION: Notice of Final Determinations of Antidumping Duty Investigations.

SUMMARY: On May 8, 2003, the Department of Commerce published the preliminary determinations in the antidumping duty investigations of durum wheat and hard red spring wheat from Canada. We gave interested parties an opportunity to comment on the preliminary determinations. Based upon the results of verification and our analysis of the comments received, we have made certain changes to the margin calculations presented in the final determinations of these investigations. We continue to find that durum wheat and hard red spring wheat from Canada were sold in the United States below normal value during the period of investigation. The final weighted-average dumping margins are listed below in the section entitled "Continuation of Suspension of Liquidation."

EFFECTIVE DATE: September 5, 2003.

FOR FURTHER INFORMATION CONTACT: Julie Santoboni or Cole Kyle, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th and Constitution Avenue, NW, Washington, DC 20230; telephone (202) 482–4194 or (202) 482–1503, respectively.

SUPPLEMENTARY INFORMATION:

Background

On May 8, 2003, the Department of Commerce ("the Department") published in the **Federal Register** the preliminary determinations in its investigations of durum wheat and hard red spring wheat from Canada (*Notice of Preliminary Determinations of Sales at Less Than Fair Value: Certain Durum Wheat and Hard Red Spring Wheat From Canada*, 68 FR 24707 (May 8, 2003) ("*Preliminary Determinations*")).

Since the Preliminary Determinations, the following events have occurred:

In May and June 2003, we conducted verifications of the sales and cost of production ("COP") questionnaire responses submitted by the Canadian Wheat Board ("CWB") and Canadian

hard red spring ("HRS") wheat farmers at the CWB's headquarters, at the offices Meyers Norris Penny LLP and at certain farm locations. We issued verification reports in July 2003. We received case briefs from the petitioners[1] and the CWB on July 30, 2003. We received rebuttal briefs from the petitioners and the CWB on August 5, 2003.

Scope of Investigations

For purposes of these investigations, the products covered are (1) durum wheat and (2) hard red spring wheat.

1. Durum Wheat

Imports covered by this investigation are all varieties of durum wheat from Canada. This includes, but is not limited to, a variety commonly referred to as Canada Western Amber Durum. The merchandise subject to this investigation is currently classifiable under the following Harmonized Tariff Schedule of the United States ("HTSUS") subheadings: 1001.10.00.10, 1001.10.00.91, 1001.10.00.92, 1001.10.00.95, 1001.10.00.96, and 1001.10.00.99. Although the HTSUS subheadings are provided for convenience and customs purposes, our written description of the scope of this proceeding is dispositive.

2. Hard Red Spring Wheat

Imports covered by this investigation are all varieties of hard red spring wheat from Canada. This includes, but is not limited to, varieties commonly referred to as Canada Western Red Spring, Canada Western Extra Strong, and Canada Prairie Spring Red. The merchandise subject to this investigation is currently classifiable under the following HTSUS subheadings: 1001.90.10.00, 1001.90.20.05, 1001.90.20.11, 1001.90.20.12, 1001.90.20.13, 1001.90.20.14, 1001.90.20.16, 1001.90.20.19, 1001.90.20.21, 1001.90.20.22, 1001.90.20.23, 1001.90.20.24, 1001.90.20.26, 1001.90.20.29, 1001.90.20.35, and 1001.90.20.96. This investigation does not cover imports of wheat that enter under the subheadings 1001.90.10.00 and 1001.90.20.96 that are not classifiable as hard red spring wheat. Although the HTSUS subheadings are provided for convenience and customs purposes, our written description of the scope of this proceeding is dispositive.

[1] The petitioners are the North Dakota Wheat Commission ("NDWC") (hard red spring wheat), the Durum Growers Trade Action Committee (durum wheat), and the U.S. Durum Growers Association (durum wheat).

Scope Comments

We have received several requests for exclusions from and clarifications of the scope of these investigations. On April 24, 2003, Montana Flour & Grains and Kamut International requested that the Department exclude Khorasan wheat from the scope of these investigations. The Government of Canada ("GOC") made the same request on July 31, 2003. On June 27, 2003, the Organic Trade Association requested that the Department exclude organically produced wheat from the scope of these investigations. On July 29, 2003, Cargill, Incorporated ("Cargill") requested that the Department clarify the scope of these investigations and specifically exclude from the scope Canadian Eastern Soft Red Winter Wheat and Canadian Eastern Hard Red Winter Wheat. On July 30, 2003, the petitioners submitted comments on all but the Cargill submission and also raised an additional issue concerning Canadian feed wheat. We have considered these requests and the comments from interested parties. We have determined that organically grown wheat is covered by the scope of these investigations and that the scope of the hard red spring investigation should be clarified by adding the following language to the scope: "This investigation does not cover imports of wheat that enter under the subheadings 1001.90.10.00 and 1001.90.20.96 that are not classifiable as hard red spring wheat." For a complete discussion of these scope issues, *see* the August 28, 2003, *Scope Exclusion and Clarification Requests: Khorasan Wheat, Organic Wheat, Canadian Eastern Soft Red Winter Wheat, Canadian Eastern Hard Red Winter Wheat, and Canadian Feed Wheat* memorandum, which is on file in the Central Records Unit, Room B–099 of the Department ("CRU").

Period of Investigation

The period of investigation ("POI") is July 1, 2001, through June 30, 2002.

Use of Facts Available

As explained in the *Preliminary Determinations*, we based the COP in part on the use of facts otherwise available, in accordance with section 776 of the Tariff Act of 1930, as amended effective January 1, 1995 ("the Act"), by the Uruguay Round Agreements Act ("URAA").

Of the twenty-seven producers selected, one producer (*i.e.*, cost respondent 2)[2] chose not to respond to the Department's questionnaire, and two other producers (*i.e.*, cost respondents 10 and 27) did not respond based on extenuating circumstances discussed below. Therefore, as described in detail below, because these producers have not provided the necessary information on the record to calculate the simple-average COP within their respective stratum, the use of facts otherwise available is warranted.

Section 776(a)(2) of the Act provides that, if an interested party or any other person (A) withholds information that has been requested by the administering authority; (B) fails to provide such information by the deadlines for the submission of the information or in the form and manner requested, subject to subsections (c)(1) and (e) of section 782 of the Act; (C) significantly impedes a proceeding under this title; or (D) provides such information but the information cannot be verified as provided in section 782(i) of the Act, the Department shall, subject to section 782(d) of the Act, use the facts otherwise available in reaching the applicable determination under this title.[3] Section 776(b) of the Act further provides that adverse inferences may be used when a party has failed to cooperate by not acting to the best of its ability to comply with a request for information.

With respect to cost respondent 2, this producer chose not to respond to the Department's questionnaire. As a result, use of facts available is appropriate pursuant to section 776(a)(2)(A) of the Act. In accordance with section 776(b) of the Act, if the Department finds that "an interested party failed to cooperate

[2] Due to the proprietary nature of the name of each producer, we have assigned a number to each farmer ("cost respondent") that will be used throughout this notice when referring to that specific farmer. A list or code key identifying the name associated with each cost respondent number can be found in the *Cost of Production and Constructed Value Adjustments for the Preliminary Determination* dated May 1, 2003 at Attachment 1, which is on file in the CRU.

[3] Where the Department determines that a response to a request for information does not comply with the request, section 782(d) of the Act provides that the Department will so inform the party submitting the response and will, to the extent practicable, provide that party the opportunity to remedy or explain the deficiency. If the party fails to remedy the deficiency within the applicable time limits, the Department may, subject to section 782(e) of the Act, disregard all or part of the original and subsequent responses, as appropriate. Section 782(e) of the Act provides that the Department "shall not decline to consider information that is submitted by an interested party and is necessary to the determination but does not meet all the applicable requirements established by the administering authority" if the information is timely, can be verified, and is not so incomplete that it cannot be used, and if the interested party acted to the best of its ability in providing the information. Where all of these conditions are met, the statute requires the Department to use the information, if it can do so without undue difficulties.

by not acting to the best of its ability to comply with a request for information," an adverse inference may be used in determining the facts otherwise available. In the instant case, cost respondent 2 did not cooperate to the best of its ability by failing to provide any of the information requested in the section D cost questionnaire with no rationale for why it could not provide such information when other producers could. Therefore, as adverse facts available for the final determination on HRS wheat for this cost respondent, we have continued to use the higher of the COP from the petition for the same province and soil type or the highest reported cost of other cost respondents within the same stratum. Based on our comparison of the amounts, we found that the reported cost of one of the other cost respondents within the same stratum was higher. As a result, we used the other respondent's COP within the same stratum as the surrogate cost for cost respondent 2.

Both cost respondents 10 and 27 did not respond to the Department's cost questionnaire based on extenuating circumstances. With respect to cost respondent 10, the CWB explained that this farmer had deliveries of HRS wheat to the CWB during the POI, but did not produce HRS wheat during the 2001 growing season. However, cost respondent 10 did have an affiliated party that produced HRS wheat during the cost reporting period. Therefore, as a surrogate, cost respondent 10 reported its affiliate's COP for the cost reporting period. We note that this affiliate was not considered a cost respondent in the sample selection and, as such, we determined it would not be appropriate to include the affiliate's COP in our overall calculation of COP.

Similar to cost respondent 10, cost respondent 27 did not provide cost data for the 2001 growing season because the information was not available. Specifically, cost respondent 27 sold its farming operations and ceased farming. Because neither cost respondent 10 nor 27 had information available that would enable them to respond to the Department's cost questionnaire and in the case of cost respondent 10 they attempted to provide some cost information, we applied neutral facts available for the HRS wheat preliminary determination pursuant to sections 776(a)(2)(A) and (B) of the Act. As neutral facts available, we have relied on the cost data submitted by the other cost respondents within the same stratum. Therefore, we have not included an amount for these cost respondents in the simple average calculation within their respective stratums.

Fair Value Comparisons

We calculated export price and normal value based on the same methodology used in the Preliminary Determinations with the following exceptions:

- We based our calculations on the CWB's updated and verified sales data. We used the revised sales data submitted by the CWB on June 20, 2003, and the revisions stated in the CWB's July 9, 2003, submission.
- We revised the level of trade ("LOT") classification to include only producer direct sales in LOTH/U2.
- We corrected a clerical error in the calculation of the LOT adjustment.
- We revised the cost of production calculation for HRS wheat to include certain changes noted in the August 28, 2003 *Cost of Production and Constructed Value Adjustments for the Final Determinations Canadian Wheat Board Cost Respondents Memorandum* ("*Final Determination Cost Calculation Memorandum*")

For a complete discussion of these changes, *see* the August 28, 2003, *Issues and Decision Memorandum for the Final Determinations of the Antidumping Duty Investigations of Certain Durum Wheat and Hard Red Spring Wheat from Canada* ("*Decision Memorandum*"), *Durum Wheat Final Determination Calculation Memorandum for the Canadian Wheat Board, Hard Red Spring Wheat Final Determination Calculation Memorandum for the Canadian Wheat Board, and the Final Determination Cost Calculation Memorandum.*

Currency Conversions

We made currency conversions in accordance with section 773A of the Act in the same manner as in the preliminary determinations.

Verifications

As provided in section 782(i)(1) of the Act, we verified the information submitted by the CWB and selected farmers during May and June 2003. We used standard verification procedures, including examination of relevant accounting and production records, as well as original source documents provided by the CWB and certain individual cost respondents (*i.e.*, farmers).

Analysis of Comments Received

All issues raised in the petitioners' and the CWB's case briefs are addressed in the *Decision Memorandum* which is hereby adopted by this notice. Attached to this notice as an appendix is a list of the issues which the petitioners and the CWB have raised and to which we have responded in the *Decision Memorandum*. Parties can find a complete discussion of all issues raised in these investigations and the corresponding recommendations in this public memorandum which is on file in the Department's CRU. In addition, a complete version of the *Decision Memorandum* can be accessed directly on the Web at http://ia.ita.doc.gov/frn/summary/list.htm. The paper copy and electronic version of the Decision Memorandum are identical in content.

Continuation of Suspension of Liquidation

In accordance with section 733(d)(2) of the Act, we are directing the U.S. Bureau of Customs and Border Protection ("BCBP") to continue to suspend liquidation of all imports of subject merchandise from Canada that are entered, or withdrawn from warehouse, for consumption on or after May 8, 2003, the date of publication of the *Preliminary Determinations* in the **Federal Register**. The BCBP shall continue to require a cash deposit or the posting of a bond equal to the weighted-average amount by which the NV exceeds the EP, as indicated in the chart below. These suspension-of-liquidation instructions will remain in effect until further notice. The weighted-average dumping margins are as follows:

DURUM WHEAT

Exporter/Manufacturer	Weighted-Average Margin Percentage
Canadian Wheat Board	8.26
All Others	8.26

HARD RED SPRING WHEAT

Exporter/Manufacturer	Weighted-Average Margin Percentage
Canadian Wheat Board	8.87
All Others	8.87

ITC Notification

In accordance with section 735(d) of the Act, we have notified the International Trade Commission ("ITC") of our determinations. As our final determinations are 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 antidumping duty orders.

This notice also serves as a reminder to parties subject to administrative protective order ("APO") of their responsibility concerning the disposition of proprietary information disclosed under APO in accordance with 19 CFR 351.305. Timely notification of return or destruction of APO materials, or conversion to judicial protective order, is hereby requested. Failure to comply with the regulations and the terms of an APO is a sanctionable violation.

These determinations are issued and published in accordance with ections 735(d) and 777(i)(1) of the Act.

Dated: August 28, 2003.

James J. Jochum,

Assistant Secretary for Import Administration.

APPENDIX

List of Comments in the Issues and Decision MemorandumSales Issues

Comment 1: Particular Market Situation
Comment 2: Inclusion of Certain Product Characteristics in Model Match Criteria
Comment 3: Date of Sale
Comment 4: Exclusion of Channel 6 Sales from LOTH 1
Comment 5: Treatment of Sales Made Above Normal Value
Comment 6: Clerical Error in the Calculation of the LOT Adjustment

Common Cost Issues

Comment 7: Farmer Estimates and Representations
Comment 8: Representative COPs
Comment 9: Eliminate Outliers in Calculating the Average COP
Comment 10: Collapsing
Comment 11: Seed Costs
Comment 12: Imputed Labor Costs
Comment 13: Personal Expenses
Comment 14: Overhead Allocation Basis
Comment 15: Financial Statement Depreciation
Comment 16: Affiliated Party Transactions Received Methodology
Comment 17: Costs of Services Provided to Outside Parties
Comment 18: Land Use
Comment 19: Crop Insurance Proceeds
Comment 20: Straw By-Product Offset
Comment 21: G&A and Interest Expense Denominators
Comment 22: Value of Bookkeeping Services

Farmer Specific Issues

Farmer 1

Comment 23: Production Quantities
Comment 24: Well Expenses
Comment 25: Over-Excluded Livestock Costs

Farmer 3

Comment 26: Imputed Seed Costs
Comment 27: Actual Labor Costs
Comment 28: Chemical Costs
Comment 29: Revenue from Green Barley
Comment 30: Country Elevator Charges

Farmer 4

Comment 31: Imputed Interest Expense
Comment 32: Short-Term Interest Income
Comment 33: Overhead Expenses Allocation Between Crops
Comment 34: Custom Work Costs
Comment 35: Land Use Cost
Comment 36: Machinery Repair Expenses

Farmer 5

Comment 37: Depreciation Expense of the Omitted Asset
Comment 38: Labor Cost for Non-Crop Activity

Farmer 6

Comment 39: Trucking Expense

Farmer 7

Comment 40: Unsupported Corrections to Normal Records
Comment 41: Reallocate Fertilizer Costs
Comment 42: Interest Expense Offset
Comment 43: Capitalization of Costs

Farmer 8

Comment 44: Imputed Seed
Comment 45: Production Quantity
Comment 46: Offset to Fertilizer Costs

Farmer 9

Comment 47: Depreciation Expense

Farmer 11

Comment 48: Fixed Assets
Comment 49: Land Use Costs

Farmer 12

Comment 50: Seed Cleaning Costs
Comment 51: Production Quantity
Comment 52: Custom Work Costs
Comment 53: Interest Charge on a Trade Payable Account

Farmer 14

Comment 54: Overstatement of Other Crop Costs
Comment 55: Understatement of Fertilizer Costs
Comment 56: Overhead Adjustment
Comment 57: Interest Expense
Comment 58: G&A Expense

Farmer 15

Comment 59: Tax Return Errors
Comment 60: Omitted Expenses
Comment 61: Livestock Costs

Farmer 16

Comment 62: Input Values for Seed, Fertilizer, and Chemicals
Comment 63: Cost Allocation Basis

Farmer 17

Comment 64: Omitted Actual Labor Cost

Farmer 19

Comment 65: Imputed Seed Costs
Comment 66: Depreciation Should be Included in Fixed Overhead
Comment 67: Revised Cash Ticket Analysis is Correctly Reported
Comment 68: Crop Insurance Profit Factor and Recoveries Should be Recalculated

Farmer 21

Comment 69: Fertilizer and Chemical Costs
Comment 70: Capitalization of Costs
Comment 71: Costs Not Associated With the Farmers' Livestock Operations

Farmer 22

Comment 72: Overhead Allocations, New Factual Information

Farmer 23

Comment 73: G&A Expenses

Comment 74: Production Quantities

Farmer 26

Comment 75: Exclusion of the 2000 Seed from the 2001 Production Quantity
Comment 76: Improper Allocation of the Cost of Chemicals

[FR Doc. 03–22661 Filed 9–4–03; 8:45 am]
BILLING CODE 3510–DS–S

DEPARTMENT OF COMMERCE

International Trade Administration

[C–122–846]

[C–122–848]

Final Affirmative Countervailing Duty Determinations: Certain Durum Wheat and Hard Red Spring Wheat from Canada

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

ACTION: Notice of Final Affirmative Countervailing Duty Determinations: Certain Durum Wheat and Hard Red Spring Wheat from Canada.

SUMMARY: The Department of Commerce has made final determinations that countervailable subsidies are being provided to certain producers and exporters of certain durum wheat and hard red spring wheat from Canada. For information on the estimated countervailing duty rates, please see the "Suspension of Liquidation" section, below.

EFFECTIVE DATE: September 5, 2003.

FOR FURTHER INFORMATION CONTACT: Audrey Twyman, Stephen Cho, or Daniel Alexy, Office of Antidumping/Countervailing Duty Enforcement, Group 1, Import Administration, U.S. Department of Commerce, Room 3099, 14th Street and Constitution Avenue, NW, Washington, DC 20230; telephone (202) 482–3534, (202) 482–3798 and (202) 482–1540, respectively.

SUPPLEMENTARY INFORMATION:

Petitioners

The petitioners in these investigations are the North Dakota Wheat Commission (hard red spring wheat), United States Durum Growers Association (durum wheat), and the Durum Growers Trade Action Committee (durum wheat) (collectively, the "petitioners").

Period of Investigations

The period for which we are measuring subsidies is August 1, 2001 to July 31, 2002, which coincides with the fiscal year of the Canadian Wheat

Board ("CWB"), the sole responding exporter. *See* 19 CFR § 351.204(b)(2).

Case History

The following events have occurred since the publication of the preliminary determinations in the **Federal Register** on March 10, 2003. *See Preliminary Affirmative Countervailing Duty Determinations and Alignment of Final Countervailing Duty Determinations with Final Antidumping Duty Determinations: Certain Durum Wheat and Hard Red Spring Wheat from Canada*, (68 FR 11374) ("Preliminary Determinations").

On March 17, 2003, the petitioners submitted ministerial error allegations relating to the *Preliminary Determinations*. The Department of Commerce ('the Department") addressed these ministerial allegations in the April 1, 2003, memorandum to Susan Kuhbach entitled "Ministerial Error Allegations for Preliminary Determination," which is on file in the Department's Central Records Unit in Room B–099 of the main Department building ("CRU"). The Department sent out supplemental questionnaires to the Government of Canada ("GOC") and the CWB on March 18, 2003 and received responses to these supplemental questionnaires between March 27 and April 14, 2003. On May 5, 2003, the Department issued a memorandum entitled "Preliminary Determination for the Initial Payment Guarantee Program" in which the Department preliminarily determined that the GOC's guarantee of the CWB's initial payment to producers does not confer a measurable subsidy on hard red spring or durum wheat. *See* May 5, 2003, memorandum to Acting Assistant Secretary Joseph A. Spetrini from Deputy Assistant Secretary Jeffrey May which is on file in the CRU. The Department's *Preliminary Determinations* had not addressed this new subsidy allegation raised by the petitioners.

On May 16, 2003, the CWB requested an extension of the final determinations for the dumping and countervailing duty investigations, therefore the Department published a *Notice of Postponement of Final Antidumping Determinations and Extension of Provisional Measures and Postponement of Final Countervailing Duty Determinations: Certain Durum Wheat and Hard Red Spring Wheat from Canada*, (68 FR 35381) on June 13, 2003.

The Department conducted verifications of the questionnaire responses submitted by the GOC, the provincial governments (*e.g.*, the Government of Alberta ("GOA") and the Government of Saskatchewan ("GOS")), and the CWB from May 5 through May 14, 2003 in Canada. We received case briefs from the GOC, GOA, GOS, CWB and the petitioners between June 20 to 23, 2003. These same parties submitted rebuttal briefs between June 27 to June 30, 2003. We held a hearing in these investigations on July 8, 2003.

Scope of Investigations

For purposes of these investigations, the products covered are (1) durum wheat and (2) hard red spring wheat.

1. Durum Wheat

Imports covered by this investigation are all varieties of durum wheat from Canada. This includes, but is not limited to, a variety commonly referred to as Canada Western Amber Durum. The merchandise subject to this investigation is currently classifiable under the following Harmonized Tariff Schedule of the United States ("HTSUS") subheadings: 1001.10.00.10, 1001.10.00.91, 1001.10.00.92, 1001.10.00.95, 1001.10.00.96, and 1001.10.00.99. Although the HTSUS subheadings are provided for convenience and customs purposes, our written description of the scope of this proceeding is dispositive.

2. Hard Red Spring Wheat

Imports covered by this investigation are all varieties of hard red spring wheat from Canada. This includes, but is not limited to, varieties commonly referred to as Canada Western Red Spring, Canada Western Extra Strong, and Canada Prairie Spring Red. The merchandise subject to this investigation is currently classifiable under the following HTSUS subheadings: 1001.90.10.00, 1001.90.20.05, 1001.90.20.11, 1001.90.20.12, 1001.90.20.13, 1001.90.20.14, 1001.90.20.16, 1001.90.20.19, 1001.90.20.21, 1001.90.20.22, 1001.90.20.23, 1001.90.20.24, 1001.90.20.26, 1001.90.20.29, 1001.90.20.35, and 1001.90.20.96. This investigation does not cover imports of wheat that enter under the subheadings 1001.90.10.00 and 1001.90.20.96 that are not classifiable as hard red spring wheat. Although the HTSUS subheadings are provided for convenience and customs purposes, our written description of the scope of this proceeding is dispositive.

Scope Comments

Since the Department's *Preliminary Determinations*, we have received several requests for exclusions from and clarifications of the scope of these investigations. On April 24, 2003, Montana Flour & Grains and Kamut International requested that the Department exclude Khorasan wheat from the scope of these investigations. The GOC made the same request on July 31, 2003. On June 27, 2003, the Organic Trade Association requested that the Department exclude organically produced wheat from the scope of these investigations. On July 29, 2003, Cargill, Incorporated ("Cargill") requested that the Department clarify the scope of these investigations and specifically exclude from the scope Canadian Eastern Soft Red Winter Wheat and Canadian Eastern Hard Red Winter Wheat. On July 30, 2003, the petitioners submitted comments on all but the Cargill submission, and also raised an additional issue concerning Canadian feed wheat. We have considered these requests and the comments from interested parties. We have determined that organically grown wheat is covered by the scope of these investigations and that the scope of the hard red spring investigation should be clarified by adding the following language to the scope: "This investigation does not cover imports of wheat that enter under the subheadings 1001.90.10.00 and 1001.90.20.96 that are not classifiable as hard red spring wheat." For a complete discussion of these scope issues, *see* the August 28, 2003, *Scope Exclusion and Clarification Requests: Khorasan Wheat, Organic Wheat, Canadian Eastern Soft Red Winter Wheat, Canadian Eastern Hard Red Winter Wheat*, and Canadian Feed Wheat memorandum, which is on file in the CRU.

Injury Test

Because Canada is a "Subsidies Agreement Country" within the meaning of section 701(b) of the Tariff Act of 1930, as amended ("the Act"), the International Trade Commission ("ITC") is required to determine whether imports of the subject merchandise from Canada materially injure, or threaten material injury to, a U.S. industry. On November 25, 2002, the ITC transmitted to the Department its preliminary determinations finding that there is a reasonable indication that an industry in the United States is being materially injured by reason of imports from Canada of durum and hard red spring wheat. *See Durum and Hard Red Spring Wheat from Canada*, 67 FR 71589 (December 2, 2002).

Analysis of Comments Received

All issues raised in the case and rebuttal briefs by parties to these investigations are addressed in the "Issues and Decision Memorandum for the Final Countervailing Duty

Determinations of the Investigations of Certain Durum Wheat and Hard Red Spring Wheat from Canada" from Jeffrey May, Deputy Assistant Secretary, Import Administration, to James J. Jochum, Assistant Secretary for Import Administration, dated August 28, 2003, ("*Decision Memorandum*"), which is hereby adopted by this notice. Attached to this notice as an Appendix is a list of the issues which parties have raised and to which we have responded in the *Decision Memorandum*. Parties can find a complete discussion of all issues raised in these investigations and the corresponding recommendations in this public memorandum which is on file in the CRU. In addition, a complete version of the Decision Memorandum can be accessed directly on the Internet at http://www.ia.ita.doc.gov/frn/summary/list.htm under the heading "Canada." The paper copy and electronic version of the Decision Memorandum are identical in content.

Suspension of Liquidation

In accordance with section 705(c)(1)(B)(i) of the Act, we have calculated an individual net subsidy rate for each manufacturer of the subject merchandise. In accordance with sections 777A(e)(2)(B) and 705(c)(5)(A) of the Act, we have set the "all others" rate as CWB's rate, because it is the only exporter/manufacturer investigated. We determine the total estimated net subsidy rate for the CWB and "all others" to be:

Exporter/Manufacturer	Net Subsidy Rate (Hard Red Spring Wheat)	Net Subsidy Rate (Durum Wheat)
Canadian Wheat Board	5.29 percent	5.29 percent
All Others	5.29 percent	5.29 percent

As a result of our *Preliminary Determinations* and pursuant to section 705(c)(1)(B)(ii) of the Act, we instructed the U.S. Bureau of Customs and Border Protection ("BCBP") to suspend liquidation of all entries of durum wheat and hard red spring wheat from Canada which were entered or withdrawn from warehouse, for consumption on or after March 10, 2003, the date of the publication of the *Preliminary Determinations* in the **Federal Register**. In accordance with section 703(d) of the Act, we instructed the BCBP to discontinue the suspension of liquidation for subject merchandise for countervailing duty purposes entered on or after July 8, 2003, but to continue the suspension of liquidation of entries made from March 10, 2003, through July 7, 2003.

We will issue countervailing duty orders and reinstate the suspension of liquidation under section 706(a) of the Act if ITC issues final affirmative injury determinations, and will require a cash deposit of estimated countervailing duties for such entries of merchandise in the amounts indicated above. If the ITC determines that material injury, or threat of material injury, does not exist, these proceedings will be terminated and all estimated duties deposited or securities posted as a result of the suspension of liquidation will be refunded or canceled.

ITC Notification

In accordance with section 705(d) of the Act, we have notified the ITC of our determinations. In addition, we are making available to the ITC all non-privileged and non-proprietary information related to these investigations. We will allow the ITC access to all privileged and business proprietary information in our files, provided the ITC confirms that it will not disclose such information, either publicly or under an Administrative Protective Order ("APO"), without the written consent of the Assistant Secretary for Import Administration.

Return or Destruction of Proprietary Information

In the event that the ITC issues final negative injury determination, this notice will serve as the only reminder to parties subject to an APO of their responsibility concerning the destruction of proprietary information disclosed under APO in accordance with 19 CFR 351.305(a)(3). Failure to comply is a violation of the APO.

These determinations are published pursuant to sections 703(f) and 777(i) of the Act.

Dated: August 28, 2003.

James J. Jochum,

Assistant Secretary for Import Administration.

APPENDIX

List of Comments and Issues in the Decision Memorandum

Comment 1: The Department Should Treat the Government-Leased Railcars Differently from the Government-Owned Railcars.

Comment 2: The Provision of Government-Owned and Leased Railcars is Tied to Non-U.S. Markets.

Comment 3: The Provision of Rail Cars Does Not Result in an Indirect Subsidy to the CWB.

Comment 4: Countervailablility of Subsidies Given to Third Party Service Providers.

Comment 5: The Governments' Entrustment or Direction of the Railways to Provide Rail Service.

Comment 6: The Provision of Government-Owned and Leased Railcar Confers No Benefit.

Comment 7: Measurement of Benefit from the Government-Provided Railcars.

Comment 8: The Revenue Cap Does Confer a Benefit.

Comment 9: The Rail Freight Revenue Cap Does Not Provide a Financial Contribution.

Comment 10: The Department Should Determine That the Revenue Cap Does Not Provide a Financial Contribution Because It is Consistent With Market Principles.

Comment 11: The Benefit of the Revenue Cap Extends to All CWB Shipments, Including Shipments to the United States.

Comment 12: The Closure Fee for Grain Dependent Branch Lines Confers a Financial Contribution.

Comment 13: Impact of the Lending and Initial Payment Guarantees on the CWB's Cost of Borrowing.

Comment 14: The Benchmark.

Comment 15: The Borrowing Guarantee is Tied to Non-U.S. Markets.

Comment 16: The Department's Analysis of the Initial Payment Guarantee is Based on Incomplete and Inaccurate Data.

[FR Doc. 03–22662 Filed 9–4–03; 8:45 am]

BILLING CODE 3510–DS–S

DEPARTMENT OF COMMERCE

International Trade Administration

[A–122–847]

Notice of Amended Final Determination of Sales at Less Than Fair Value: Hard Red Spring Wheat From Canada

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

ACTION: Notice of Amended Final Determination of Sales at Less Than Fair Value.

EFFECTIVE DATE: October 6, 2003.

FOR FURTHER INFORMATION CONTACT: Julie Santoboni or Cole Kyle, Office 1, AD/CVD Enforcement, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW, Washington DC 20230; telephone (202) 482–4194 or (202) 482–1503, respectively.

Scope of the Investigation

For purposes of this investigation, the products covered are all varieties of hard red spring ("HRS") wheat from Canada. This includes, but is not limited to, varieties commonly referred to as Canada Western Red Spring, Canada Western Extra Strong, and Canada Prairie Spring Red. The merchandise subject to this investigation is currently classifiable under the following Harmonized Tariff Schedule of the United States ("HTSUS") subheadings: 1001.90.10.00, 1001.90.20.05, 1001.90.20.11, 1001.90.20.12, 1001.90.20.13, 1001.90.20.14, 1001.90.20.16, 1001.90.20.19, 1001.90.20.21, 1001.90.20.22, 1001.90.20.23, 1001.90.20.24, 1001.90.20.26, 1001.90.20.29, 1001.90.20.35, and 1001.90.20.96. This investigation does not cover imports of wheat that enter under the subheadings 1001.90.10.00 and 1001.90.20.96 that are not classifiable as hard red spring wheat. Although the HTSUS subheadings are provided for convenience and customs purposes, our written description of the scope of this proceeding is dispositive.

Amended Final Determination

On August 28, 2003, the Department of Commerce ("the Department") determined that HRS wheat from Canada is being, or is likely to be, sold in the United States at less than fair value ("LTFV"), as provided in section 735(a) of the Tariff Act of 1930, as amended ("the Act"). *See Notice of Final Determinations of Sales at Less Than Fair Value: Certain Durum and Hard Red Spring Wheat from Canada*, 68 FR 52741 (September 5, 2003). On September 8, 2003, we received ministerial error allegations, timely filed pursuant to 19 CFR. 351.224(c)(2), from the Canadian Wheat Board ("the CWB") regarding the Department's final margin calculations. The CWB requests that we correct the errors and publish a notice of amended final determination in the **Federal Register**, pursuant to 19 CFR. 351.224(e). The CWB's submission alleges the following with regard to the Department's cost of production ("COP") calculations.

Farmer 8—The CWB alleges that the Department inadvertently double-counted seed cleaning costs.

Farmer 17—The CWB alleges that the Department inadvertently double-counted certain labor costs.

Farmer 19—The CWB alleges that the Department inadvertently used an incorrect production quantity for the calculation of the crop insurance offset.

Farmer 20—The CWB alleges that the Department inadvertently allocated water rights costs to owned and rented land, rather than just owned land. The CWB also alleges that the Department

inadvertently mis-allocated fixed and variable overhead costs.

Farmer 23—The CWB alleges that the Department inadvertently understated actual labor costs allocated to livestock, thereby overstating the general and administrative ("G&A") and interest expenses allocated to HRS. The CWB also alleges that the Department inadvertently excluded variable overhead costs related to non-farming activities, thereby overstating the G&A and interest expenses allocated to HRS.

The North Dakota Wheat Commission ("the petitioner") submitted comments on the CWB's ministerial error allegations on September 10, 2003. The petitioner did not comment on the CWB's ministerial error allegations for Farmer 8 and the allocation of labor costs to livestock for Farmer 23. In response to the CWB's other allegations, the petitioner argues that they were not ministerial.

In accordance with section 735(e) of the Act, we have determined that certain ministerial errors were made in the calculation of the CWB's COP and constructed value ("CV") in our final margin calculations. For a detailed discussion of the above-cited ministerial error allegations and the Department's analysis, *see* Memorandum to Jeffrey A. May, "Allegation of Ministerial Errors; Final Determination in the Antidumping Duty Investigation of Certain Hard Red Spring Wheat from Canada" dated September 26, 2003, which is on file in room B–099 of the main Commerce building.

Therefore, in accordance with 19 CFR 351.224(e), we are amending the final determination of the antidumping duty investigation of HRS Wheat from Canada to correct the ministerial errors found in the calculation of the COP and CV. The final weighted-average dumping margins are:

Exporter/manufacturer	Original weighted-average margin percentage	Amended weighted-average margin percentage
Canadian Wheat Board	8.87	8.86
All Others	8.87	8.86

Continuation of Suspension of Liquidation

In accordance with section 735(c)(1)(B)(ii) of the Act, we are directing the U.S. Bureau of Customs and Border Protection ("BCBP") to continue to suspend liquidation of all imports of subject merchandise from Canada that are entered, or withdrawn from warehouse, for consumption on or after May 8, 2003, the date of publication of the *Notice of Preliminary Determinations of Sales at Less Than Fair Value: Certain Durum and Hard Red Spring Wheat from Canada*, 68 FR 24707 (May 8, 2003) in the **Federal Register**. The BCBP shall continue to require a cash deposit or the posting of a bond equal to the weighted-average amount by which the NV exceeds the EP, as indicated in the chart above. These suspension-of-liquidation instructions will remain in effect until further notice.

ITC Notification

In accordance with section 735(d) of the Tariff Act, we have notified the International Trade Commission of our amended final determination.

This determination is issued and published in accordance with sections 735(d) and 777(i)(1) of the Act.

Dated: September 29, 2003.

James J. Jochum,

Assistant Secretary for Import Administration.

[FR Doc. 03–25279 Filed 10–3–03; 8:45 am]

BILLING CODE 3510–DS–P

APPENDIX B

HEARING WITNESSES

CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject:	Durum and Hard Red Spring Wheat from Canada
Inv. Nos.:	701-TA-430A and 430B and 731-TA-1019A and 1019B (Final)
Date and Time:	September 4, 2003 - 9:30 a.m.

Sessions were held in connection with these investigations in the Main Hearing Room (room 101), 500 E Street, S.W., Washington, D.C.

CONGRESSIONAL APPEARANCES:

The Honorable Kent Conrad, United States Senator, State of North Dakota

The Honorable Byron L. Dorgan, United States Senator, State of North Dakota

The Honorable Earl Pomeroy, U.S. Congressman, 1st District, State of North Dakota

STATE LEGISLATIVE APPEARANCE:

The Honorable Jack Dalrymple, Lieutenant Governor, State of North Dakota, on behalf of Governor John Hoeven

OPENING REMARKS:

Petitioners (**Charles A. Hunnicutt**, Robins, Kaplan, Miller & Ciresi L.L.P.)
Respondents (**Richard O. Cunningham**, Steptoe & Johnson LLP)

In Support of the Imposition
of Countervailing and Antidumping Duties:

Robins, Kaplan, Miller & Ciresi L.L.P.
Washington, D.C.
on behalf of

North Dakota Wheat Commission
U.S. Durum Growers Association
Durum Growers Trade Action Committee

Alan Lee, Chairman, U.S. Wheat Associates; Ward County Representative, North Dakota Wheat Commission; and Immediate Past President, Berthold Farmers Elevator Co.

Mark Birdsall, Current Director and Past President, U.S. Durum Growers Association; and Member, Durum Education, Research, and Marketing Committee of Dakota Growers Pasta Company

Harlan Klein, Vice Chairman, North Dakota Wheat Commission; and Chairman, Southwest Grain Division, Cenex Harvest States

Neal Fisher, Administrator, North Dakota Wheat Commission

Jim Peterson, Marketing Director, North Dakota Wheat Commission

Andrew Wechsler, Managing Director, LECG, LLC

Andrew Szamosszegi, Managing Consultant, LECG, LLC

Vincent Smith, Professor of Agricultural Economics and Co-Director, Agricultural Marketing Policy Center, Montana State University

Charles A. Hunnicutt) – OF COUNSEL

In Opposition to the Imposition
of Countervailing and Antidumping Duties:

Steptoe & Johnson LLP
Washington, D.C.
on behalf of

The Canadian Wheat Board

David Przednowek, Analyst, Weather and Crop Surveillance Department, Canadian Wheat Board

Dwayne Lee, Market Analyst, Canadian Wheat Board

Rick Steinke, Marketing Manager, USA, Canadian Wheat Board

Richard Boltuck, Vice President, International Trade, Charles River Associates, Inc.

Daniel A. Sumner, Director, University of California Agricultural Issues Center; and Frank H. Buck, Jr. Chair Professor, Department of Agricultural and Resource Economics, University of California, Davis

Richard O. Cunningham)
Edward J. Krauland)
) – OF COUNSEL
Matthew S. Yeo)
David S. Lorello)

In Opposition to the Imposition
of Countervailing and Antidumping Duties (continued):

Weil, Gotshal & Manges LLP
Washington, D.C.
on behalf of

North American Millers' Association

David B. Potter, Vice President, Procurement and Industrial Markets, American Italian Pasta Company

Greg Viers, Wheat Procurement Manager, Barilla America, Inc.

James M. Meyer, Executive Vice President, Italgrani USA, Inc.

John I. Hillman, Executive Vice President, Bay State Milling Company

James Wilmes, Vice President, Grain and Feed Operations, Bay State Milling Company

Alan Koenig, Director, Grain, Milner Milling Company

John Miller, President, Miller Milling Company

Randy Marten, Vice President, Miller Milling Company

John Griffith, Vice President, Commodities, American Italian Pasta Company

Mark Vermylen, Vice President, A. Zerega's Sons, Inc.

Glenn Zearfoss, Vice President, Logistics, New World Pasta

James A. Bair, Vice President, North American Millers' Association

M. Jean Anderson)
) – OF COUNSEL
John M. Ryan)

In Opposition to the Imposition
of Countervailing and Antidumping Duties:

National Grain Trade Council
Washington, DC

Randy Linville, Chief Executive Officer, Scoular Company

Kent Horsager, President, Minneapolis Grain Exchange

REBUTTAL/CLOSING REMARKS:

Petitioners (**Charles A. Hunnicutt**, Robins, Kaplan, Miller & Ciresi L.L.P.; and
Andrew Wechsler, LECG, LLC)
Respondents (**Richard O. Cunningham**, Steptoe & Johnson LLP)

APPENDIX C

SUMMARY TABLES

Table C-1
Durum wheat: Summary data concerning the U.S. market, marketing years 2000/2001 - 2003/2004 (1)

(Quantity=million bushels, value=million dollars, unit values are per bushel; period changes=percent, except where noted)

Item	Reported data				Period changes			
	2000/2001	2001/2002	2002/2003	2003/2004	2000/2001 - 2002/2003	2000/2001 - 2001/2002	2001/2002 - 2002/2003	2002/2003 - 2003/2004
U.S. consumption quantity:								
Amount	68	61	61	(2)	-10.6	-9.5	-1.2	(2)
Producers' share (3)	81.4	69.3	78.3	(2)	-3.1	-12.2	9.1	(2)
Importers' share (3):								
Canada	18.0	29.3	20.8	(2)	2.7	11.2	-8.5	(2)
All other sources	0.5	1.5	0.9	(2)	0.4	1.0	-0.6	(2)
Total imports	18.6	30.7	21.7	(2)	3.1	12.2	-9.1	(2)
U.S. imports from:								
Canada	12	18	13	(4)	2.9	46.8	-29.9	(2)
All other sources	(5)	1	1	(4)	56.0	159.9	-40.0	(2)
All sources	13	19	13	(4)	4.3	49.9	-30.4	(2)
U.S. producers':								
Acreage planted (million acres)	3.9	2.9	2.9	2.8	-26.1	-26.1	(6)	-3.6
Acreage harvested (million acres)	3.6	2.8	2.7	2.7	-24.3	-21.9	-3.1	1.3
Production	110	84	79	87	-27.8	-23.6	-5.4	10.0
Yield (bushels/acre harvested) (3)	30.7	30.0	29.4	(7) 34.1	-1.3	-0.7	-0.6	4.7
Shipment quantity:								
U.S. shipments	55	43	47	49	-14.0	-23.0	11.7	2.5
Export shipments	56	50	37	35	-33.1	-10.7	-25.0	-6.6
Total shipments	111	93	85	84	-23.6	-16.8	-8.2	-1.5
Ending inventory quantity	29	21	15	19	-48.1	-29.2	-26.7	24.5
Inventories/total shipments (3)	26.2	22.3	17.8	22.5	-8.4	-3.9	-4.5	4.7
U.S. imports as percentage of U.S. production (3):								
U.S. imports from Canada/ U.S. production	11.1	21.4	15.8	(2)	4.7	10.2	-5.5	(2)
U.S. imports from all other sources/ U.S. production	0.3	1.1	0.7	(2)	0.4	0.8	-0.4	(2)

(1) June-May.
(2) Not applicable.
(3) "Reported data" are in percent and "period changes" are in percentage points.
(4) Not available.
(5) Less than 500,000 bushels.
(6) Less than negative 0.05 percent.
(7) As reported by USDA.

Note.--Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from USDA and Commerce data, using official USDA statistics for imports from Canada (excluding Canadian transshipments), Commerce statistics for imports from all other sources, and not including export shipments in U.S. apparent consumption.

Table C-2

Hard red spring wheat: Summary data concerning the U.S. market, marketing years 2000/2001 - 2003/2004 (1)

(Quantity=million bushels, value=million dollars, unit values are per bushel; period changes=percent, except where noted)

Item	Reported data				Period changes			
	2000/2001	2001/2002	2002/2003	2003/2004	2000/2001 - 2002/2003	2000/2001 - 2001/2002	2001/2002 - 2002/2003	2002/2003 - 2003/2004
U.S. consumption quantity:								
Amount	324	290	182	(2)	-43.8	-10.3	-37.3	(2)
Producers' share (3)	87.2	84.1	94.2	(2)	7.0	-3.1	10.1	(2)
Importers' share (3):								
Canada	12.8	15.9	5.8	(2)	-7.0	3.1	-10.1	(2)
All other sources	(4)	(4)	(4)	(2)	(5)	(5)	(5)	(2)
Total imports	12.8	15.9	5.8	(2)	-7.0	3.1	-10.1	(2)
U.S. imports from:								
Canada	41	46	11	(6)	-74.5	11.3	-77.1	(2)
All other sources	(7)	(7)	(7)	(6)	344.9	40.0	217.8	(2)
All sources	41	46	11	(6)	-74.5	11.3	-77.1	(2)
U.S. producers':								
Acreage planted (million acres)	14.4	14.8	14.9	13.0	3.3	2.8	0.5	-12.4
Acreage harvested (million acres)	13.6	13.8	12.6	12.7	-7.0	1.5	-8.4	0.5
Production	502	476	357	460	-29.0	-5.2	-25.1	29.0
Yield (bushels/acre harvested) (3)	37.0	34.6	28.2	(8) 36.7	-8.8	-2.4	-6.4	8.5
Shipment quantity:								
U.S. shipments	282	244	171	205	-39.3	-13.5	-29.8	19.3
Export shipments	227	216	254	255	11.9	-4.8	17.6	0.4
Total shipments	509	460	425	460	-16.5	-9.6	-7.6	8.0
Ending inventory quantity	194	210	141	141	-27.4	8.1	-32.8	0.2
Inventories/total shipments (3)	38.1	45.6	33.1	30.7	-5.0	7.5	-12.5	-2.4
U.S. imports as percentage of U.S. production (3):								
U.S. imports from Canada/ U.S. production	8.3	9.7	3.0	(2)	-5.3	1.4	-6.7	(2)
U.S. imports from all other sources/ U.S. production	(4)	(4)	(4)	(2)	(5)	(5)	(5)	(2)

(1) June-May.

(2) Not applicable.

(3) "Reported data" are in percent and "period changes" are in percentage points.

(4) Less than 0.05 percent.

(5) Less than 0.05 percentage points.

(6) Not available.

(7) Less than 500,000 bushels.

(8) As reported by USDA.

Note.--Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from USDA and Commerce data, using official USDA statistics for imports from Canada (excluding Canadian transshipments), Commerce statistics for imports from all other sources, and not including export shipments in U.S. apparent consumption.

Table C-3

Hard red winter wheat: Summary data concerning the U.S. market, marketing years 2000/2001 - 2003/2004 (1)

(Quantity=million bushels, value=million dollars, unit values are per bushel; period changes=percent, except where noted)

Item	Reported data				Period changes			
	2000/2001	2001/2002	2002/2003	2003/2004	2000/2001 - 2002/2003	2000/2001 - 2001/2002	2001/2002 - 2002/2003	2002/2003 - 2003/2004
U.S. consumption quantity:								
Amount	500	468	473	(2)	-5.5	-6.6	1.2	(2)
Producers' share (3)	99.9	99.7	99.7	(2)	-0.2	-0.2	(4)	(2)
Importers' share (3):								
Canada	0.1	0.3	0.3	(2)	0.2	0.2	(5)	(2)
All other sources	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Total imports	0.1	0.3	0.3	(2)	0.2	0.2	(5)	(2)
U.S. imports from:								
Canada	(6)	1	1	(7)	176.1	168.7	2.7	(2)
All other sources	(7)	(7)	(7)	(7)	(2)	(2)	(2)	(2)
All sources	(6)	1	1	(7)	176.1	168.7	2.7	(2)
U.S. producers':								
Acreage planted (million acres)	30.4	29.0	29.8	32.0	-1.9	-4.6	2.8	7.4
Acreage harvested (million acres)	23.6	20.9	19.6	25.7	-16.9	-11.4	-6.2	31.2
Production	846	767	609	1,093	-28.0	-9.3	-20.6	79.4
Yield (bushels/acre harvested) (3)	35.9	36.7	31.1	42.4	-4.8	0.8	-5.6	11.3
Shipment quantity:								
U.S. shipments	500	466	472	485	-5.6	-6.7	1.2	2.8
Export shipments	393	349	311	460	-20.7	-11.2	-10.8	47.7
Total shipments	893	815	783	945	-12.3	-8.7	-3.9	20.7
Ending inventory quantity	411	362	188	336	-54.1	-11.8	-48.0	78.5
Inventories/total shipments (3)	46.0	44.4	24.1	35.6	-21.9	-1.6	-20.4	11.5
U.S. imports as percentage of U.S. production (3):								
U.S. imports from Canada/ U.S. production	0.1	0.2	0.2	(2)	0.2	0.1	(5)	(2)
U.S. imports from all other sources/ U.S. production	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)

(1) June-May.

(2) Not applicable.

(3) "Reported data" are in percent and "period changes" are in percentage points.

(4) Less than negative 0.05 percentage points.

(5) Less than 0.05 percentage points.

(6) Less than 500,000 bushels.

(7) Not available.

Note.--Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from USDA and Commerce data, using official Commerce statistics for imports, and not including export shipments in U.S. apparent consumption.

Table C-4

Hard red spring and hard red winter wheat: Summary data concerning the U.S. market, marketing years 2000/2001 - 2003/2004 (1)

(Quantity=million bushels, value=million dollars, unit values are per bushel; period changes=percent, except where noted)

Item	Reported data				Period changes			
	2000/2001	2001/2002	2002/2003	2003/2004	2000/2001 - 2002/2003	2000/2001 - 2001/2002	2001/2002 - 2002/2003	2002/2003 - 2003/2004
U.S. consumption quantity:								
Amount	824	758	655	(2)	-20.5	-8.0	-13.6	(2)
Producers' share (3)	94.9	93.8	98.2	(2)	3.3	-1.2	4.4	(2)
Importers' share (3):								
Canada:								
Hard red spring wheat	5.0	6.1	1.6	(2)	-3.4	1.1	-4.5	(2)
Hard red winter wheat	0.1	0.2	0.2	(2)	0.1	0.1	(4)	(2)
Total	5.1	6.2	1.8	(2)	-3.3	1.2	-4.4	(2)
All other sources	(5)	(5)	(5)	(2)	(4)	(4)	(4)	(2)
Total imports	5.1	6.2	1.8	(2)	-3.3	1.2	-4.4	(2)
U.S. imports from:								
Canada (hard red winter wheat)	41	46	11	(6)	-74.5	11.3	-77.1	(2)
Canada (hard red winter wheat)	(7)	1	1	(6)	176.1	168.7	2.7	(2)
Canada (total)	42	47	12	(6)	-71.7	13.1	-75.0	(2)
All other sources	(7)	(7)	(7)	(6)	344.9	40.0	217.8	(2)
All sources	42	47	12	(6)	-71.7	13.1	-75.0	(2)
U.S. producers':								
Acreage planted (million acres)	44.8	43.8	44.7	45.1	-0.3	-2.2	2.0	0.8
Acreage harvested (million acres)	37.2	34.7	32.3	38.4	-13.3	-6.7	-7.0	19.2
Production	1,348	1,243	966	1,553	-28.4	-7.8	-22.3	60.8
Yield (bushels/acre harvested) (3)	36.2	35.8	29.9	40.4	-6.3	-0.4	-5.9	10.5
Shipment quantity:								
U.S. shipments	782	711	643	690	-17.8	-9.2	-9.5	7.2
Export shipments	620	565	565	715	-8.8	-8.9	0.1	26.4
Total shipments	1,402	1,276	1,209	1,405	-13.8	-9.0	-5.3	16.2
Ending inventory quantity	605	572	329	477	-45.6	-5.4	-42.5	45.0
Inventories/total shipments (3)	43.1	44.8	27.2	34.0	-15.9	1.7	-17.6	6.8
U.S. imports as percentage of U.S. production (3):								
U.S. imports from Canada/ U.S. production	3.1	3.8	1.2	(2)	-1.9	0.7	-2.6	(2)
U.S. imports from all other sources/ U.S. production	(5)	(5)	(5)	(2)	(4)	(4)	(4)	(2)

(1) June-May.
(2) Not applicable.
(3) "Reported data" are in percent and "period changes" are in percentage points.
(4) Less than 0.05 percentage points.
(5) Less than 0.05 percent.
(6) Not available.
(7) Less than 500,000 bushels.

Note.–Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from USDA and Commerce data, using official USDA statistics for imports of hard red spring wheat from Canada (excluding Canadian transshipments), Commerce statistics for imports of hard red winter wheat from Canada and imports from all other sources, and not including export shipments in U.S. apparent consumption.

Table C-1A

Durum wheat: Summary data concerning the U.S. (including exports) market, marketing years 2000/2001 - 2003/2004 (1)

(Quantity=million bushels, value=million dollars, unit values are per bushel; period changes=percent, except where noted)

Item	Reported data				Period changes			
	2000/2001	2001/2002	2002/2003	2003/2004	2000/2001 - 2002/2003	2000/2001 - 2001/2002	2001/2002 - 2002/2003	2002/2003 - 2003/2004
U.S. consumption quantity:								
Amount	124	111	98	(2)	-20.8	-10.0	-11.9	(2)
Producers' share (3)	89.8	83.1	86.6	(2)	-3.2	-6.8	3.6	(2)
Importers' share (3):								
Canada	9.9	16.1	12.8	(2)	2.9	6.2	-3.3	(2)
All other sources	0.3	0.8	0.6	(2)	0.3	0.5	-0.3	(2)
Total imports	10.2	16.9	13.4	(2)	3.2	6.8	-3.6	(2)
U.S. imports from:								
Canada	12	18	13	(4)	2.9	46.8	-29.9	(2)
All other sources	(5)	1	1	(4)	56.0	159.9	-40.0	(2)
All sources	13	19	13	(4)	4.3	49.9	-30.4	(2)
U.S. producers':								
Acreage planted (million acres)	3.9	2.9	2.9	2.8	-26.1	-26.1	(6)	-3.6
Acreage harvested (million acres)	3.6	2.8	2.7	2.7	-24.3	-21.9	-3.1	1.3
Production	110	84	79	87	-27.8	-23.6	-5.4	10.0
Yield (bushels/acre harvested) (3)	30.7	30.0	29.4	(7) 34.1	-1.3	-0.7	-0.6	4.7
Shipment quantity:								
U.S. shipments	55	43	47	49	-14.0	-23.0	11.7	2.5
Export shipments	56	50	37	35	-33.1	-10.7	-25.0	-6.6
Total shipments	111	93	85	84	-23.6	-16.8	-8.2	-1.5
Ending inventory quantity	29	21	15	19	-48.1	-29.2	-26.7	24.5
Inventories/total shipments (3)	26.2	22.3	17.8	22.5	-8.4	-3.9	-4.5	4.7
U.S. imports as percentage of U.S. production (3):								
U.S. imports from Canada/ U.S. production	11.1	21.4	15.8	(2)	4.7	10.2	-5.5	(2)
U.S. imports from all other sources/ U.S. production	0.3	1.1	0.7	(2)	0.4	0.8	-0.4	(2)

(1) June-May. Exports are included in U.S. consumption. Export shipments are not typically made by U.S. farmers.

(2) Not applicable.

(3) "Reported data" are in percent and "period changes" are in percentage points.

(4) Not available.

(5) Less than 500,000 bushels.

(6) Less than negative 0.05 percent.

(7) As reported by USDA.

Note.--Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from USDA and Commerce data, using official USDA statistics for imports from Canada (excluding Canadian transshipments), Commerce statistics for imports from all other sources, and including export shipments in U.S. apparent consumption.

Table C-2A

Hard red spring wheat: Summary data concerning the U.S. (including exports) market, marketing years 2000/2001 - 2003/2004 (1)

(Quantity=million bushels, value=million dollars, unit values are per bushel; period changes=percent, except where noted)

Item	Reported data				Period changes			
	2000/2001	2001/2002	2002/2003	2003/2004	2000/2001 - 2002/2003	2000/2001 - 2001/2002	2001/2002 - 2002/2003	2002/2003 - 2003/2004
U.S. consumption quantity:								
Amount	551	506	436	(2)	-20.8	-8.1	-13.9	(2)
Producers' share (3)	92.5	90.9	97.6	(2)	5.1	-1.6	6.7	(2)
Importers' share (3):								
Canada	7.5	9.1	2.4	(2)	-5.1	1.6	-6.7	(2)
All other sources	(4)	(4)	(4)	(2)	(5)	(5)	(5)	(2)
Total imports	7.5	9.1	2.4	(2)	-5.1	1.6	-6.7	(2)
U.S. imports from:								
Canada	41	46	11	(6)	-74.5	11.3	-77.1	(2)
All other sources	(7)	(7)	(7)	(6)	344.9	40.0	217.8	(2)
All sources	41	46	11	(6)	-74.5	11.3	-77.1	(2)
U.S. producers':								
Acreage planted (million acres)	14.4	14.8	14.9	13.0	3.3	2.8	0.5	-12.4
Acreage harvested (million acres)	13.6	13.8	12.6	12.7	-7.0	1.5	-8.4	0.5
Production	502	476	357	460	-29.0	-5.2	-25.1	29.0
Yield (bushels/acre harvested) (3)	37.0	34.6	28.2	(8) 36.7	-8.8	-2.4	-6.4	8.5
Shipment quantity:								
U.S. shipments	282	244	171	205	-39.3	-13.5	-29.8	19.3
Export shipments	227	216	254	255	11.9	-4.8	17.6	0.4
Total shipments	509	460	425	460	-16.5	-9.6	-7.6	8.0
Ending inventory quantity	194	210	141	141	-27.4	8.1	-32.8	0.2
Inventories/total shipments (3)	38.1	45.6	33.1	30.7	-5.0	7.5	-12.5	-2.4
U.S. imports as percentage of U.S. production (3):								
U.S. imports from Canada/ U.S. production	8.3	9.7	3.0	(2)	-5.3	1.4	-0.7	(2)
U.S. imports from all other sources/ U.S. production	(4)	(4)	(4)	(2)	(5)	(5)	(5)	(2)

(1) June-May. Exports are included in U.S. consumption. Export shipments are not typically made by U.S. farmers.

(2) Not applicable.

(3) "Reported data" are in percent and "period changes" are in percentage points.

(4) Less than 0.05 percent.

(5) Less than 0.05 percentage points.

(6) Not available.

(7) Less than 500,000 bushels.

(8) As reported by USDA.

Note.--Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from USDA and Commerce data, using official USDA statistics for imports from Canada (excluding Canadian transshipments), Commerce statistics for imports from all other sources, and including export shipments in U.S. apparent consumption.

Table C-3A

Hard red winter wheat: Summary data concerning the U.S. (including exports) market, marketing years 2000/2001 - 2003/2004 (1)

(Quantity=million bushels, value=million dollars, unit values are per bushel; period changes=percent, except where noted)

Item	Reported data				Period changes			
	2000/2001	2001/2002	2002/2003	2003/2004	2000/2001 - 2002/2003	2000/2001 - 2001/2002	2001/2002 - 2002/2003	2002/2003 - 2003/2004
U.S. consumption quantity:								
Amount	893	817	785	(2)	-12.2	-8.6	-3.9	(2)
Producers' share (3)	99.9	99.8	99.8	(2)	-0.1	-0.1	(4)	(2)
Importers' share (3):								
Canada	0.1	0.2	0.2	(2)	0.1	0.1	(5)	(2)
All other sources	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Total imports	0.1	0.2	0.2	(2)	0.1	0.1	(5)	(2)
U.S. imports from:								
Canada	(6)	1	1	(7)	176.1	168.7	2.7	(2)
All other sources	(7)	(7)	(7)	(7)	(2)	(2)	(2)	(2)
All sources	(6)	1	1	(7)	176.1	168.7	2.7	(2)
U.S. producers':								
Acreage planted (million acres)	30.4	29.0	29.8	32.0	-1.9	-4.6	2.8	7.4
Acreage harvested (million acres)	23.6	20.9	19.6	25.7	-16.9	-11.4	-6.2	31.2
Production	846	767	609	1,093	-28.0	-9.3	-20.6	79.4
Yield (bushels/acre harvested) (3)	35.9	36.7	31.1	42.4	-4.8	0.8	-5.6	11.3
Shipment quantity:								
U.S. shipments	500	466	472	485	-5.6	-6.7	1.2	2.8
Export shipments	393	349	311	460	-20.7	-11.2	-10.8	47.7
Total shipments	893	815	783	945	-12.3	-8.7	-3.9	20.7
Ending inventory quantity	411	362	188	336	-54.1	-11.8	-48.0	78.5
Inventories/total shipments (3)	46.0	44.4	24.1	35.6	-21.9	-1.6	-20.4	11.5
U.S. imports as percentage of U.S. production (3):								
U.S. imports from Canada/ U.S. production	0.1	0.2	0.2	(2)	0.2	0.1	(5)	(2)
U.S. imports from all other sources/ U.S. production	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)

(1) June-May. Exports are included in U.S. consumption. Export shipments are not typically made by U.S. farmers.

(2) Not applicable.

(3) "Reported data" are in percent and "period changes" are in percentage points.

(4) Less than negative 0.05 percentage points.

(5) Less than 0.05 percentage points.

(6) Less than 500,000 bushels.

(7) Not available.

Note.--Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from USDA and Commerce data, using official Commerce statistics for imports, and including export shipments in U.S. apparent consumption.

Table C-4A

Hard red spring and hard red winter wheat: Summary data concerning the U.S. (including exports) market, marketing years 2000/2001 - 2003/2004 (1)

(Quantity=million bushels, value=million dollars, unit values are per bushel; period changes=percent, except where noted)

Item	Reported data				Period changes			
	2000/2001	2001/2002	2002/2003	2003/2004	2000/2001 - 2002/2003	2000/2001 - 2001/2002	2001/2002 - 2002/2003	2002/2003 - 2003/2004
U.S. consumption quantity:								
Amount	1,444	1,323	1,221	(2)	-15.5	-8.4	-7.7	(2)
Producers' share (3)	97.1	96.4	99.0	(2)	1.9	-0.7	2.6	(2)
Importers' share (3):								
Canada:								
Hard red spring wheat	2.9	3.5	0.9	(2)	-2.0	0.6	-2.6	(2)
Hard red winter wheat	(4)	0.1	0.1	(2)	0.1	0.1	(5)	(2)
Total	2.9	3.6	1.0	(2)	-1.9	0.7	-2.6	(2)
All other sources	(4)	(4)	(4)	(2)	(5)	(5)	(5)	(2)
Total imports	2.9	3.6	1.0	(2)	-1.9	0.7	-2.6	(2)
U.S. imports from:								
Canada (hard red winter wheat)	41	46	11	(6)	-74.5	11.3	-77.1	(2)
Canada (hard red winter wheat)	(7)	1	1	(6)	176.1	168.7	2.7	(2)
Canada (total)	42	47	12	(6)	-71.7	13.1	-75.0	(2)
All other sources	(7)	(7)	(7)	(6)	344.9	40.0	217.8	(2)
All sources	42	47	12	(6)	-71.7	13.1	-75.0	(2)
U.S. producers':								
Acreage planted (million acres)	44.8	43.8	44.7	45.1	-0.3	-2.2	2.0	0.8
Acreage harvested (million acres)	37.2	34.7	32.3	38.4	-13.3	-6.7	-7.0	19.2
Production	1,348	1,243	966	1,553	-28.4	-7.8	-22.3	60.8
Yield (bushels/acre harvested) (3)	36.2	35.8	29.9	40.4	-6.3	-0.4	-5.9	10.5
Shipment quantity:								
U.S. shipments	782	711	643	690	-17.8	-9.2	-9.5	7.2
Export shipments	620	565	565	715	-8.8	-8.9	0.1	26.4
Total shipments	1,402	1,276	1,209	1,405	-13.8	-9.0	-5.3	16.2
Ending inventory quantity	605	572	329	477	-45.6	-5.4	-42.5	45.0
Inventories/total shipments (3)	43.1	44.8	27.2	34.0	-15.9	1.7	-17.6	6.8
U.S. imports as percentage of U.S. production (3):								
U.S. imports from Canada/ U.S. production	3.1	3.8	1.2	(2)	-1.9	0.7	-2.6	(2)
U.S. imports from all other sources/ U.S. production	(4)	(4)	(4)	(2)	(5)	(5)	(5)	(2)

(1) June-May. Exports are included in U.S. consumption. Export shipments are not typically made by U.S. farmers.

(2) Not applicable.

(3) "Reported data" are in percent and "period changes" are in percentage points.

(4) Less than 0.05 percent.

(5) Less than 0.05 percentage points.

(6) Not available.

(7) Less than 500,000 bushels.

Note.--Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from USDA and Commerce data, using official USDA statistics for imports of hard red spring wheat from Canada (excluding Canadian transshipments), Commerce statistics for imports of hard red winter wheat from Canada and imports from all other sources, and including export shipments in U.S. apparent consumption.

Table C-5

Durum wheat: Alternative summary data concerning the U.S. market, marketing years 2000/2001 - 2003/2004 (1)

(million bushels, value=million dollars, unit values are per bushel, period changes=percent, except where noted)

Item	Reported data				Period changes			
	2000/2001	2001/2002	2002/2003	2003/2004	2000/2001 - 2002/2003	2000/2001 - 2001/2002	2001/2002 - 2002/2003	2002/2003 - 2003/2004
U.S. consumption quantity:								
Amount	68	63	62	(2)	-8.3	-7.9	-0.5	(2)
Producers' share (3)	81.1	67.8	76.1	(2)	-5.0	-13.3	8.3	(2)
Importers' share (3):								
Canada	18.4	30.8	23.1	(2)	4.7	12.4	-7.7	(2)
All other sources	0.5	1.5	0.9	(2)	0.4	0.9	-0.6	(2)
Total imports	18.9	32.2	23.9	(2)	5.0	13.3	-8.3	(2)
U.S. imports from:								
Canada:								
Quantity	13	19	14	(4)	15.0	54.1	-25.4	(2)
Value	56	86	65	(4)	18.2	57.3	-24.9	(2)
Unit value	$4.37	$4.46	$4.49	(2)	2.8	2.0	0.7	(2)
All other sources:								
Quantity	(5)	1	1	(4)	56.0	159.9	-40.0	(2)
Value	1	4	2	(4)	76.4	189.5	-39.1	(2)
Unit value	$3.51	$3.91	$3.97	(2)	13.1	11.4	1.6	(2)
All sources:								
Quantity	13	20	15	(4)	16.1	57.0	-26.1	(2)
Value	56	90	67	(4)	19.4	60.2	-25.4	(2)
Unit value	$4.34	$4.43	$4.47	(2)	2.9	2.0	0.9	(2)
U.S. producers':								
Acreage planted (million acres)	3.9	2.9	2.9	2.8	-26.1	-26.1	(6)	-3.6
Acreage harvested (million acres)	3.6	2.8	2.7	2.7	-24.3	-21.9	-3.1	1.3
Production	110	84	79	87	-27.8	-23.6	-5.4	10.0
Yield (bushels/acre harvested) (3)	30.7	30.0	29.4	(7) 34.1	-1.3	-0.7	-0.6	4.7
Shipment quantity:								
U.S. shipments	55	43	47	49	-14.0	-23.0	11.7	2.5
Export shipments	56	50	37	35	-33.1	-10.7	-25.0	-6.6
Total shipments	111	93	85	84	-23.6	-16.8	-8.2	-1.5
Ending inventory quantity	29	21	15	19	-48.1	-29.2	-26.7	24.5
Inventories/total shipments (3)	26.2	22.3	17.8	22.5	-8.4	-3.9	-4.5	4.7
U.S. imports as percentage of U.S. production (3):								
U.S. imports from Canada/ U.S. production	11.4	23.0	18.1	(2)	6.7	11.6	-4.9	(2)
U.S. imports from all other sources/ U.S. production	0.3	1.1	0.7	(2)	0.4	0.8	-0.4	(2)

(1) June-May.

(2) Not applicable.

(3) "Reported data" are in percent and "period changes" are in percentage points.

(4) Not available.

(5) Less than 500,000 bushels.

(6) Less than negative 0.05 percent.

(7) As reported by USDA.

Note.--Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from USDA and Commerce data, using official Commerce statistics for imports, and not including export shipments in U.S. apparent consumption.

Table C-6

Hard red spring wheat: Alternative summary data concerning the U.S. market, marketing years 2000/2001 - 2003/2004 (1)

(Quantity=million bushels, value=million dollars, unit values are per bushel, period changes=percent, except where noted)

Item	Reported data				Period changes			
	2000/2001	2001/2002	2002/2003	2003/2004	2000/2001 - 2002/2003	2000/2001 - 2001/2002	2001/2002 - 2002/2003	2002/2003 - 2003/2004
U.S. consumption quantity:								
Amount	332	298	187	(2)	-43.7	-10.1	-37.4	(2)
Producers' share (3)	85.2	82.0	91.9	(2)	6.7	-3.2	9.9	(2)
Importers' share (3):								
Canada	14.8	18.0	8.1	(2)	-6.7	3.2	-9.9	(2)
All other sources	(4)	(4)	(4)	(2)	(5)	(5)	(5)	(2)
Total imports	14.8	18.0	8.1	(2)	-6.7	3.2	-9.9	(2)
U.S. imports from:								
Canada:								
Quantity	49	54	15	(6)	-69.4	9.1	-71.9	(2)
Value	175	210	61	(6)	-65.0	19.8	-70.8	(2)
Unit value	$3.56	$3.91	$4.06	(2)	14.1	9.9	3.9	(2)
All other sources:								
Quantity	(7)	(7)	(7)	(6)	344.9	40.0	217.8	(2)
Value	(8)	(8)	(8)	(6)	93.7	23.2	57.3	(2)
Unit value	$24.73	$21.76	$10.77	(2)	-56.5	-12.0	-50.5	(2)
All sources:								
Quantity	49	54	15	(6)	-69.4	9.1	-71.9	(2)
Value	175	210	61	(6)	-65.0	19.8	-70.8	(2)
Unit value	$3.56	$3.91	$4.07	(2)	14.2	9.9	3.9	(2)
U.S. producers':								
Acreage planted (million acres)	14.4	14.8	14.9	13.0	3.3	2.8	0.5	-12.4
Acreage harvested (million acres)	13.6	13.8	12.6	12.7	-7.0	1.5	-8.4	0.5
Production	502	476	357	460	-29.0	-5.2	-25.1	29.0
Yield (bushels/acre harvested) (3)	37.0	34.6	28.2	(9) 36.7	-8.8	-2.4	-8.4	8.5
Shipment quantity:								
U.S. shipments	282	244	171	205	-39.3	-13.5	-29.8	19.3
Export shipments	227	216	254	255	11.9	-4.8	17.6	0.4
Total shipments	509	460	425	460	-16.5	-9.6	-7.6	8.0
Ending inventory quantity	194	210	141	141	-27.4	8.1	-32.8	0.2
Inventories/total shipments (3)	38.1	45.6	33.1	30.7	-5.0	7.5	-12.5	-2.4
U.S. imports as percentage of U.S. production (3):								
U.S. imports from Canada/ U.S. production	9.8	11.3	4.2	(2)	-5.6	1.5	-7.0	(2)
U.S. imports from all other sources/ U.S. production	(4)	(4)	(4)	(2)	(5)	(5)	(5)	(2)

(1) June-May.

(2) Not applicable.

(3) "Reported data" are in percent and "period changes" are in percentage points.

(4) Less than 0.05 percent.

(5) Less than 0.05 percentage points.

(6) Not available.

(7) Less than 500,000 bushels.

(8) Less than $500,000.

(9) As reported by USDA.

Note.--Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from USDA and Commerce data, using official Commerce statistics for imports, and not including export shipments in U.S. apparent consumption.

Table C-7

Hard red spring and hard red winter wheat: Alternative summary data concerning the U.S. market, marketing years 2000/2001 - 2003/2004 (1)

(Quantity=million bushels, value=million dollars, unit values are per bushel; period changes=percent, except where noted)

Item	Reported data				Period changes			
	2000/2001	2001/2002	2002/2003	2003/2004	2000/2001 - 2002/2003	2000/2001 - 2001/2002	2001/2002 - 2002/2003	2002/2003 - 2003/2004
U.S. consumption quantity:								
Amount	832	766	660	(2)	-20.7	-8.0	-13.8	(2)
Producers' share (3)	94.0	92.8	97.5	(2)	3.5	-1.2	4.7	(2)
Importers' share (3):								
Canada:								
Hard red spring wheat	5.9	7.0	2.3	(2)	-3.6	1.1	-4.7	(2)
Hard red winter wheat	0.1	0.2	0.2	(2)	0.1	0.1	(4)	(2)
Total	6.0	7.2	2.5	(2)	-3.5	1.2	-4.7	(2)
All other sources	(5)	(5)	(5)	(2)	(4)	(4)	(4)	(2)
Total imports	6.0	7.2	2.5	(2)	-3.5	1.2	-4.7	(2)
U.S. imports from:								
Canada (hard red spring wheat):								
Quantity	49	54	15	(6)	-69.4	9.1	-71.9	(2)
Value	175	210	61	(6)	-65.0	19.8	-70.8	(2)
Unit value	$3.56	$3.91	$4.06	(2)	14.1	9.9	3.9	(2)
Canada (hard red winter wheat):								
Quantity	(7)	1	1	(6)	176.1	168.7	2.7	(2)
Value	1	4	5	(6)	312.5	247.5	18.7	(2)
Unit value	$2.51	$3.25	$3.75	(2)	49.4	29.3	15.5	(2)
Canada (total):								
Quantity	50	55	16	(6)	-67.0	10.6	-70.2	(2)
Value	176	214	66	(6)	-62.5	21.3	-69.1	(2)
Unit value	$3.55	$3.90	$4.04	(2)	13.8	9.7	3.7	(2)
All other sources:								
Quantity	(7)	(7)	(7)	(6)	344.9	40.0	217.8	(2)
Value	(8)	(8)	(8)	(6)	93.7	23.2	57.3	(2)
Unit value	$24.73	$21.76	$10.77	(2)	-56.5	-12.0	-50.5	(2)
All sources:								
Quantity	50	55	16	(6)	-67.0	10.6	-70.2	(2)
Value	176	214	66	(6)	-62.5	21.3	-69.1	(2)
Unit value	$3.55	$3.90	$4.04	(2)	13.8	9.7	3.7	(2)
U.S. producers':								
Acreage planted (million acres)	44.8	43.8	44.7	45.1	-0.3	-2.2	2.0	0.8
Acreage harvested (million acres)	37.2	34.7	32.3	38.4	-13.3	-6.7	-7.0	19.2
Production	1,348	1,243	966	1,553	-28.4	-7.8	-22.3	60.8
Yield (bushels/acre harvested) (3)	36.2	35.8	29.9	40.4	-6.3	-0.4	-5.9	10.5
Shipment quantity:								
U.S. shipments	782	711	643	690	-17.8	-9.2	-9.5	7.2
Export shipments	620	565	565	715	-8.8	-8.9	0.1	26.4
Total shipments	1,402	1,276	1,209	1,405	-13.8	-9.0	-5.3	16.2
Ending inventory quantity	605	572	329	477	-45.6	-5.4	-42.5	45.0
Inventories/total shipments (3)	43.1	44.8	27.2	34.0	-15.9	1.7	-17.6	6.8
U.S. imports as percentage of U.S. production (3):								
U.S. imports from Canada/ U.S. production	3.7	4.4	1.7	(2)	-2.0	0.7	-2.7	(2)
U.S. imports from all other sources/ U.S. production	(5)	(5)	(5)	(2)	(4)	(4)	(4)	(2)

(1) June-May.

(2) Not applicable.

(3) "Reported data" are in percent and "period changes" are in percentage points.

(4) Less than 0.05 percentage points.

(5) Less than 0.05 percent.

(6) Not available.

(7) Less than 500,000 bushels.

(8) Less than $500,000.

Note.--Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from USDA and Commerce data, using official Commerce statistics for imports, and not including export shipments in U.S. apparent consumption.

Table C-5A

Durum wheat: Alternative summary data concerning the U.S. (including exports) market, marketing years 2000/2001 - 2003/2004 (1)

(Quantity=million bushels, value=million dollars, unit values are per bushel; period changes=percent, except where noted)

Item	Reported data				Period changes			
	2000/2001	2001/2002	2002/2003	2003/2004	2000/2001 - 2002/2003	2000/2001 - 2001/2002	2001/2002 - 2002/2003	2002/2003 - 2003/2004
U.S. consumption quantity:								
Amount	124	113	100	(2)	-19.5	-9.2	-11.4	(2)
Producers' share (3)	89.6	82.1	85.0	(2)	-4.6	-7.6	3.0	(2)
Importers' share (3):								
Canada	10.1	17.1	14.4	(2)	4.3	7.0	-2.7	(2)
All other sources	0.3	0.8	0.5	(2)	0.3	0.5	-0.3	(2)
Total imports	10.4	17.9	15.0	(2)	4.6	7.6	-3.0	(2)
U.S. imports from:								
Canada:								
Quantity	13	19	14	(4)	15.0	54.1	-25.4	(2)
Value	55	86	65	(4)	18.2	57.3	-24.9	(2)
Unit value	$4.37	$4.46	$4.49	(2)	2.8	2.0	0.7	(2)
All other sources:								
Quantity	(5)	1	1	(4)	56.0	159.9	-40.0	(2)
Value	1	4	2	(4)	76.4	189.5	-39.1	(2)
Unit value	$3.51	$3.91	$3.97	(2)	13.1	11.4	1.6	(2)
All sources:								
Quantity	13	20	15	(4)	16.1	57.0	-26.1	(2)
Value	56	90	67	(4)	19.4	60.2	-25.4	(2)
Unit value	$4.34	$4.43	$4.47	(2)	2.9	2.0	0.9	(2)
U.S. producers':								
Acreage planted (million acres)	3.9	2.9	2.9	2.8	-26.1	-26.1	(6)	-3.6
Acreage harvested (million acres)	3.6	2.8	2.7	2.7	-24.3	-21.9	-3.1	1.3
Production	110	84	79	87	-27.8	-23.6	-5.4	10.0
Yield (bushels/acre harvested) (3)	30.7	30.0	29.4	(7) 34.1	-1.3	-0.7	-0.6	4.7
Shipment quantity:								
U.S. shipments	55	43	47	49	-14.0	-23.0	11.7	2.5
Export shipments	56	50	37	35	-33.1	-10.7	-25.0	-6.6
Total shipments	111	93	85	84	-23.6	-16.8	-8.2	-1.5
Ending inventory quantity	29	21	15	19	-48.1	-29.2	-26.7	24.5
Inventories/total shipments (3)	26.2	22.3	17.8	22.5	-8.4	-3.9	-4.5	4.7
U.S. imports as percentage of U.S. production (3):								
U.S. imports from Canada/ U.S. production	11.4	23.0	18.1	(2)	6.7	11.6	-4.9	(2)
U.S. imports from all other sources/ U.S. production	0.3	1.1	0.7	(2)	0.4	0.8	-0.4	(2)

(1) June-May. Exports are included in U.S. consumption. Export shipments are not typically made by U.S. farmers.

(2) Not applicable.

(3) "Reported data" are in percent and "period changes" are in percentage points.

(4) Not available.

(5) Less than 500,000 bushels.

(6) Less than negative 0.05 percent.

(7) As reported by USDA.

Note.–Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from USDA and Commerce data, using official Commerce statistics for imports, and including export shipments in U.S. apparent consumption.

Table C-6A

Hard red spring wheat: Alternative summary data concerning the U.S. (including exports) market, marketing years 2000/2001 - 2003/2004 (1)

(Quantity=million bushels, value=million dollars, unit values are per bushel; period changes=percent, except where noted)

Item	Reported data				Period changes			
	2000/2001	2001/2002	2002/2003	2003/2004	2000/2001 - 2002/2003	2000/2001 - 2001/2002	2001/2002 - 2002/2003	2002/2003 - 2003/2004
U.S. consumption quantity:								
Amount	559	514	441	(2)	-21.1	-8.0	-14.3	(2)
Producers' share (3)	91.2	89.6	96.6	(2)	5.4	-1.6	7.0	(2)
Importers' share (3):								
Canada	8.8	10.4	3.4	(2)	-5.4	1.6	-7.0	(2)
All other sources	(4)	(4)	(4)	(2)	(5)	(5)	(5)	(2)
Total imports	8.8	10.4	3.4	(2)	-5.4	1.6	-7.0	(2)
U.S. imports from:								
Canada:								
Quantity	49	54	15	(6)	-69.4	9.1	-71.9	(2)
Value	175	210	61	(6)	-65.0	19.8	-70.8	(2)
Unit value	$3.56	$3.91	$4.06	(2)	14.1	9.9	3.9	(2)
All other sources:								
Quantity	(7)	(7)	(7)	(6)	344.9	40.0	217.8	(2)
Value	(8)	(8)	(8)	(6)	93.7	23.2	57.3	(2)
Unit value	$24.73	$21.76	$10.77	(2)	-56.5	-12.0	-50.5	(2)
All sources:								
Quantity	49	54	15	(6)	-69.4	9.1	-71.9	(2)
Value	175	210	61	(6)	-65.0	19.8	-70.8	(2)
Unit value	$3.56	$3.91	$4.07	(2)	14.2	9.9	3.9	(2)
U.S. producers':								
Acreage planted (million acres)	14.4	14.8	14.9	13.0	3.3	2.8	0.5	-12.4
Acreage harvested (million acres)	13.6	13.8	12.6	12.7	-7.0	1.5	-8.4	0.5
Production	502	476	357	460	-29.0	-5.2	-25.1	29.0
Yield (bushels/acre harvested) (3)	37.0	34.6	28.2	(9) 36.7	-8.8	-2.4	-6.4	8.5
Shipment quantity:								
U.S. shipments	282	244	171	205	-39.3	-13.5	-29.8	19.3
Export shipments	227	216	254	255	11.9	-4.8	17.6	0.4
Total shipments	509	460	425	460	-16.5	-9.6	-7.6	8.0
Ending inventory quantity	194	210	141	141	-27.4	8.1	-32.8	0.2
Inventories/total shipments (3)	38.1	45.6	33.1	30.7	-5.0	7.5	-12.5	-2.4
U.S. imports as percentage of U.S. production (3):								
U.S. imports from Canada/ U.S. production	9.8	11.3	4.2	(2)	-5.6	1.5	-7.0	(2)
U.S. imports from all other sources/ U.S. production	(4)	(4)	(4)	(2)	(5)	(5)	(5)	(2)

(1) June-May. Exports are included in U.S. consumption. Export shipments are not typically made by U.S. farmers.

(2) Not applicable.

(3) "Reported data" are in percent and "period changes" are in percentage points.

(4) Less than 0.05 percent.

(5) Less than 0.05 percentage points.

(6) Not available.

(7) Less than 500,000 bushels.

(8) Less than $500,000.

(9) As reported by USDA.

Note.–Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from USDA and Commerce data, using official Commerce statistics for imports, and including export shipments in U.S. apparent consumption.

Table C-7A

Hard red spring and hard red winter wheat: Alternative summary data concerning the U.S. (including exports) market, marketing years 2000/2001 - 2003/2004 (1)

(Quantity=million bushels, value=million dollars, unit values are per bushel; period changes=percent, except where noted)

Item	Reported data				Period changes			
	2000/2001	2001/2002	2002/2003	2003/2004	2000/2001 - 2002/2003	2000/2001 - 2001/2002	2001/2002 - 2002/2003	2002/2003 - 2003/2004
U.S. consumption quantity:								
Amount	1,452	1,331	1,225	(2)	-15.6	-8.4	-7.9	(2)
Producers' share (3)	96.6	95.9	98.7	(2)	2.1	-0.7	2.8	(2)
Importers' share (3):								
Canada:								
Hard red spring wheat	3.4	4.0	1.2	(2)	-2.2	0.6	-2.8	(2)
Hard red winter wheat	(4)	0.1	0.1	(2)	0.1	0.1	(5)	(2)
Total	3.4	4.1	1.3	(2)	-2.1	0.7	-2.8	(2)
All other sources	(4)	(4)	(4)	(2)	(5)	(5)	(5)	(2)
Total imports	3.4	4.1	1.3	(2)	-2.1	0.7	-2.8	(2)
U.S. imports from:								
Canada (hard red spring wheat):								
Quantity	49	54	15	(6)	-69.4	9.1	-71.9	(2)
Value	175	210	61	(6)	-65.0	19.8	-70.8	(2)
Unit value	$3.56	$3.91	$4.06	(2)	14.1	9.9	3.9	(2)
Canada (hard red winter wheat):								
Quantity	(7)	1	1	(6)	176.1	168.7	2.7	(2)
Value	1	4	5	(6)	312.5	247.5	18.7	(2)
Unit value	$2.51	$3.25	$3.75	(2)	49.4	29.3	15.5	(2)
Canada (total):								
Quantity	50	55	16	(6)	-67.0	10.6	-70.2	(2)
Value	176	214	66	(6)	-62.5	21.3	-69.1	(2)
Unit value	$3.55	$3.90	$4.04	(2)	13.8	9.7	3.7	(2)
All other sources:								
Quantity	(7)	(7)	(7)	(6)	344.9	40.0	217.8	(2)
Value	(8)	(8)	(8)	(6)	93.7	23.2	57.3	(2)
Unit value	$24.73	$21.76	$10.77	(2)	-56.5	-12.0	-50.5	(2)
All sources:								
Quantity	50	55	16	(6)	-67.0	10.6	-70.2	(2)
Value	176	214	66	(6)	-62.5	21.3	-69.1	(2)
Unit value	$3.55	$3.90	$4.04	(2)	13.8	9.7	3.7	(2)
U.S. producers':								
Acreage planted (million acres)	44.8	43.8	44.7	45.1	-0.3	-2.2	2.0	0.8
Acreage harvested (million acres)	37.2	34.7	32.3	38.4	-13.3	-6.7	-7.0	19.2
Production	1,348	1,243	966	1,553	-28.4	-7.8	-22.3	60.8
Yield (bushels/acre harvested) (3)	36.2	35.8	29.9	40.4	-6.3	-0.4	-5.9	10.5
Shipment quantity:								
U.S. shipments	782	711	643	690	-17.8	-9.2	-9.5	7.2
Export shipments	620	565	565	715	-8.8	-8.9	0.1	26.4
Total shipments	1,402	1,276	1,209	1,405	-13.8	-9.0	-5.3	16.2
Ending inventory quantity	605	572	329	477	-45.6	-5.4	-42.5	45.0
Inventories/total shipments (3)	43.1	44.8	27.2	34.0	-15.9	1.7	-17.6	6.8
U.S. imports as percentage of U.S. production (3):								
U.S. imports from Canada/ U.S. production	3.7	4.4	1.7	(2)	-2.0	0.7	-2.7	(2)
U.S. imports from all other sources/ U.S. production	(4)	(4)	(4)	(2)	(5)	(5)	(5)	(2)

(1) June-May. Exports are included in U.S. consumption. Export shipments are not typically made by U.S. farmers.

(2) Not applicable.

(3) "Reported data" are in percent and "period changes" are in percentage points.

(4) Less than 0.05 percent.

(5) Less than 0.05 percentage points.

(6) Not available.

(7) Less than 500,000 bushels.

(8) Less than $500,000.

Note.--Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from USDA and Commerce data, using official Commerce statistics for imports, and including export shipments in U.S. apparent consumption.

APPENDIX D

OFFICIAL USDA DATA
(UNREVISED BY STAFF)

Table D-1
Durum, hard red spring, and hard red winter wheat: Supply and disappearance data, marketing years 2000/01, 2001/02, 2002/03, and projected 2003/04

Source	Marketing year[1]			
	2000/01	2001/02	2002/03[2]	2003/04[3]
	Quantity (*million bushels*)			
Beginning stocks:[4]				
Durum wheat	50	45	33	28
Hard red spring wheat	218	210	230	145
Hard red winter wheat	458	411	363	189
Hard red spring and hard red winter wheat	676	621	593	334
Total beginning stocks	726	666	626	362
Production:[5]				
Durum wheat	110	84	79	87
Hard red spring wheat	502	476	357	460
Hard red winter wheat	846	767	609	1,093
Hard red spring and hard red winter wheat	1,348	1,243	966	1,553
Total production	1,458	1,327	1,045	1,640
Total supply:[6]				
Durum wheat	185	163	142	145
Hard red spring wheat	779	750	610	645
Hard red winter wheat	1,304	1,179	980	1,290
Hard red spring and hard red winter wheat	2,083	1,929	1,590	1,935
Total	2,268	2,092	1,732	2,080
Domestic use:[7]				
Durum wheat	85	80	77	85
Hard red spring wheat	342	303	211	237
Hard red winter wheat	500	467	479	491
Hard red spring and hard red winter wheat	842	770	691	728
Total domestic use	927	850	768	813

Table D-1--*Continued*
Durum, hard red spring, and hard red winter wheat: Supply and disappearance data, marketing years 2000/01, 2001/02, 2002/03, and projected 2003/04

Source	Marketing year[1]			
	2000/01	2001/02	2002/03[2]	2003/04[3]
	Quantity (*million bushels*)			
Exports:[8]				
Durum wheat	56	50	37	35
Hard red spring wheat	227	216	254	255
Hard red winter wheat	393	349	311	460
Hard red spring and hard red winter wheat	620	565	565	715
Total exports	676	615	603	750
Total disappearance:[9]				
Durum wheat	140	130	115	120
Hard red spring wheat	569	520	465	492
Hard red winter wheat	893	815	791	951
Hard red spring and hard red winter wheat	1,462	1,335	1,256	1,443
Total	1,602	1,465	1,371	1,563
Ending stocks:[4]				
Durum wheat	45	33	28	25
Hard red spring wheat	210	230	145	153
Hard red winter wheat	411	363	189	339
Hard red spring and hard red winter wheat	621	593	334	492
Total ending stocks	666	626	362	517

Table D-1--*Continued*
Durum, hard red spring, and hard red winter wheat: Supply and disappearance data, marketing years 2000/01, 2001/02, 2002/03, and projected 2003/04

[1] The U.S. marketing year begins June 1 and ends May 31.
[2] Marketing year 2002/03 data are estimates.
[3] Marketing year 2003/04 data are projections.
[4] Inventory data collected as of June 1 are used for both beginning and ending inventory data. Separate on-farms and off-farms inventory data are available for durum and all wheat, but are not available for hard red spring and hard red winter wheat (see table D-2). Off-farms inventory data include stocks held at mills, elevators, warehouses, terminals, and processors. Imports are included in inventory data to the extent that inventories of imported product are held in off-farms facilities. Inventory data do not include quantities in transit, quantities of flour and wheat products, or quantities of all captive wheat.
[5] Production data are collected at the farmers' level of trade. These figures include estimates of feed and seed wheat that does not leave the farm.
[6] Total supply equals the sum of beginning inventory, production, and imports. These figures are slightly overstated because inventory data include imports and imports include quantities of flour and products in wheat equivalent.
[7] Domestic use equals total supply minus ending inventory and exports. The USDA does not survey the industry to collect these data. Because domestic use figures are derived from total supply, they include quantities of imports.
[8] Exports include flour and products in wheat equivalent.
[9] Total disappearance equals the sum of domestic use and exports.

Note.–Because of rounding, figures may not add to the totals shown.

Source: Compiled from official USDA (USDA, ERS, *Wheat Situation and Outlook Yearbook*, March 26, 2003, app. table 11 for marketing years 2000/01 and 2001/02; USDA, ERS, *Wheat Outlook*, August 14, 2003, table 2 for marketing years 2002/03 and 2003/04.

Table D-2
Durum and all wheat: Inventory,[1] by positions, marketing years 2000/01, 2001/02, and 2002/03

Source	Marketing year[2]		
	2000/01	2001/02	2002/03
	Quantity (*thousand bushels*)		
Stocks on farms:			
Durum wheat	29,100	20,600	15,100
All wheat	197,270	216,830	132,110
Stocks off farms:			
Durum wheat	16,073	12,390	12,808
All wheat	678,912	560,282	359,611
Total stocks:			
Durum wheat	45,173	32,990	27,908
All wheat	876,182	777,112	491,721

[1] Inventory data collected as of June 1 are used for both beginning and ending inventory data. Separate on-farms and off-farms inventory data are available for durum and all wheat, but are not available for hard red spring and hard red winter wheat. Off-farms inventory data include stocks held at mills, elevators, warehouses, terminals, and processors. Imports are included in inventory data to the extent that inventories of imported product are held in off-farms facilities. Inventory data do not include quantities in transit, quantities of flour and wheat products, or quantities of all captive wheat. Projections for marketing year 2003/04 are not available.
[2] The U.S. marketing year begins June 1 and ends May 31.

Note.–Because of rounding, figures may not add to the totals shown.

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

APPENDIX E

ADDITIONAL PRICE INFORMATION

STATISTICAL PRICE COMPARISON

This appendix presents a statistical approach for analyzing the pricing data and presents critiques of the petitioners' and the CWB's econometric models that address the influence of Canadian imports on U.S. prices.

Introduction

The statistical approach incorporates the effects of the attributes (dockage, protein content, vitreous kernel content, and test weight) on prices. After incorporating these effects, means of the prices of imported Canadian products are compared with those of the similar domestic products. The data are the delivered, as opposed to the contract, purchaser data, which consisted of the three largest sales of each firm, as described in Part V of this report. There were 36 months of data, and an additional variable called date was created that ranged from 1 to 36 to correspond to each month of data.

In response to parties' comments, all prices were put on a Minneapolis basis to make them more comparable. This was done, where possible, by selecting plants in or near Minneapolis, subtracting transportation costs when the reported costs were between Minneapolis and a particular plant's location, or adjusting prices as explained in Part V, footnote 15, in the case of ***. Also, companies enter the model as a fixed effect instead of a random effect. Because conditions may change from month to month, possibly causing prices to change, month-specific intercepts are treated as random. The goal is to make inferences over the entire 36-month period.

This statistical analysis, as explained below, indicates that, at the 95-percent confidence level, mean prices of Canadian No. 1 western amber durum and No. 2 western amber durum were higher than the mean prices of the similar U.S. products. The mean price of U.S. No. 1 western red spring wheat was not significantly different from the mean price of the similar Canadian product, but the mean price of the U.S. No. 2 hard red spring wheat was slightly less than the mean price of Canadian No. 2 western red spring wheat.

Although various companies presented data for each product, many companies only presented partial time series of data for the products in question. Companies presented data for some products but not others. There are more data for U.S. wheat than for Canadian wheat. This results in unequal numbers of observations in the product-country-date combinations, which is referred to as unbalanced data.

Analysis of variance is a common approach for making inferences about whether means from different classifications are distinct. The analysis of covariance, which was the approach taken in the preliminary phase of the investigations, is the natural extension of this method when attributes or covariates affect the response variable.[1] In this analysis, the product (whether the wheat is from Canada or the United States), the company effect, and the attributes are modeled as fixed effects in a manner similar to that in the preliminary phase of the investigations. Unlike the methodology used in the preliminary phase of the investigations, the date (month) is modeled as a random intercept.[2]

The mixed procedure in the SAS system was used for this analysis, and residual maximum likelihood (REML) was the estimation method in each case. The mixed procedure was developed to

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[1] *Durum and Hard Red Spring Wheat from Canada*, invs. Nos. 701-TA-430A and 430B and 731-TA-1019A and 1019B (Preliminary), Pub. 3563, December 2002, app. D.

[2] Charles E. McCulloch and Shayle R. Searle, *Generalized, Linear, and Mixed Models*, 2001. Chapters 1, 6, 7, and 9 discuss mixed models.

handle models with both fixed and random effects, including random intercepts.[3] It also handles unbalanced data, although estimation with unbalanced data is more inexact. Tests of the mean of the Canadian product minus the mean of the U.S. product were performed. 95-percent confidence intervals of this difference were computed: an all positive confidence interval indicates that the mean price of the Canadian product is likely to be higher; a confidence interval that includes 0 indicates that statistically neither the mean U.S. price nor the mean Canadian price is higher, and an all negative confidence interval indicates that the mean price of the U.S. product is likely to be higher. The means of the Canadian and U.S. products are estimates that reflect levels of the attributes and the company effect and thus depend upon multiple parameters. To take these multiple parameters into account, the confidence limits and p-values of the differences of the means are based on the values of a simulated multivariate t distribution.

Durum

Product 3 (Canadian No. 1 western amber durum) was compared to product 7 (U.S. No. 1 hard amber durum). The data were from *** and contained 191 usable observations. Variance of the date random intercept was 306.84, and the variance of the residuals was 133.26. The standard deviation of the variation of the monthly intercepts is 17.52, and the correlation of the prices reported in the same month was estimated at 0.697. Tests of the fixed effects are shown in the following box (where DF denotes degrees of freedom). The product and company effect were significant, but vitreous (kernel content) was the only attribute that was significant. The protein level had the expected positive sign, but was not significant but it was retained because it improved the overall fit of the model as judged by the Akaike information criterion. Test weight and dockage were highly insignificant and dropped because they did not improve the fit of the model.

Fixed Effect	Estimate	Numerator DF	Denominator DF	F-value	Probability > F
Product	-	1	166	29.70	<.0001
Company	-	1	159	13.21	0.0004
Vitreous	1.2006	1	161	38.12	<.0001
Protein	1.2461	1	158	0.58	0.4477

Note.–DF denotes degrees of freedom. The Satterthwaite formula, which is data dependent and involves the within-group variance estimates, was used to compute the degrees of freedom.

The estimated mean of Canadian product 3 was approximately $194.61 per metric ton, and the estimated mean of U.S. product 7 was approximately $179.53 per metric ton. Results of the differences of the means test are shown in the box below. The 95-percent confidence interval is all positive, which indicates that the mean price of the Canadian No. 1 western amber durum was likely greater than the mean price of U.S. No. 1 hard amber durum.

[3] Peter H. Westfall et al., *Multiple Comparisons and Multiple Tests Using the SAS System*, 1999, ch. 10.

Mean of product 3 minus mean of product 7	15.076
Degrees of freedom	166
t-value	5.45
Probability > t-value	< 0.0001
Lower and upper limits of 95 percent confidence interval	9.6077, 20.5445

Product 4 (Canadian No. 2 western amber durum) was compared to product 8 (U.S. No. 2 hard amber durum). The data, which were from ***, contained 200 usable observations. The variance of the date random intercept was 18.56, and the variance of the residuals was 129.58. The standard deviation of the variation of the monthly random intercepts was 18.56, and the correlation of prices within each month was estimated at 0.727. Tests of the fixed effects are shown in the following box. The product effect, the company effect, dockage, and weight are significant. Weight has the expected sign, although dockage does not. Surprisingly the effects of vitreous kernel content were not as strong in the No. 2 durum product. The protein content had the expected sign but was not significant.

Fixed Effect	Estimate	Numerator DF	Denominator DF	F-value	Probability > F
Product	-	1	170	10.91	0.0012
Company	-	1	167	6.99	0.0090
Vitreous	0.1511	1	163	1.46	0.2293
Protein	3.354	1	170	2.29	0.1319
Dockage	7.622	1	170	6.03	0.0151
Weight	3.544	1	164	8.01	0.0052

Note.–DF denotes degrees of freedom. The Satterthwaite formula, which is data dependent and involves the within-group variance estimates, was used to compute the degrees of freedom.

The estimated mean of Canadian product 4 was approximately $180.87 per metric ton, and the estimated mean of U.S. product 8 was approximately $167.27 per metric ton. Results of the differences of the means test are shown in the box below. The 95-percent confidence interval is all positive, which indicates that the mean price of the Canadian No. 2 western amber durum was likely greater than the mean price of U.S. No. 2 hard amber durum.

Mean of product 4 minus mean of product 8	13.601
Degrees of freedom	170
t-value	3.30
Probability > t-value	0.0012
Lower and upper limits of 95 percent confidence interval	5.4759, 21.7261

Hard Red Spring Wheat

The vitreous kernel content variable for all hard red spring wheat data was either blank or exactly the same number for all observations; therefore this variable was not used because it clearly did not vary in any meaningful way with the response variable, price.

Product 1 (Canadian No. 1 western red spring wheat) was compared to product 5 (U.S. No. 1 hard red spring wheat). The adjusted data contained 219 usable observations. Data from *** were used. The variance of the date random intercept was 381.54, and the residual variance was 22.909. The standard deviation of the variation in the monthly intercepts was 19.53, and the correlation of the different prices reported in the same month was estimated at 0.943, which is higher than in the durum products. Tests of the fixed effects are shown below. Protein was significant and had the expected positive sign. Dockage and (test) weight were insignificant statistically, but were retained because they improved the goodness of fit as judged by the Akaike information criterion. Dockage had the expected negative sign, but weight was also negative contrary to expectations.

Fixed Effect	Estimate	Numerator DF	Denominator DF	F-value	Probability > F
Product	-	1	176	0.03	0.8734
Company	-	4	176	34.33	<.0001
Protein	2.7666	1	176	17.30	<.0001
Dockage	-0.7170	1	176	1.02	0.3140
Weight	-0.2186	1	176	0.51	0.4779

Note.–DF denotes degrees of freedom. The Satterthwaite formula, which is data dependent and involves the within-group variance estimates, was used to compute the degrees of freedom.

The estimated mean of Canadian product 1 was approximately $146.35 per metric ton, and the estimated mean of U.S. product 5 was approximately $146.07. Results of the differences of the means test are shown in the box below. The 95-percent confidence interval includes zero, which indicates that there is no statistical difference in the mean price of the Canadian No. 1 western red spring wheat and the mean price of U.S. No. 1 hard red spring wheat.

Mean of product 1 minus mean of product 5	0.2862
Degrees of freedom	176
t-value	0.16
Probability > t-value	0.8734
Lower and upper limits of 95 percent confidence interval	-3.269, 3.842

Product 2 (Canadian No. 2 western red spring wheat) was compared to product 6 (U.S. No. 2 hard red spring wheat). The data contained 188 usable observations. The variance of the date random intercept was 360.53, and the variance of residuals was 37.41. The standard deviation of the variation

about the monthly intercepts was 18.99, and the correlation of prices within each month was estimated at 0.906, which is higher than in the durum products but less than No. 1 hard red spring wheat. Tests of the fixed effects are shown below. Product, the company effect, and protein content were significant, and protein had the expected positive sign. Dockage and (test) weight were not significant statistically but were retained because they improved the goodness of fit as judged by the Akaike information criterion, although dockage did not have the expected negative sign.

Fixed Effect	Estimate	Numerator DF	Denominator DF	F-value	Probability > F
Product	-	1	149	6.17	0.0141
Company	-	3	149	6.98	0.0002
Protein	6.7669	1	151	43.56	<.0001
Dockage	0.9545	1	149	0.25	0.6155
Weight	0.2415	1	150	0.11	0.7383

Note.–DF denotes degrees of freedom. The Satterthwaite formula, which is data dependent and involves the within-group variance estimates, was used to compute the degrees of freedom.

The estimated mean of Canadian product 2 was approximately $146.90 per metric ton, and the estimated mean of U.S. product 6 was approximately $141.50 per metric ton. Results of the differences of the means test are shown in the box below. The 95-percent confidence interval is all positive (although just barely), which indicates that the mean price of U.S. No. 2 western red spring wheat is statistically less than the mean price Canadian No. 2 hard red spring wheat.

Mean of product 2 minus mean of product 6	5.4022
Degrees of freedom	149
t-value	2.48
Probability > t-value	0.0143
Lower and upper limits of 95 percent confidence interval	1.0996, 9.7047

CRITIQUES OF SUBMITTED ECONOMETRIC MODELS

Petitioners' Model on the Effects of Canadian Imports on U.S. Prices

Petitioners presented a model stating that price at U.S. elevator i at time t is a linear function of a categorical variable to identify the elevator, projected ending stocks at time t, the U.S.-Canadian exchange rate, and U.S. imports into neighboring U.S. customs regions.[4] Staff note that this reduced-form equation does not appear to originate from a coherent economic model and is likely mis-specified as

[4] Petitioners' prehearing brief, exh. 37.

key supply and demand variables are not included in the model, such as a domestic quantity variable, cost variables, etc. Omission of the key exogenous variables affects the estimates of the included variables and makes the model unreliable. While stocks may be an important variable for a storable commodity as stated in the petitioners' posthearing brief,[5] where local prices are concerned, local production is likely a greater effect. Longitudinal data is used that varies both by place and time. Although attempts have been made to address the spatial issues,[6] time-series issues have not been addressed. On a broader level, the model seems to posit the existence of a local market, which could suggest regional effects. Other evidence suggests however that there is a national, if not international market, and prices differ only by transportation costs at different points.

The CWB's Model on the Effects of Imports on the U.S. Wheat Price

The CWB presented a vector autoregression (VAR) model that purported (1) that U.S. imports of Canadian hard red spring wheat do not suppress the U.S. farm price of wheat, and (2) that "global" shocks in prices of wheat not traded in the U.S. market do influence price.[7] Because of potential mis-specification and problems with the VAR model and problems with the cointegration tests for the quantity-extended cointegration model of respondent's posthearing brief, the results of both models are of questionable validity.

First, the CWB VAR model is likely mis-specified because the model equations, particularly the U.S. price equation, exclude the very important U.S. market quantity variables required for adequate specification, and may render invalid price response estimates. The CWB's posthearing brief states that Babula, Jabara, and Reeder (BJR)[8] pioneered the application of VAR models in wheat market issues. The BJR article summarized the Commission's 1994 VAR model analysis in the section-22 case dealing with U.S. imports of primarily Canadian wheat.[9] As a result, the Commission analysis was lodged in the agricultural economics literature with full benefit of peer review, and established that when using a VAR to discern the degree (or lack) of import-induced suppression of U.S. farm wheat price, one should include U.S. market quantities in the VAR. One of the CWB's primary goals was the same as the literature-established Commission analysis: to estimate import-induced suppression of U.S. farm wheat price. To have eliminated U.S. market wheat quantities in a VAR with this goal not only opposes basic economic theory for both reduced form and structural models, but also disregards established literature and past Commission work, and likely renders each of the CWB VAR model's relationships mis-specified, especially the U.S. farm wheat price (hard red spring) whose import-induced responses the CWB attempted to estimate.

Second, the CWB's VAR model may not be adequately specified because the variables are modeled in first differences. The CWB's consultants chose to model the variables in first differences because of alleged evidence that the VAR variables were nonstationary.[10] It is well-known that modeling

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[5] Petitioners' posthearing brief, app. 2, p. 17.

[6] Petitioners' posthearing brief, app. 2, exh. 1.

[7] CWB's prehearing brief, exh. 24, and posthearing brief, exh. A16.

[8] R.A. Babula, C. Jabara, and John Reeder, "Role of Empirical Evidence in U.S./Canadian dispute on U.S. Imports of Wheat, Wheat Flour, and Semolina," *Agribusiness: An International Journal* (1996), vol. 12(2), pp. 183-199. See CWB's, posthearing brief, p. 129.

[9] *Wheat, Wheat Flour, and Semolina,* inv. No. 22-54, USITC Pub. 2794, July, 1994, ch. II and app. N.

[10] See CWB's prehearing brief, exh. 24, and posthearing brief, exh. A16.

a vector series as a VAR in first differences is mis-specified when the data are stationary.[11] However, the conclusion that these data are non-stationary is questionable for four reasons.

1. The CWB consultants did not justify the use of an augmented Dickey Fuller Tμ test (with lagged dependent variable values) over the non-augmented form of the same test and did not justify the choice of the four-lag structure for the chosen augmented form of the Dickey Fuller Tμ test. It is well-known that results are often dependent on the choice of the test form (augmented or non-augmented) and on the choice of the lag structure for the augmented form of the test. The CWB consultants chose a structure of four lags for the tests on the VAR variables and did not explain this lag structure.[12] Often, one uses lag-selection criterion such as the Akaike Information Criterion or the Schwarz Criterion[13] (among other alternatives) in order to use statistical evidence to choose an appropriate lag structure. Without justification of how the four-lag structure was chosen, the lag structure could be construed as arbitrarily chosen, and the stationarity test results may be questionable.

2. The tests appear to be done differently or inconsistently on the same data. For example, consider the U.S. hard red spring wheat price, the FARMS variable: FARMS was tested for stationarity with an augmented Dickey-Fuller test using four lags of the dependent variable for the CWB's VAR model, and inexplicably with only two lags of the dependent variable for the CWB's cointegration model.[14] These tests are variable-specific and should be consistently carried out across models.

3. The choices of the Dickey-Fuller tests (augmented or non-augmented) and of the lag structure of the augmented Tμ test must be justified for each endogenous time series included in the VAR model. This is because Dickey-Fuller test results can vary depending on the test form (augmented vs. non-augmented) and depending on the chosen lag structure. It appears the CWB consultants chose a Dickey-Fuller Tμ test with four lags of the dependent variable values for all of the VAR's endogenous time series without providing a justification for this uniform choice. The variables, which include imports of hard red spring wheat, U.S. hard red spring price, and various prices of different wheat types not traded in the U.S. market but sourced from very different countries, differ widely. There is no reason to impose, a priori, a four-lag structure on an augmented Dickey- Fuller Tμ for every one of these differing endogenous VAR variables; rather, the choice of test form (augmented, non-augmented) and the formulation of lag structures

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[11] R. Engle and C.W.J. Granger, "Co-Integration and Error Correction: Representation, Estimation, and Testing," *Econometrica* (1987), vol. 55(2), p. 259.

[12] The CWB's consultants did not report the reasons for selecting the four-lag structure in their September 22, 2003 posthearing submission "CRA Unit Root Tests on the Time Series for the VAR Model in Levels – A Note on Technical Details."

[13] For Akaike Information Criterion, see H. Akaike, "Information and the Extension of the Maximum Likelihood Principle," *Second International Symposium on Information Theory*, B. Petrov and F. Czaki, eds. Budapest (1973); for Schwarz criterion, see G. Schwarz, "Estimating the Dimension of a Model," *Annals of Statistics* (1978) vol. 6, pp. 461-464; and for programming of both criteria, see T. Doan. *RATS User's Manual, Version 4* (Evanston, IL: Estima, 1996), ch. 5, p. 18.

[14] For the augmented Dickey-Fuller Tμ test with four lags of the dependent variable on the FARMS price variable, see CWB's posthearing brief, and posthearing submission "CRA Unit Root Tests on the Time Series for the VAR Model in Levels – A Note on Technical Details." For the augmented Dickey-Fuller Tμ test with two lags of the dependent variable on the FARMS price variable, see CWB's posthearing brief, p. 115.

should be independently determined for each series test. As a result, the stationarity test results are of questionable validity.

4. The CWB consultants' stationarity test results on some of the VAR data seem questionable because they are at odds with closely related past Commission work and recent literature. While the literature cited by the CWB consultants indeed found some foreign wheat price data to be nonstationary, closely related Commission work and recent literature have found opposing results of stationarity for some U.S. data, and the CWB consultants do not discuss these opposing results. While the CWB consultants found evidence that the U.S. hard red spring wheat farm price (FARMS) is nonstationary, the Commission, as well as Babula, Jabara, and Reeder, found that the U.S. farm price of wheat is likely to be stationary, while some more recent VAR research on quarterly durum-related U.S. wheat markets has found U.S. durum price to be stationary.[15] Although this Commission work and recent literature did not test the exact same price series as the CWB consultants, certainly these literature-tested prices are closely related. The literature and the Commission's repeated findings of stationary U.S. wheat prices renders the CWB consultants' results on the nonstationarity of the FARMS variable questionable. Also, the CWB consultants note that their results of nonstationarity differ somewhat from the petitioners' results because of a five or six month difference in a monthly sample spanning close to 13 years.[16] Clearly, well-done stationarity tests results of both parties should not be generating such different results with such a slight variation in sample size. (At this point, and with the information submitted, it is not possible to discern which party's results are invalid.)

Third, the CWB's results that the VAR model data, which included foreign prices of EU, Argentine, and Australian wheat, are not cointegrated seems to oppose the results of some very recent and important literature that uncovered evidence of cointegrating relationships among vectors of modeled variables which included EU, Australian, and Argentine wheat prices. Bessler, Yang, and Wongcharupan[17] and Mohanty, Meyers, and Smith,[18] found cointegrating relationships among various national wheat prices, including prices of EU, Argentine, and Australian wheat. If the CWB VAR data are indeed non-stationary, but cointegrated, as implied by important recent research, then the CWB VAR in first differences is likely mis-specified because the model excludes crucial levels information that embodies long-run theoretical components needed for adequate specification.[19] At the very least, the

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[15] R.A. Babula, C. Jabara, and John Reeder, "Role of Empirical Evidence in U.S./Canadian Dispute on U.S. Imports of Wheat, Wheat Flour, and Semolina," *Agribusiness: An International Journal* (1996), vol. 12(2), pp. 183-199; *Wheat, Wheat Flour, and Semolina,* inv. No. 22-54, USITC pub. No. 2794, July, 1994, ch. II and app. N; and R. A. Babula and K. Rich, "A Time-Series Analysis of the U.S. Durum Wheat and Pasta Markets," *Journal of Food Distribution Research* (July, 2001) vol. 32(2), pp. 1-19. See CWB posthearing brief, p. 129.

[16] The CWB consultants did not report reasons for choice of the four-lag structure in their September 22, 2003 posthearing submission "CRA Unit Root Tests on the Time Series for the VAR Model in Levels – A Note on Technical Details."

[17] D. Bessler, J. Yang, and M. Wongcharupan, "Price Dynamics in the International Wheat Market: Modeling with Error Correction and Directed Acyclic Graphs," *Journal of Regional Science* (2002) vol. 42, No. 2, pp. 793-825.

[18] S. Mohanty, W. Meyers, and D. Smith, "A Reexamination of Price Dynamics in the International Wheat Market," *Canadian Journal of Agricultural Economics* (1997) vol. 47, No. 1, pp. 21-29.

[19] R. Engle and C.W.J. Granger, "Co-Integration and Error Correction: Representation, Estimation, and Testing," *Econometrica* (1987), vol. 55, No. 2, pp. 251-276.

CWB need to explain the reason that no cointegration was found between their Argentine, EU, and Australian wheat prices, while recent research on such prices did find cointegration among similar prices.

The fourth point concerns a separate issue: item 4 of the CWB's posthearing brief extending the VAR model into a cointegration model with the inclusion of some of the Commission-requested U.S. wheat market quantity variables. The CWB test evidence suggested that two of the variables were stationary (exports, domestic use), while the other 5-6 variables were treated as nonstationary.[20] The CWB's consultants decided to test for cointegration, and having found evidence of one single cointegrating relation, they appeared to have built a vector error correction or cointegration model. The Commission staff questions the appropriateness of these cointegration tests because of an apparent problem with the application of Johansen and Juselius'[21] cointegration test methods to vectors of "mixed variables," where some are stationary and some non-stationary. It is well known that each stationary variable should register as a single cointegrating relationship, as summarized by Babula, Ruppel, and Bessler.[22] If done correctly, then these tests should have registered at least two cointegrating vectors, one for each of the two stationary variables, even for the case where there was an absence of cointegration among the non-stationary variables. But as reported, only one cointegrating vector was uncovered, leading the Commission staff to question whether the tests were done erroneously, whether the conclusions of one cointegrating vector was valid, and whether the ensuing cointegration or vector modeling analysis was valid.

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[20] CWB's posthearing brief, exh. A16.

[21] S. Johansen and K. Juselius, "Maximum Likelihood and Inferences on Cointegration: With Applications to the Demand for Money," *Oxford Bulletin of Economics and Statistics* (1990) vol. 52, pp. 169-210; S. Johansen and K. Juselius, "Testing Structural Hypotheses in Multivariate Cointegration Analysis of the PPP and UIP for the U.K.," *Journal of Econometrics* (1992), vol. 53, pp. 211-244.

[22] R. Babula, F. Ruppel, and D. Bessler, "U.S. Corn Exports: The Role of the Exchange Rate," *Agricultural Economics* (1995) vol. 13, p. 79.

APPENDIX F

PROGRAM DATA ON PER-ACRE RETURN, BY PRODUCT AND TYPE OF LAND TENURE, FROM MINNESOTA, NORTH DAKOTA, AND SOUTH DAKOTA

MINNESOTA

North West Area Reports for 1999

Crop Enterprise Analysis, 1999
Northwestern Farm Business Management Averages
Northland Community and Technical College
(Farms sorted by Return to Overhead)

SPRING WHEAT ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	113	16	22
Number of farms	80	16	16
Acres	114.74	115.83	72.11
Yield per acre (bushel)	28.16	21.47	42.95
Operators share of yield %	100.00	100.00	100.00
Value per bushel	2.94	2.72	3.00
Total product return per acre	82.83	58.49	128.64
Miscellaneous income per acre	37.82	14.62	39.95
Gross return per acre	120.65	73.11	168.59
Direct expenses per acre			
Seed	10.09	9.50	9.66
Fertilizer	23.46	24.92	21.39
Crop chemicals	13.77	10.01	9.50
Crop insurance	4.43	3.65	4.47
Drying fuel	0.46	1.07	0.34
Fuel & oil	6.35	7.09	5.50
Repairs	11.66	12.93	11.69
Custom hire	1.47	2.96	0.88
Hired labor	0.47	0.13	0.88
Machinery & bldg leases	0.04	0.00	0.00
Marketing	0.31	1.04	0.24
Operating interest	3.97	2.33	3.00
Miscellaneous	0.16	0.13	0.18
Total direct expenses per acre	76.64	75.76	67.71
Return over direct expenses per acre	44.02	-2.66	100.88
Overhead expenses per acre			
Custom hire	0.92	0.26	0.46
Hired labor	3.94	4.76	2.30
Machinery & bldg leases	1.93	1.25	2.76
RE & pers. property taxes	6.25	5.37	6.92
Farm insurance	2.03	3.23	2.02
Utilities	1.93	2.38	1.33
Dues & professional fees	1.23	1.08	1.30
Interest	18.04	13.33	27.23
Mach & bldg depreciation	10.54	8.05	8.58
Miscellaneous	1.89	1.29	2.03
Total overhead expenses per acre	48.69	40.99	54.92
Total listed expenses per acre	125.33	116.75	122.64
Net return per acre	-4.67	-43.65	45.96
Total direct expense per bushel	2.72	3.53	1.58
Total listed expense per bushel	4.45	5.44	2.86
Net return per bushel	-0.17	-2.03	1.07
Breakeven yield per acre	29.75	37.49	27.60
Est. labor hours per acre	2.10	2.58	1.67
Net return including govt. payments	23.28	-19.05	73.65
Lbr & mgt charge per acre	15.19	15.10	14.47
Net return over lbr & mgt	8.09	-34.15	59.18

North West Area Reports for 1999

Crop Enterprise Analysis, 1999
Northwestern Farm Business Management Averages
Northland Community and Technical College
(Farms sorted by Return to Overhead)

SPRING WHEAT ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	157	32	26
Number of farms	93	19	19
Acres	253.17	188.83	245.01
Yield per acre (bushel)	28.57	22.96	31.26
Operators share of yield %	100.00	100.00	100.00
Value per bushel	2.94	2.87	2.98
Total product return per acre	83.96	65.79	93.04
Miscellaneous income per acre	43.01	14.54	74.89
Gross return per acre	126.98	80.33	167.92
Direct expenses per acre			
Seed	9.89	9.62	8.45
Fertilizer	23.23	21.70	21.54
Crop chemicals	16.26	16.96	12.52
Crop insurance	6.12	4.25	5.60
Drying fuel	0.87	1.66	0.45
Fuel & oil	5.98	6.49	7.10
Repairs	11.42	12.29	11.97
Custom hire	3.32	1.57	2.04
Hired labor	0.17	0.19	0.61
Land rent	35.70	36.86	36.32
Machinery & bldg leases	0.16	0.72	0.10
Marketing	0.34	0.94	0.61
Operating interest	3.26	3.82	3.05
Miscellaneous	0.17	0.03	0.33
Total direct expenses per acre	116.88	117.10	110.70
Return over direct expenses per acre	10.09	-36.78	57.22
Overhead expenses per acre			
Custom hire	0.54	0.42	1.44
Hired labor	4.30	3.61	5.43
Machinery & bldg leases	3.17	0.80	2.67
Farm insurance	1.85	2.25	2.16
Utilities	1.52	1.84	1.48
Dues & professional fees	0.93	1.99	1.18
Interest	3.03	2.26	4.50
Mach & bldg depreciation	6.94	6.12	8.05
Miscellaneous	1.60	1.16	1.50
Total overhead expenses per acre	23.88	20.44	28.41
Total listed expenses per acre	140.77	137.55	139.11
Net return per acre	-13.79	-57.22	28.82
Total direct expense per bushel	4.09	5.10	3.54
Total listed expense per bushel	4.93	5.99	4.45
Net return per bushel	-0.48	-2.49	0.92
Breakeven yield per acre	33.26	42.93	21.58
Est. labor hours per acre	1.60	1.84	1.89
Net return including govt. payments	16.47	-25.77	59.16
Lbr & mgt charge per acre	11.86	11.49	13.14
Net return over lbr & mgt	4.61	-37.26	46.02

Crop Enterprise Analysis
Northwestern Farm Business Management Averages
Northland Community and Technical College
(Farms Sorted By Return to Overhead)

Wheat, Spring on Owned Land 2000

	Avg. Of All Farms	Low 20%	High 20%
Number of fields	101	16	28
Number of farms	83	16	17
Acres	192.62	91.16	231.96
Yield per acre (bushel)	53.39	38.94	59.68
Operators share of yield %	100.00	100.00	100.00
Value per bushel	3.51	3.10	3.68
Total product return per acre	187.65	120.69	219.67
Miscellaneous income per acre	2.41	2.25	0.71
Gross return per acre	190.06	122.95	220.37
Direct Expenses			
Seed	8.93	9.55	8.22
Fertilizer	24.21	19.37	26.78
Crop chemicals	19.69	15.16	18.94
Crop insurance	7.63	7.82	8.68
Drying fuel	0.72	0.31	0.97
Fuel & oil	9.18	10.87	7.90
Repairs	12.54	18.23	11.59
Custom hire	4.90	5.35	4.75
Operating interest	3.27	4.75	1.99
Miscellaneous	0.50	0.54	0.21
Total direct expenses per acre	91.57	91.96	90.03
Return over direct exp per acre	98.49	30.99	130.34
Overhead Expenses			
Custom hire	2.06	0.71	3.17
Hired labor	3.69	1.70	2.35
Machinery & bldg leases	1.65	1.63	1.15
RE & pers. property taxes	4.21	4.24	3.44
Farm insurance	2.13	2.99	2.26
Utilities	2.00	3.22	1.86
Dues & professional fees	0.97	1.08	0.81
Interest	17.18	18.31	15.86
Mach & bldg depreciation	9.35	11.19	11.59
Miscellaneous	1.93	1.68	2.18
Total overhead expenses per acre	45.18	46.74	44.68
Total dir & ovhd expenses per acre	136.75	138.70	134.71
Net return per acre	53.31	-15.75	85.66
Lbr & mgt charge per acre	14.96	20.27	12.88
Net return over lbr & mgt	38.35	-36.02	72.78
Government payments	27.97	22.63	29.82
Net return with govt payments	66.32	-13.39	102.61
Cost of Production			
Total direct expense per bushel	1.72	2.36	1.51
Total dir & ovhd exp per bushel	2.56	3.56	2.26
With labor & management	2.84	4.08	2.47
Total exp less govt & oth income	2.27	3.44	1.96
Est. labor hours per acre	1.91	2.11	1.70

Crop Enterprise Analysis
Northwestern Farm Business Management Averages
Northland Community and Technical College
(Farms Sorted By Return to Overhead)

Wheat, Spring on Cash Rent 2000

	Avg. Of All Farms	Low 20%	High 20%
Number of fields	155	22	51
Number of farms	86	17	17
Acres	274.36	213.59	217.09
Yield per acre (bushel)	50.36	41.94	55.35
Operators share of yield %	100.00	100.00	100.00
Value per bushel	3.57	3.16	3.71
Total product return per acre	179.63	132.39	205.57
Miscellaneous income per acre	3.48	2.20	1.70
Gross return per acre	183.11	134.60	207.27
Direct Expenses			
Seed	9.47	9.37	8.83
Fertilizer	22.70	24.71	22.20
Crop chemicals	22.72	15.39	23.23
Crop insurance	8.12	9.60	7.69
Drying fuel	0.58	0.22	0.60
Fuel & oil	8.21	8.65	7.83
Repairs	11.42	12.90	11.01
Custom hire	3.54	2.07	6.60
Hired labor	0.14	0.97	0.08
Land rent	36.78	37.71	33.54
Operating interest	3.66	2.65	2.06
Miscellaneous	0.42	0.58	0.97
Total direct expenses per acre	127.77	124.82	124.64
Return over direct exp per acre	55.34	9.78	82.64
Overhead Expenses			
Custom hire	1.15	0.81	1.48
Hired labor	4.50	1.60	5.83
Machinery & bldg leases	3.78	1.56	3.02
Farm insurance	2.07	1.72	1.81
Utilities	1.36	1.44	1.39
Dues & professional fees	0.76	0.64	1.10
Interest	3.64	3.45	3.43
Mach & bldg depreciation	8.10	6.24	12.07
Miscellaneous	1.59	1.67	1.52
Total overhead expenses per acre	26.96	19.13	31.65
Total dir & ovhd expenses per acre	154.73	143.95	156.28
Net return per acre	28.38	-9.35	50.99
Lbr & mgt charge per acre	13.69	14.23	13.59
Net return over lbr & mgt	14.69	-23.58	37.40
Government payments	29.24	29.54	29.93
Net return with govt payments	43.93	5.96	67.33
Cost of Production			
Total direct expense per bushel	2.54	2.98	2.25
Total dir & ovhd exp per bushel	3.07	3.43	2.82
With labor & management	3.34	3.77	3.07
Total exp less govt & oth income	2.69	3.01	2.50
Est. labor hours per acre	1.54	1.45	1.62

Northwestern Farm Business Management Averages
Northland Community and Technical College
(Farms Sorted By Net Return)
Wheat, Spring on Owned Land 2001

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	148	20	37	24
Number of farms	104	20	20	21
Acres	163.81	223.98	158.64	133.67
Yield per acre (bushel)	41.12	34.19	42.55	44.11
Operators share of yield %	100	100	100	100
Value per bushel	3.1	2.96	3.19	3.1
Total product return per acre	127.57	101.19	135.56	136.75
Miscellaneous income per acre	10.2	5.54	7.43	30.48
Gross return per acre	137.77	106.73	142.99	167.23
Direct Expenses				
Seed	9.03	8.69	9.15	8.23
Fertilizer	29.16	31.98	28.77	28.94
Crop chemicals	21.24	26.21	21.26	15.55
Crop insurance	7.73	6.06	8.66	6.83
Fuel & oil	8.8	10.85	8.51	7.07
Repairs	12.56	15.8	12.58	13.99
Custom hire	4.2	6.88	3.6	2.32
Operating interest	3.73	5.55	3	2.69
Miscellaneous	0.95	0.44	0.77	1.14
Total direct expenses per acre	97.39	112.46	96.3	86.76
Return over direct exp per acre	40.39	-5.73	46.7	80.47
Overhead Expenses				
Custom hire	1.64	1.23	1.09	1.03
Hired labor	4.19	4.15	3.67	2.84
Machinery & bldg leases	2.02	2.34	1.91	1.13
RE & pers. property taxes	4.69	5.01	4.84	5.34
Farm insurance	2.52	2.73	1.94	3.37
Utilities	2.08	2.39	1.79	1.82
Dues & professional fees	1.12	1.93	0.89	0.66
Interest	16.65	23.66	15.3	10.95
Mach & bldg depreciation	11.78	11.22	14.19	9.09
Miscellaneous	2.06	2.22	1.66	1.38
Total overhead expenses per acre	48.76	56.89	47.28	37.62
Total dir & ovhd expenses per acre	146.15	169.35	143.58	124.38
Net return per acre	-8.38	-62.62	-0.58	42.85
Lbr & mgt charge per acre	14.78	16.09	13.59	15.5
Net return over lbr & mgt	-23.15	-78.71	-14.17	27.35
Government payments	23.02	19.81	21.67	24.27
Net return with govt payments	-0.13	-58.89	7.5	51.62
Cost of Production				
Total direct expense per bushel	2.37	3.29	2.26	1.97
Total dir & ovhd exp per bushel	3.55	4.95	3.37	2.82
With labor & management	3.91	5.42	3.69	3.17
Total exp less govt & oth income	3.11	4.68	3.01	1.93
Est. labor hours per acre	1.87	2.6	1.54	1.85

Northwestern Farm Business Management Averages
Northland Community and Technical College
(Farms Sorted By Net Return)
Wheat, Spring on Cash Rent 2001

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	184	30	47	30
Number of farms	115	23	22	23
Acres	274.98	194.95	173.71	473.60
Yield per acre (bushel)	42.97	35.68	42.02	45.26
Operators share of yield %	100	100	100	100
Value per bushel	3.14	2.97	3.12	3.15
Total product return per acre	134.79	105.97	131.17	142.72
Miscellaneous income per acre	14.45	6.98	4.98	31.49
Gross return per acre	149.24	112.95	136.15	174.21
Direct Expenses				
Seed	9.45	10.43	8.56	8.70
Fertilizer	28.13	31.51	25.77	27.21
Crop chemicals	21.76	24.97	24.92	19.75
Crop insurance	8.27	8.33	9.10	8.85
Drying fuel	0.41	0.26	0.44	0.76
Fuel & oil	8.70	10.27	8.15	7.95
Repairs	12.69	13.82	10.06	13.20
Custom hire	2.43	5.01	2.56	1.46
Hired labor	0.14	0.01	0.89	-
Land rent	36.24	36.85	33.44	36.45
Operating interest	3.60	6.14	3.43	2.45
Miscellaneous	0.39	0.17	0.26	0.14
Total direct expenses per acre	132.23	147.77	127.56	126.92
Return over direct exp per acre	17.01	-34.82	8.59	47.29
Overhead Expenses				
Custom hire	1.23	1.36	1.65	0.63
Hired labor	4.37	4.00	3.28	4.02
Machinery & bldg leases	3.08	1.58	3.22	3.99
Farm insurance	2.06	2.08	2.64	1.83
Utilities	1.76	2.57	1.44	1.67
Dues & professional fees	1.11	1.39	1.06	0.96
Interest	3.83	6.14	2.69	2.83
Mach & bldg depreciation	8.89	9.13	7.30	8.77
Miscellaneous	1.89	3.55	2.54	0.91
Total overhead expenses per acre	28.22	31.80	25.81	25.62
Total dir & ovhd expenses per acre	160.44	179.58	153.37	152.54
Net return per acre	-11.21	-66.63	-17.22	21.67
Lbr & mgt charge per acre	16.38	18.06	14.11	15.77
Net return over lbr & mgt	-27.59	-84.68	-31.33	5.89
Government payments	24.56	25.43	23.15	23.52
Net return with govt payments	-3.03	-59.25	-8.19	29.41
Cost of Production				
Total direct expense per bushel	3.08	4.14	3.04	2.80
Total dir & ovhd exp per bushel	3.73	5.03	3.65	3.37
With labor & management	4.12	5.54	3.99	3.72
Total exp less govt & oth income	3.21	4.63	3.32	2.50
Est. labor hours per acre	1.73	1.78	1.42	1.68

Crop Enterprise Analysis
Farm Business Management Northwest Averages
Northland Community and Technical College
(Farms Sorted By Return to Overhead)

Wheat, Spring on Owned Land 2002

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	122	19	17	16
Number of farms	82	16	16	16
Acres	192.33	124.84	206.11	192.77
Yield per acre (bu.)	25.74	15.00	28.12	45.34
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	3.97	3.64	4.00	4.15
Total product return per acre	102.25	54.62	112.47	187.94
Miscellaneous income per acre	30.92	38.86	21.94	3.84
Gross return per acre	133.17	93.48	134.41	191.78
Direct Expenses				
Seed	9.64	11.98	9.67	10.66
Fertilizer	25.87	27.65	24.85	25.85
Crop chemicals	13.79	12.57	16.33	19.88
Crop insurance	8.12	11.02	8.20	5.46
Drying fuel	0.61	0.11	1.08	0.65
Fuel & oil	6.88	9.17	5.43	5.80
Repairs	12.68	16.51	13.87	12.14
Custom hire	2.60	1.89	2.05	0.27
Operating interest	2.57	2.37	2.93	3.21
Miscellaneous	0.27	0.05	0.62	0.74
Total direct expenses per acre	83.04	93.32	85.02	84.65
Return over direct exp per acre	50.13	0.16	49.40	107.13
Overhead Expenses				
Custom hire	1.79	0.18	0.76	1.83
Hired labor	3.35	1.61	2.25	5.07
Machinery & bldg leases	1.61	2.10	1.00	1.60
RE & pers. property taxes	3.79	4.37	4.05	6.45
Farm insurance	2.48	2.54	1.91	3.55
Utilities	1.81	2.92	1.79	1.64
Dues & professional fees	1.00	0.87	0.98	1.45
Interest	15.24	24.99	15.77	20.24
Mach & bldg depreciation	10.68	8.36	6.50	14.91
Miscellaneous	1.42	2.17	1.35	1.46
Total overhead expenses per acre	43.17	50.10	36.34	58.20
Total dir & ovhd expenses per acre	126.22	143.42	121.35	142.85
Net return per acre	6.96	-49.94	13.06	48.93
Lbr & mgt charge per acre	13.79	14.95	13.37	14.70
Net return over lbr & mgt	-6.83	-64.89	-0.31	34.23
Government payments	11.37	11.78	10.43	10.79
Net return with govt payments	4.54	-53.10	10.13	45.02
Cost of Production				
Total direct expense per bu.	3.23	6.22	3.02	1.87
Total dir & ovhd exp per bu.	4.90	9.56	4.32	3.15
With labor & management	5.44	10.56	4.79	3.48
Total exp less govt & oth income	3.80	7.18	3.64	3.15
Est. labor hours per acre	1.66	1.62	1.37	1.88

Crop Enterprise Analysis
Farm Business Management Northwest Averages
Northland Community and Technical College
(Farms Sorted By Return to Overhead)

Wheat, Spring on Cash Rent 2002

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	122	25	33	21
Number of farms	83	17	17	17
Acres	291.98	230.63	298.11	358.24
Yield per acre (bu.)	29.49	22.59	27.73	38.06
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	3.92	3.64	3.88	4.26
Total product return per acre	115.74	82.32	107.50	162.16
Miscellaneous income per acre	22.39	18.85	22.34	17.89
Gross return per acre	138.14	101.17	129.85	180.05
Direct Expenses				
Seed	9.80	11.43	8.96	9.74
Fertilizer	24.56	25.53	24.50	25.59
Crop chemicals	18.12	21.75	16.63	18.33
Crop insurance	8.72	7.51	9.71	8.29
Drying fuel	0.45	0.19	0.36	0.75
Fuel & oil	6.46	6.95	6.26	6.82
Repairs	12.61	14.51	11.07	13.57
Custom hire	1.29	1.69	0.55	1.21
Land rent	36.36	39.65	35.59	32.69
Operating interest	2.78	3.87	1.80	3.01
Miscellaneous	0.48	0.09	0.27	1.36
Total direct expenses per acre	121.63	133.16	115.68	121.36
Return over direct exp per acre	16.51	-31.99	14.17	58.68
Overhead Expenses				
Custom hire	1.94	1.17	1.16	2.64
Hired labor	2.96	2.59	1.65	4.84
Machinery & bldg leases	1.74	1.97	0.78	1.97
Farm insurance	2.20	1.87	1.98	2.50
Utilities	1.70	1.70	1.36	1.88
Dues & professional fees	1.16	0.93	0.58	1.53
Interest	2.90	3.13	2.36	3.35
Mach & bldg depreciation	7.50	6.87	7.21	11.42
Miscellaneous	1.19	1.56	1.11	0.88
Total overhead expenses per acre	23.29	21.79	18.19	31.02
Total dir & ovhd expenses per acre	144.92	154.94	133.87	152.38
Net return per acre	-6.78	-53.77	-4.02	27.67
Lbr & mgt charge per acre	13.72	12.69	13.94	14.63
Net return over lbr & mgt	-20.51	-66.46	-17.96	13.04
Government payments	12.34	12.32	11.78	12.45
Net return with govt payments	-8.17	-54.14	-6.19	25.49
Cost of Production				
Total direct expense per bu.	4.12	5.90	4.17	3.19
Total dir & ovhd exp per bu.	4.91	6.86	4.83	4.00
With labor & management	5.38	7.42	5.33	4.39
Total exp less govt & oth income	4.20	6.04	4.10	3.59
Est. labor hours per acre	1.46	1.34	1.46	1.69

NORTH DAKOTA

Explanatory Notes for Crops Tables

North Dakota Farm Business Management Education Program
2002 State Report

The "Crop Enterprise Analysis" tables show the average physical production, gross return, direct costs, overhead costs, and net returns per acre. All costs are actual costs; no opportunity eosts are included. The "Net Return per Acre" is the "Gross Return per Acre" minus the direct and overhead costs. "Net Return" represents the return to the operator's and family's unpaid labor, management, and equity. It represents the return to all of the resources, which are owned by the farm family and hence, not purchased or paid a wage. The last section of each crop table contains economic efficiency measures, which provide useful standards or goals for the individual managers.

There are potentially three tables for each crop depending on the farmer's tenure on the land. The crop tables may be for (1) owned land, (2) cash rented land, and (3) share rented land. Individual farms may have data in all three tables if all three land tenure categories are represented in that farm business. When there are less than five farms with a particular crop and tenure, that table is not included in the report. Farms are classified into low 20% or high 20% on the basis of net return per acre. The classification is done separately for each table, i.e., an individual farm may be in the low 20% for one crop, the high 20% for a second, and the middle 60% for a third. When there are less than 25 total farms with any particular crop and farmer's tenure, only overall averages are presented.

Value per unit is the market price received plus any loan deficiency payment. Miscellaneous income includes crop insurance and disaster payments for crops.

Several costs items, such as "utilities," "hired labor," and "interest paid," are listed under both "direct" and "overhead" costs because some of these costs are specific to that crop whereas others are general overhead costs of the farm. For example, "Direct Lease Payments" refers to non-land inputs or resources leased and used only in that crop enterprise and not listed elsewhere under direct costs; the most common example is the lease of equipment that is crop specific. However, cost of leasing machinery that is used for the entire farm operation is listed as an overhead cost. Interest payments are likewise divided into those incurred directly for a specific crop and those that are not. "Land Rent" is listed as a separate category and is assigned as a direct cost for each crop enterprise because it is identifiable with a specific crop. In the case of double cropping, one-half of the rent is charged to each crop.

The last section of the crop tables include several cost of production calculations. "Total direct expense per unit" and "total direct and overhead expense per unit" are calculated by dividing "total direct expense per acre" and "total direct and overhead expense per acre," respectively by "yield per acre." With "labor and management" being the breakeven price after direct, overhead and a labor and management charge are considered. "Total expense less government and other income" is a breakeven price after all costs (including labor and management charge) are reduced by government payment and miscellaneous income.

Rounding of individual items for the report have caused minor discrepancies with the calculated totals.

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DURUM WHEAT ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	128	33	25
Number of farms	79	16	16
Acres	125.80	51.52	158.24
Yield per acre (bushel)	20.48	21.99	11.54
Operators share of yield %	100.00	100.00	100.00
Value per bushel	2.74	2.26	2.75
Other product return per acre	0.04	0.00	0.14
Total product return per acre	56.08	49.65	31.90
Miscellaneous income per acre	49.83	13.64	104.88
Gross return per acre	105.91	63.29	136.78
Direct expenses per acre			
Seed	7.05	6.05	6.55
Fertilizer	8.39	8.73	5.11
Crop chemicals	7.00	7.26	7.04
Crop insurance	9.65	7.61	12.72
Drying fuel	0.22	0.00	0.13
Fuel & oil	5.31	8.08	5.59
Repairs	9.93	13.11	7.92
Custom hire	1.74	0.15	0.15
Operating interest	3.45	4.98	3.28
Miscellaneous	0.15	0.18	0.02
Total direct expenses per acre	52.90	56.16	48.52
Return over direct expenses per acre	53.01	7.13	88.26
Overhead expenses per acre			
Hired labor	2.38	2.51	2.07
Machinery & bldg leases	0.74	0.93	1.08
RE & pers. property taxes	3.98	3.94	4.44
Farm insurance	1.51	1.88	1.47
Utilities	1.70	2.89	1.30
Hauling and trucking	0.01	0.00	0.06
Dues & professional fees	0.31	0.17	0.30
Interest	16.33	18.56	20.05
Mach & bldg depreciation	10.22	10.95	10.14
Miscellaneous	3.58	5.17	3.02
Total overhead expenses per acre	40.77	47.00	43.94
Total listed expenses per acre	93.67	103.16	92.45
Net return per acre	12.24	-39.87	44.32
Total direct expense per bushel	2.58	2.55	4.20
Total listed expense per bushel	4.57	4.69	8.01
Net return per bushel	0.60	-1.81	3.84
Breakeven yield per acre	16.01	39.65	-4.57

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DURUM WHEAT ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	226	29	47
Number of farms	81	16	16
Acres	145.49	170.61	182.37
Yield per acre (bushel)	19.02	24.45	14.91
Operators share of yield %	100.00	100.00	100.00
Value per bushel	2.82	2.49	3.27
Total product return per acre	53.62	60.93	48.73
Miscellaneous income per acre	53.54	2.32	91.80
Gross return per acre	107.16	63.25	140.52
Direct expenses per acre			
Seed	7.61	7.16	7.03
Fertilizer	8.63	12.25	4.79
Crop chemicals	8.76	10.19	7.38
Crop insurance	11.01	9.92	14.59
Drying fuel	0.12	0.00	0.00
Fuel & oil	5.70	5.72	4.38
Repairs	10.58	12.63	5.82
Custom hire	2.70	1.14	1.31
Hired labor	0.16	0.00	0.00
Land rent	28.96	28.37	27.28
Operating interest	3.74	1.90	2.83
Miscellaneous	0.07	0.31	0.01
Total direct expenses per acre	88.03	89.59	75.42
Return over direct expenses per acre	19.13	-26.34	65.10
Overhead expenses per acre			
Hired labor	3.17	4.69	3.13
Machinery & bldg leases	1.30	1.39	1.16
Farm insurance	1.42	1.79	1.30
Utilities	1.10	1.68	0.67
Hauling and trucking	0.01	0.00	0.00
Dues & professional fees	0.36	0.27	0.17
Interest	3.25	2.89	3.08
Mach & bldg depreciation	9.10	8.31	10.06
Miscellaneous	2.66	3.05	2.15
Total overhead expenses per acre	22.39	24.07	21.72
Total listed expenses per acre	110.42	113.66	97.15
Net return per acre	-3.26	-50.41	43.38
Total direct expense per bushel	4.63	3.66	5.06
Total listed expense per bushel	5.81	4.65	6.52
Net return per bushel	-0.17	-2.06	2.91
Breakeven yield per acre	20.17	44.68	1.64

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DURUM WHEAT ON SHARE RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	100	19	21
Number of farms	47	9	9
Acres	94.77	98.17	108.57
Yield per acre (bushel)	22.85	26.18	17.51
Operators share of yield %	67.01	67.61	71.24
Value per bushel	2.71	2.58	2.89
Total product return per acre	41.87	45.34	36.69
Miscellaneous income per acre	27.78	1.99	56.11
Gross return per acre	69.65	47.33	92.80
Direct expenses per acre			
Seed	6.64	6.55	7.36
Fertilizer	9.24	14.74	6.96
Crop chemicals	7.99	12.34	6.08
Crop insurance	6.48	5.53	8.42
Drying fuel	0.14	0.03	0.00
Fuel & oil	5.15	5.07	4.07
Repairs	8.22	7.73	6.24
Custom hire	1.43	2.09	0.53
Operating interest	2.58	2.33	2.14
Miscellaneous	0.33	1.52	0.02
Total direct expenses per acre	48.21	57.93	41.83
Return over direct expenses per acre	21.43	-10.61	50.97
Overhead expenses per acre			
Hired labor	3.49	2.12	4.77
Machinery & bldg leases	0.41	0.64	0.50
Farm insurance	1.28	0.96	1.46
Utilities	1.20	1.22	0.91
Dues & professional fees	0.43	0.08	0.49
Interest	2.94	3.18	3.93
Mach & bldg depreciation	9.17	3.96	9.19
Miscellaneous	2.54	2.72	2.46
Total overhead expenses per acre	21.47	14.88	23.70
Total listed expenses per acre	69.68	72.81	65.53
Net return per acre	-0.04	-25.48	27.27
Total direct expense per bushel	3.15	3.27	3.35
Total listed expense per bushel	4.55	4.11	5.25
Net return per bushel	-0.00	-1.44	2.19
Breakeven yield per acre	23.06	40.55	4.58

TABLE 11 - 1
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Wheat, Durum on Owned Land

	Avg. Of All Farms	Low 20%	High 20%
Number of fields	154	25	20
Number of farms	78	15	15
Acres	128.98	63.24	178.22
Yield per acre (bushel)	29.01	28.20	37.65
Operators share of yield %	100.00	100.00	100.00
Value per bushel	2.76	1.94	3.37
Other product return per acre	0.04	-	-
Total product return per acre	80.18	54.74	127.03
Miscellaneous income per acre	18.43	13.03	26.27
Gross return per acre	98.61	67.77	153.30
Direct Expenses			
Seed	7.18	7.46	8.13
Fertilizer	10.69	11.49	11.36
Crop chemicals	10.08	16.74	13.14
Crop insurance	6.34	6.11	7.15
Fuel & oil	7.08	6.90	6.42
Repairs	9.88	12.97	10.56
Custom hire	2.09	4.73	1.55
Operating interest	3.14	3.24	1.41
Miscellaneous	0.45	0.02	0.21
Total direct expenses per acre	56.93	69.66	59.93
Return over direct exp per acre	41.67	-1.89	93.37
Overhead Expenses			
Hired labor	2.80	1.44	2.44
Machinery & bldg leases	1.31	0.30	0.48
RE & pers. property taxes	4.07	4.50	4.19
Farm insurance	1.37	1.79	1.19
Utilities	1.53	1.70	1.28
Dues & professional fees	0.47	0.62	0.64
Interest	15.26	23.90	11.38
Mach & bldg depreciation	8.32	8.12	9.67
Miscellaneous	3.34	3.31	3.80
Total overhead expenses per acre	38.47	45.67	35.07
Total dir & ovhd expenses per acre	95.40	115.33	95.00
Net return per acre	3.21	-47.56	58.30
Lbr & mgt charge per acre	13.34	16.20	14.42
Net return over lbr & mgt	-10.14	-63.76	43.88
Government payments	20.79	18.45	21.59
Net return with govt payments	10.66	-45.31	65.47
Cost of Production			
Total direct expense per bushel	1.96	2.47	1.59

Total dir & ovhd exp per bushel	3.29	4.09	2.52
With labor & management	3.75	4.67	2.91
Total exp less govt & oth income	2.40	3.55	1.64

TABLE 11 - 2
Crop Enterprise Analysis, 2000
North Dakota Farm Business Management Education Program
State Report
(Farms Sorted By Net Return)

Wheat, Durum on Cash Rent

	Avg. Of All Farms	Low 20%	High 20%
Number of fields	239	46	42
Number of farms	90	18	18
Acres	130.73	77.04	134.01
Yield per acre (bushel)	25.69	31.53	21.62
Operators share of yield %	100.00	100.00	100.00
Value per bushel	2.58	1.68	2.86
Total product return per acre	66.32	52.93	61.89
Miscellaneous income per acre	36.92	6.93	90.45
Gross return per acre	103.24	59.86	152.34
Direct Expenses			
Seed	7.58	7.43	7.31
Fertilizer	10.59	12.98	10.32
Crop chemicals	10.28	11.34	10.21
Crop insurance	9.46	7.03	14.70
Fuel & oil	6.23	5.82	6.33
Repairs	8.44	9.86	7.51
Custom hire	2.01	6.86	0.30
Land rent	28.26	28.46	31.20
Operating interest	3.54	4.85	2.66
Miscellaneous	0.55	0.05	1.15
Total direct expenses per acre	86.93	94.69	91.69
Return over direct exp per acre	16.31	-34.83	60.65
Overhead Expenses			
Hired labor	2.40	0.84	1.90
Machinery & bldg leases	1.81	0.35	3.06
Farm insurance	1.19	1.86	0.86
Utilities	1.11	1.28	1.06
Interest	3.61	3.79	3.57
Mach & bldg depreciation	6.32	5.53	5.11
Miscellaneous	2.71	2.07	1.78
Total overhead expenses per acre	19.14	15.71	17.34
Total dir & ovhd expenses per acre	106.07	110.40	109.03
Net return per acre	-2.83	-50.54	43.30
Lbr & mgt charge per acre	12.11	16.26	11.78
Net return over lbr & mgt	-14.94	-66.80	31.52
Government payments	20.86	22.60	18.55
Net return with govt payments	5.92	-44.20	50.07
Cost of Production			
Total direct expense per bushel	3.38	3.00	4.24
Total dir & ovhd exp per bushel	4.13	3.50	5.04
With labor & management	4.60	4.02	5.59

Total exp less govt & oth income	2.35	3.08	0.55

TABLE 11 - 3
Crop Enterprise Analysis, 2000
North Dakota Farm Business Management Education Program
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Wheat, Durum on Share Rent

	Avg. Of All Farms	Low 20%	High 20%
Number of fields	156	41	30
Number of farms	65	13	13
Acres	110.46	124.86	119.40
Yield per acre (bushel)	29.66	30.23	32.38
Operators share of yield %	66.48	65.15	69.96
Value per bushel	2.74	2.67	3.38
Total product return per acre	53.87	51.75	76.75
Miscellaneous income per acre	17.62	1.45	29.05
Gross return per acre	71.49	53.20	105.79
Direct Expenses			
Seed	7.44	8.90	6.67
Fertilizer	11.34	14.11	12.28
Crop chemicals	11.20	12.27	10.89
Crop insurance	5.42	4.16	4.83
Fuel & oil	5.95	4.97	5.51
Repairs	8.29	7.60	7.40
Custom hire	0.94	1.30	1.26
Operating interest	3.27	6.03	1.33
Miscellaneous	0.94	1.35	0.55
Total direct expenses per acre	54.79	60.69	50.72
Return over direct exp per acre	16.70	-7.49	55.07
Overhead Expenses			
Hired labor	3.53	6.73	2.65
Machinery & bldg leases	0.53	0.34	0.43
Farm insurance	1.24	1.81	1.10
Utilities	1.25	1.48	0.80
Interest	3.00	3.41	2.73
Mach & bldg depreciation	7.73	7.89	9.10
Miscellaneous	2.54	2.87	2.64
Total overhead expenses per acre	19.82	24.52	19.45
Total dir & ovhd expenses per acre	74.61	85.21	70.17
Net return per acre	-3.12	-32.01	35.62
Lbr & mgt charge per acre	11.21	8.42	11.64
Net return over lbr & mgt	-14.33	-40.43	23.99
Government payments	14.65	12.60	13.57
Net return with govt payments	0.32	-27.83	37.56
Cost of Production			
Total direct expense per bushel	2.78	3.08	2.24
Total dir & ovhd exp per bushel	3.78	4.33	3.10
With labor & management	4.35	4.75	3.61
Total exp less govt & oth income	2.72	4.04	1.73

TABLE 11 - 1
Crop Enterprise Analysis, 2001
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Wheat, Durum on Owned Land

	Avg. Of All Farms	Low 20%	High 20%
Number of fields	70	16	19
Number of farms	39	7	7
Acres	158.99	70.71	135.73
Yield per acre (bushel)	25.30	19.12	32.47
Operators share of yield %	100.00	100.00	100.00
Value per bushel	3.58	2.11	4.00
Other product return per acre	0.09	-	0.18
Total product return per acre	90.68	40.25	130.17
Miscellaneous income per acre	9.95	7.71	5.70
Gross return per acre	100.62	47.96	135.87
Direct Expenses			
Seed	7.78	7.99	8.16
Fertilizer	16.04	17.00	16.75
Crop chemicals	9.93	7.95	15.22
Crop insurance	4.98	5.68	4.63
Fuel & oil	8.06	9.56	6.05
Repairs	10.71	9.84	7.03
Custom hire	1.73	0.21	1.46
Operating interest	1.68	2.54	0.98
Miscellaneous	0.11	-	0.03
Total direct expenses per acre	61.02	60.78	60.31
Return over direct exp per acre	39.60	-12.81	75.56
Overhead Expenses			
Hired labor	3.02	1.46	4.20
RE & pers. property taxes	3.71	5.22	2.94
Farm insurance	1.54	2.10	1.55
Utilities	1.41	2.15	0.70
Interest	15.47	22.75	8.01
Mach & bldg depreciation	8.70	6.82	8.26
Miscellaneous	4.67	2.50	3.50
Total overhead expenses per acre	38.51	43.00	29.16
Total dir & ovhd expenses per acre	99.54	103.78	89.47
Net return per acre	1.09	-55.81	46.40
Lbr & mgt charge per acre	13.99	18.21	9.83
Net return over lbr & mgt	-12.91	-74.02	36.57
Government payments	16.07	16.45	13.64
Net return with govt payments	3.16	-57.57	50.21
Cost of Production			
Total direct expense per bushel	2.41	3.18	1.86
Total dir & ovhd exp per bushel	3.93	5.43	2.76
With labor & management	4.49	6.38	3.06
Total exp less govt & oth income	3.46	5.12	2.46

TABLE 11 - 2
Crop Enterprise Analysis, 2001
North Dakota Farm Business Management Education Program
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(Farms Sorted By Net Return)

Wheat, Durum on Cash Rent

	Avg. Of All Farms	Low 20%	High 20%
Number of fields	128	33	21
Number of farms	46	9	9
Acres	118.50	97.00	178.74
Yield per acre (bushel)	24.03	16.82	32.08
Operators share of yield %	100.00	100.00	100.00
Value per bushel	3.38	2.75	4.27
Other product return per acre	0.79	-	-
Total product return per acre	82.04	46.29	137.09
Miscellaneous income per acre	17.17	21.27	5.68
Gross return per acre	99.21	67.57	142.77
Direct Expenses			
Seed	8.16	7.43	9.81
Fertilizer	15.37	15.76	16.92
Crop chemicals	10.13	8.26	10.49
Crop insurance	6.10	5.38	4.91
Fuel & oil	6.39	7.99	5.82
Repairs	10.13	13.51	8.98
Custom hire	1.43	0.93	1.39
Land rent	28.12	30.89	23.71
Operating interest	2.19	2.67	1.82
Miscellaneous	0.06	-	0.02
Total direct expenses per acre	88.08	92.82	83.88
Return over direct exp per acre	11.12	-25.25	58.90
Overhead Expenses			
Hired labor	2.83	2.21	5.33
Machinery & bldg leases	1.33	0.85	0.80
Farm insurance	1.02	1.15	1.22
Utilities	0.99	1.73	0.82
Dues & professional fees	0.54	0.89	0.57
Interest	3.27	5.08	3.12
Mach & bldg depreciation	7.40	6.94	8.91
Miscellaneous	1.83	1.54	3.03
Total overhead expenses per acre	19.21	20.39	23.80
Total dir & ovhd expenses per acre	107.29	113.20	107.68
Net return per acre	-8.09	-45.64	35.09
Lbr & mgt charge per acre	11.26	13.02	10.45
Net return over lbr & mgt	-19.35	-58.66	24.64
Government payments	16.16	17.04	15.34
Net return with govt payments	-3.19	-41.62	39.98
Cost of Production			
Total direct expense per bushel	3.67	5.52	2.61
Total dir & ovhd exp per bushel	4.47	6.73	3.36

With labor & management	4.93	7.50	3.68
Total exp less govt & oth income	3.51	5.23	3.03

TABLE 11 - 3
Crop Enterprise Analysis, 2001
North Dakota Farm Business Management Education Program
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(Farms Sorted By Net Return)

Wheat, Durum on Share Rent

	Avg. Of All Farms	Low 20%	High 20%
Number of fields	66	8	12
Number of farms	32	6	6
Acres	138.41	100.53	135.56
Yield per acre (bushel)	24.01	25.45	28.91
Operators share of yield %	67.21	67.12	69.26
Value per bushel	3.58	2.69	4.22
Total product return per acre	58.60	46.23	85.93
Miscellaneous income per acre	14.78	7.72	13.32
Gross return per acre	73.38	53.95	99.24
Direct Expenses			
Seed	8.33	8.39	7.03
Fertilizer	13.75	15.53	12.66
Crop chemicals	10.58	13.97	8.82
Crop insurance	4.18	8.44	4.73
Fuel & oil	6.73	9.32	5.38
Repairs	10.19	15.05	8.88
Custom hire	0.99	3.87	0.66
Operating interest	2.25	3.38	1.25
Miscellaneous	0.12	-	0.02
Total direct expenses per acre	57.12	77.94	49.44
Return over direct exp per acre	16.27	-23.99	49.80
Overhead Expenses			
Hired labor	4.72	4.36	3.39
Machinery & bldg leases	1.00	1.97	0.71
Farm insurance	1.25	2.68	1.30
Utilities	0.89	1.66	0.80
Interest	2.70	4.79	3.29
Mach & bldg depreciation	7.62	9.73	5.81
Miscellaneous	3.29	2.34	2.97
Total overhead expenses per acre	21.46	27.53	18.27
Total dir & ovhd expenses per acre	78.58	105.48	67.71
Net return per acre	-5.20	-51.53	31.53
Lbr & mgt charge per acre	11.42	15.20	10.59
Net return over lbr & mgt	-16.62	-66.73	20.94
Government payments	11.30	10.13	11.69
Net return with govt payments	-5.32	-56.60	32.63
Cost of Production			
Total direct expense per bushel	3.54	4.56	2.47
Total dir & ovhd exp per bushel	4.87	6.18	3.38
With labor & management	5.58	7.07	3.91
Total exp less govt & oth income	3.96	6.02	2.66

TABLE 11 - 1
Crop Enterprise Analysis, 2002
North Dakota Farm Business Management Education Program
State Report
(Farms Sorted By Net Return)

Wheat, Durum on Owned Land

	Avg. Of All Farms	Low 20%	High 20%
Number of fields	57	7	14
Number of farms	33	6	7
Acres	167.68	197.66	121.89
Yield per acre (bu.)	21.42	15.18	28.70
Operators share of yield %	100.00	100.00	100.00
Value per bu.	3.85	2.97	4.86
Other product return per acre	4.43	3.84	1.00
Total product return per acre	86.94	48.96	140.55
Miscellaneous income per acre	23.62	25.55	26.25
Gross return per acre	110.56	74.51	166.80
Direct Expenses			
Seed	9.05	8.61	7.08
Fertilizer	13.78	12.99	12.01
Crop chemicals	10.86	9.61	6.99
Crop insurance	4.27	1.93	5.50
Fuel & oil	3.87	4.51	4.20
Repairs	7.75	6.38	8.36
Custom hire	2.75	7.82	0.90
Operating interest	1.50	2.10	1.12
Miscellaneous	0.60	-	0.05
Total direct expenses per acre	54.43	53.96	46.20
Return over direct exp per acre	56.14	20.55	120.61
Overhead Expenses			
Hired labor	2.19	1.42	2.08
Machinery & bldg leases	0.54	1.58	0.20
RE & pers. property taxes	3.79	3.21	4.62
Farm insurance	1.29	2.00	1.12
Utilities	1.38	1.91	0.83
Interest	11.47	12.78	13.71
Mach & bldg depreciation	9.87	10.38	9.62
Miscellaneous	3.71	5.42	3.13
Total overhead expenses per acre	34.24	38.69	35.31
Total dir & ovhd expenses per acre	88.67	92.65	81.50
Net return per acre	21.90	-18.15	85.30
Lbr & mgt charge per acre	12.69	13.94	13.44
Net return over lbr & mgt	9.21	-32.09	71.86
Government payments	9.35	6.68	8.11
Net return with govt payments	18.56	-25.41	79.98
Cost of Production			
Total direct expense per bu.	2.54	3.55	1.61
Total dir & ovhd exp per bu.	4.14	6.10	2.84
With labor & management	4.73	7.02	3.31

Total exp less govt & oth income	2.99	4.64	2.08

TABLE 11 - 2
Crop Enterprise Analysis, 2002
North Dakota Farm Business Management Education Program
State Report
(Farms Sorted By Net Return)

Wheat, Durum on Cash Rent

	Avg. Of All Farms	Low 20%	High 20%
Number of fields	121	21	21
Number of farms	45	9	9
Acres	120.64	160.79	142.83
Yield per acre (bu.)	21.21	9.73	29.70
Operators share of yield %	100.00	100.00	100.00
Value per bu.	4.00	3.61	4.56
Other product return per acre	1.12	1.75	-
Total product return per acre	85.97	36.84	135.34
Miscellaneous income per acre	15.32	22.20	3.89
Gross return per acre	101.29	59.04	139.23
Direct Expenses			
Seed	9.92	11.10	10.17
Fertilizer	14.44	16.14	12.09
Crop chemicals	11.00	13.44	5.99
Crop insurance	4.72	6.32	4.66
Fuel & oil	5.03	4.86	5.11
Repairs	9.00	7.59	8.79
Custom hire	3.69	5.55	2.04
Hired labor	0.20	0.86	-
Land rent	25.25	27.41	24.54
Machinery & bldg leases	0.21	0.66	0.01
Operating interest	1.66	2.81	0.89
Miscellaneous	0.57	2.14	0.28
Total direct expenses per acre	85.71	98.88	74.56
Return over direct exp per acre	15.58	-39.85	64.67
Overhead Expenses			
Hired labor	3.29	3.14	1.87
Machinery & bldg leases	1.12	1.51	0.15
Farm insurance	1.14	1.21	1.17
Utilities	1.04	1.59	0.95
Interest	1.99	1.77	1.81
Mach & bldg depreciation	7.55	3.15	10.97
Miscellaneous	2.12	2.00	2.74
Total overhead expenses per acre	18.24	14.37	19.66
Total dir & ovhd expenses per acre	103.95	113.25	94.22
Net return per acre	-2.66	-54.21	45.02
Lbr & mgt charge per acre	10.84	9.44	11.23
Net return over lbr & mgt	-13.49	-63.65	33.79
Government payments	7.26	7.03	7.24
Net return with govt payments	-6.24	-56.63	41.03
Cost of Production			
Total direct expense per bu.	4.04	10.16	2.51

Total dir & ovhd exp per bu.	4.90	11.64	3.17
With labor & management	5.41	12.61	3.55
Total exp less govt & oth income	4.30	9.43	3.18

TABLE 11 - 3
Crop Enterprise Analysis, 2002
North Dakota Farm Business Management Education Program
State Report
(Farms Sorted By Net Return)

Wheat, Durum on Share Rent

	Avg. Of All Farms
Number of fields	36
Number of farms	22
Acres	135.29
Yield per acre (bu.)	23.51
Operators share of yield %	65.01
Value per bu.	4.05
Total product return per acre	61.98
Miscellaneous income per acre	5.66
Gross return per acre	67.64
Direct Expenses	
Seed	8.25
Fertilizer	12.19
Crop chemicals	10.51
Crop insurance	2.99
Fuel & oil	4.66
Repairs	7.43
Custom hire	2.67
Operating interest	1.20
Miscellaneous	1.56
Total direct expenses per acre	51.46
Return over direct exp per acre	16.18
Overhead Expenses	
Hired labor	2.93
Farm insurance	1.28
Utilities	1.05
Interest	1.67
Mach & bldg depreciation	9.59
Miscellaneous	2.87
Total overhead expenses per acre	19.39
Total dir & ovhd expenses per acre	70.85
Net return per acre	-3.21
Lbr & mgt charge per acre	10.19
Net return over lbr & mgt	-13.41
Government payments	5.12
Net return with govt payments	-8.29
Cost of Production	

Total direct expense per bu.	3.37
Total dir & ovhd exp per bu.	4.64
With labor & management	5.30
Total exp less govt & oth income	4.60

Crop Enterprise Analysis, 1999
North Dakota Farm Business Management Education Program
State Report
(Farms sorted by Return to Overhead)

SPRING WHEAT ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	219	36	35
Number of farms	127	25	25
Acres	121.12	80.60	121.36
Yield per acre (bushel)	28.90	20.71	42.79
Operators share of yield %	100.00	100.00	100.00
Value per bushel	3.17	2.87	3.62
Total product return per acre	91.47	59.40	155.01
Miscellaneous income per acre	5.45	1.52	6.40
Gross return per acre	96.92	60.92	161.41
Direct expenses per acre			
Seed	7.42	6.72	9.16
Fertilizer	13.35	12.55	14.98
Crop chemicals	9.34	9.44	13.59
Crop insurance	5.21	4.94	6.41
Drying fuel	0.06	0.00	0.06
Fuel & oil	5.32	6.20	5.92
Repairs	9.41	13.53	10.28
Custom hire	2.05	1.19	1.18
Operating interest	2.80	3.96	3.77
Miscellaneous	0.34	0.00	1.11
Total direct expenses per acre	55.31	58.53	66.45
Return over direct expenses per acre	41.61	2.38	94.96
Overhead expenses per acre			
Hired labor	2.63	1.18	3.62
Machinery & bldg leases	1.26	2.97	2.81
RE & pers. property taxes	3.85	4.03	4.81
Farm insurance	1.46	2.34	1.60
Utilities	1.41	2.10	1.42
Hauling and trucking	0.05	0.00	0.07
Dues & professional fees	0.38	0.20	0.44
Interest	14.04	14.69	22.09
Mach & bldg depreciation	8.80	8.14	10.43
Miscellaneous	2.53	3.49	2.23
Total overhead expenses per acre	36.41	39.14	49.53
Total listed expenses per acre	91.72	97.67	115.98
Net return per acre	5.20	-36.75	45.43
Total direct expense per bushel	1.91	2.83	1.55
Total listed expense per bushel	3.17	4.72	2.71
Net return per bushel	0.18	-1.77	1.06
Breakeven yield per acre	27.26	33.53	30.25

Crop Enterprise Analysis, 1999
North Dakota Farm Business Management Education Program
State Report
(Farms sorted by Return to Overhead)

SPRING WHEAT ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	345	61	55
Number of farms	147	29	29
Acres	146.36	129.35	160.13
Yield per acre (bushel)	28.80	18.29	41.31
Operators share of yield %	100.00	100.00	100.00
Value per bushel	3.22	2.85	3.40
Total product return per acre	92.85	52.12	140.59
Miscellaneous income per acre	5.44	7.68	5.30
Gross return per acre	98.29	59.80	145.89
Direct expenses per acre			
Seed	7.43	7.17	8.10
Fertilizer	14.83	14.60	15.67
Crop chemicals	10.72	9.13	11.03
Crop insurance	5.40	5.08	5.98
Drying fuel	0.07	0.02	0.00
Fuel & oil	5.15	6.04	4.89
Repairs	9.11	11.92	8.18
Custom hire	3.43	3.92	4.39
Land rent	29.47	27.94	34.86
Operating interest	3.43	3.44	3.77
Miscellaneous	0.25	0.13	0.00
Total direct expenses per acre	89.27	89.41	96.87
Return over direct expenses per acre	9.02	-29.60	49.03
Overhead expenses per acre			
Hired labor	3.29	2.28	3.82
Machinery & bldg leases	1.61	0.69	1.95
Farm insurance	1.47	1.51	1.50
Utilities	1.13	1.55	1.19
Hauling and trucking	0.09	0.00	0.02
Dues & professional fees	0.27	0.15	0.27
Interest	3.35	5.02	3.06
Mach & bldg depreciation	8.48	7.73	9.35
Miscellaneous	2.26	2.12	1.94

Total overhead expenses per acre	21.95	21.04	23.10
Total listed expenses per acre	111.22	110.45	119.97
Net return per acre	-12.93	-50.65	25.93
Total direct expense per bushel	3.10	4.89	2.34
Total listed expense per bushel	3.86	6.04	2.90
Net return per bushel	-0.45	-2.77	0.63
Breakeven yield per acre	32.82	36.05	33.69

Crop Enterprise Analysis, 1999
North Dakota Farm Business Management Education Program
State Report
(Farms sorted by Return to Overhead)

SPRING WHEAT ON SHARE RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	163	24	21
Number of farms	78	16	16
Acres	124.13	133.43	125.87
Yield per acre (bushel)	28.55	19.39	35.41
Operators share of yield %	67.31	71.89	65.73
Value per bushel	3.22	3.13	3.37
Total product return per acre	61.39	44.42	78.97
Miscellaneous income per acre	5.02	3.69	19.06
Gross return per acre	66.42	48.10	98.02
Direct expenses per acre			
Seed	6.49	7.46	5.69
Fertilizer	12.83	13.28	11.75
Crop chemicals	9.53	14.45	7.35
Crop insurance	4.21	5.86	4.57
Drying fuel	0.06	0.06	0.00
Fuel & oil	4.99	4.12	4.90
Repairs	9.07	7.86	8.17
Custom hire	1.84	1.45	1.22
Operating interest	3.00	5.60	2.81
Miscellaneous	1.25	5.98	0.29
Total direct expenses per acre	53.28	66.13	46.75
Return over direct expenses per acre	13.13	-18.02	51.28

Overhead expenses per acre			
Hired labor	2.42	0.63	2.22
Machinery & bldg leases	1.35	0.25	0.91
Farm insurance	1.27	1.93	1.59
Utilities	1.17	1.88	1.10
Hauling and trucking	0.04	0.00	0.11
Dues & professional fees	0.23	0.12	0.26
Interest	2.92	2.79	3.86
Mach & bldg depreciation	6.89	4.80	10.28
Miscellaneous	1.94	1.63	2.75
Total overhead expenses per acre	18.23	14.03	23.09
Total listed expenses per acre	71.51	80.16	69.84
Net return per acre	-5.09	-32.05	28.19
Total direct expense per bushel	2.77	4.74	2.01
Total listed expense per bushel	3.72	5.75	3.00
Net return per bushel	-0.27	-2.30	1.21
Breakeven yield per acre	30.67	33.96	22.91

TABLE 11 - 4
Crop Enterprise Analysis, 2000
North Dakota Farm Business Management Education Program
State Report
(Farms Sorted By Net Return)

Wheat, Spring on Owned Land

	Avg. Of All Farms	Low 20%	High 20%
Number of fields	235	43	51
Number of farms	131	26	26
Acres	142.33	120.93	158.05
Yield per acre (bushel)	35.00	25.22	43.97
Operators share of yield %	100.00	100.00	100.00
Value per bushel	3.39	3.15	3.50
Total product return per acre	118.53	79.43	153.86
Miscellaneous income per acre	5.36	6.72	4.46
Gross return per acre	123.89	86.15	158.32
Direct Expenses			
Seed	6.91	7.27	6.88
Fertilizer	14.93	13.76	13.83
Crop chemicals	11.77	12.38	12.21
Crop insurance	5.68	6.09	5.33
Fuel & oil	7.19	7.07	7.98
Repairs	9.95	11.48	10.24
Custom hire	3.15	3.94	1.87
Operating interest	2.74	4.80	1.80
Miscellaneous	0.40	0.26	0.20
Total direct expenses per acre	62.72	67.05	60.36
Return over direct exp per acre	61.17	19.10	97.96
Overhead Expenses			
Hired labor	3.27	4.47	2.95
Machinery & bldg leases	0.79	0.45	0.79
RE & pers. property taxes	3.79	4.05	3.64
Farm insurance	1.55	1.95	1.22
Utilities	1.21	1.36	1.40
Dues & professional fees	0.39	0.74	0.18
Interest	13.76	19.83	9.91
Mach & bldg depreciation	8.18	7.19	7.93
Miscellaneous	2.00	2.33	2.20
Total overhead expenses per acre	34.94	42.38	30.23
Total dir & ovhd expenses per acre	97.66	109.43	90.59
Net return per acre	26.23	-23.27	67.73
Lbr & mgt charge per acre	12.54	14.25	12.45
Net return over lbr & mgt	13.69	-37.52	55.28
Government payments	19.56	21.85	18.71
Net return with govt payments	33.25	-15.67	73.98
Cost of Production			
Total direct expense per bushel	1.79	2.66	1.37
Total dir & ovhd exp per bushel	2.79	4.34	2.06

With labor & management	3.15	4.90	2.34
Total exp less govt & oth income	2.44	3.77	1.82

TABLE 11 - 5
Crop Enterprise Analysis, 2000
North Dakota Farm Business Management Education Program
State Report
(Farms Sorted By Net Return)

Wheat, Spring on Cash Rent

	Avg. Of All Farms	Low 20%	High 20%
Number of fields	394	71	88
Number of farms	167	33	34
Acres	156.82	129.92	160.46
Yield per acre (bushel)	33.49	23.91	40.34
Operators share of yield %	100.00	100.00	100.00
Value per bushel	3.39	3.13	3.58
Other product return per acre	0.00	0.03	-
Total product return per acre	113.58	74.90	144.58
Miscellaneous income per acre	9.42	6.39	12.92
Gross return per acre	123.00	81.30	157.49
Direct Expenses			
Seed	7.29	8.13	6.85
Fertilizer	14.95	13.70	14.36
Crop chemicals	11.88	15.41	11.35
Crop insurance	6.48	8.02	6.46
Fuel & oil	6.40	6.77	6.37
Repairs	9.81	10.85	9.38
Custom hire	3.28	3.40	3.17
Land rent	29.10	27.78	28.22
Operating interest	3.12	4.32	2.51
Miscellaneous	0.57	0.45	0.60
Total direct expenses per acre	92.86	98.83	89.27
Return over direct exp per acre	30.14	-17.54	68.22
Overhead Expenses			
Hired labor	3.12	2.39	3.10
Machinery & bldg leases	1.54	2.00	1.42
Farm insurance	1.43	1.24	1.35
Utilities	1.13	1.11	1.21
Dues & professional fees	0.44	0.58	0.56
Interest	3.24	3.31	2.77
Mach & bldg depreciation	8.03	6.07	7.89
Miscellaneous	1.86	1.79	1.76
Total overhead expenses per acre	20.78	18.49	20.07
Total dir & ovhd expenses per acre	113.65	117.32	109.34
Net return per acre	9.35	-36.03	48.15
Lbr & mgt charge per acre	12.25	13.37	11.99
Net return over lbr & mgt	-2.90	-49.39	36.16
Government payments	20.37	22.01	20.16
Net return with govt payments	17.48	-27.39	56.32
Cost of Production			
Total direct expense per bushel	2.77	4.13	2.21

Total dir & ovhd exp per bushel	3.39	4.91	2.71
With labor & management	3.76	5.47	3.01
Total exp less govt & oth income	2.87	4.28	2.19

TABLE 11 - 6
Crop Enterprise Analysis, 2000
North Dakota Farm Business Management Education Program
State Report
(Farms Sorted By Net Return)

Wheat, Spring on Share Rent

	Avg. Of All Farms	Low 20%	High 20%
Number of fields	184	23	32
Number of farms	84	16	17
Acres	123.59	155.82	134.16
Yield per acre (bushel)	33.63	26.98	41.41
Operators share of yield %	67.14	68.99	65.19
Value per bushel	3.29	3.07	3.37
Total product return per acre	73.98	56.56	90.58
Miscellaneous income per acre	4.00	10.36	2.90
Gross return per acre	77.98	66.92	93.48
Direct Expenses			
Seed	6.96	8.60	5.67
Fertilizer	12.78	15.99	9.78
Crop chemicals	11.36	13.79	10.46
Crop insurance	5.24	6.82	3.75
Fuel & oil	6.53	6.84	6.28
Repairs	9.93	13.13	9.03
Custom hire	2.12	1.92	2.15
Operating interest	2.70	4.73	2.31
Miscellaneous	0.53	0.75	0.09
Total direct expenses per acre	58.14	72.58	49.51
Return over direct exp per acre	19.84	-5.66	43.96
Overhead Expenses			
Hired labor	2.50	3.50	1.33
Machinery & bldg leases	1.34	3.79	0.14
Farm insurance	1.22	1.58	0.90
Utilities	1.18	1.32	0.88
Dues & professional fees	0.50	0.78	0.37
Interest	3.20	3.65	2.73
Mach & bldg depreciation	6.80	7.02	7.25
Miscellaneous	1.73	1.99	1.88
Total overhead expenses per acre	18.48	23.62	15.47
Total dir & ovhd expenses per acre	76.62	96.19	64.98
Net return per acre	1.36	-29.28	28.49
Lbr & mgt charge per acre	12.05	13.28	11.01
Net return over lbr & mgt	-10.69	-42.56	17.48
Government payments	14.63	18.37	12.06
Net return with govt payments	3.94	-24.19	29.54
Cost of Production			
Total direct expense per bushel	2.58	3.90	1.83
Total dir & ovhd exp per bushel	3.39	5.17	2.41
With labor & management	3.93	5.88	2.82

Total exp less govt & oth income	3.10	4.34	2.26

TABLE 11 - 4
Crop Enterprise Analysis, 2001
North Dakota Farm Business Management Education Program
State Report
(Farms Sorted By Net Return)

Wheat, Spring on Owned Land

	Avg. Of All Farms	Low 20%	High 20%
Number of fields	239	53	49
Number of farms	132	26	26
Acres	141.55	121.08	219.40
Yield per acre (bushel)	34.14	27.08	43.01
Operators share of yield %	100.00	100.00	100.00
Value per bushel	2.95	2.95	2.96
Other product return per acre	0.09	-	0.17
Total product return per acre	100.87	79.89	127.64
Miscellaneous income per acre	3.56	3.15	3.46
Gross return per acre	104.43	83.04	131.10
Direct Expenses			
Seed	7.75	7.47	7.19
Fertilizer	18.00	17.51	20.22
Crop chemicals	12.19	15.43	10.58
Crop insurance	5.76	7.10	4.77
Fuel & oil	7.75	9.54	7.37
Repairs	10.18	13.30	9.39
Custom hire	3.66	5.78	3.16
Operating interest	2.37	4.01	1.72
Miscellaneous	0.40	0.00	0.70
Total direct expenses per acre	68.06	80.14	65.10
Return over direct exp per acre	36.37	2.91	66.00
Overhead Expenses			
Hired labor	3.12	4.04	4.36
Machinery & bldg leases	0.96	0.57	0.79
RE & pers. property taxes	4.30	5.49	4.09
Farm insurance	1.80	2.34	1.78
Utilities	1.38	2.24	1.02
Interest	13.89	20.46	8.75
Mach & bldg depreciation	8.14	7.94	8.65
Miscellaneous	2.71	2.92	2.79
Total overhead expenses per acre	36.29	46.02	32.24
Total dir & ovhd expenses per acre	104.35	126.15	97.33
Net return per acre	0.08	-43.11	33.76
Lbr & mgt charge per acre	13.04	16.78	11.00
Net return over lbr & mgt	-12.96	-59.89	22.77
Government payments	17.88	20.90	17.23
Net return with govt payments	4.92	-39.00	40.00
Cost of Production			
Total direct expense per bushel	1.99	2.96	1.51
Total dir & ovhd exp per bushel	3.06	4.66	2.26
With labor & management	3.44	5.28	2.52

Total exp less govt & oth income	2.81	4.39	2.03

TABLE 11 - 5
Crop Enterprise Analysis, 2001
North Dakota Farm Business Management Education Program
State Report
(Farms Sorted By Net Return)

Wheat, Spring on Cash Rent

	Avg. Of All Farms	Low 20%	High 20%
Number of fields	448	98	76
Number of farms	164	32	33
Acres	144.32	114.20	173.53
Yield per acre (bushel)	32.34	26.82	41.09
Operators share of yield %	100.00	100.00	100.00
Value per bushel	2.95	2.94	3.04
Other product return per acre	0.04	0.04	-
Total product return per acre	95.49	78.81	124.77
Miscellaneous income per acre	6.35	8.06	6.57
Gross return per acre	101.84	86.87	131.34
Direct Expenses			
Seed	7.65	9.23	7.14
Fertilizer	18.64	19.65	18.15
Crop chemicals	11.94	18.13	10.29
Crop insurance	6.38	8.23	5.29
Fuel & oil	7.14	8.08	6.35
Repairs	10.07	14.35	9.19
Custom hire	3.66	4.61	4.16
Land rent	29.42	30.62	25.27
Operating interest	3.10	3.19	2.56
Miscellaneous	0.36	0.18	1.28
Total direct expenses per acre	98.35	116.28	89.69
Return over direct exp per acre	3.49	-29.41	41.64
Overhead Expenses			
Hired labor	3.08	3.79	4.30
Machinery & bldg leases	1.72	3.10	2.07
Farm insurance	1.60	2.04	1.37
Utilities	1.29	1.61	1.03
Dues & professional fees	0.33	0.58	0.18
Interest	3.69	4.72	2.49
Mach & bldg depreciation	8.25	8.76	6.49
Miscellaneous	2.11	2.43	2.01
Total overhead expenses per acre	22.07	27.02	19.95
Total dir & ovhd expenses per acre	120.42	143.30	109.65
Net return per acre	-18.58	-56.43	21.69
Lbr & mgt charge per acre	12.78	14.28	11.26
Net return over lbr & mgt	-31.36	-70.72	10.43
Government payments	17.15	16.83	16.24
Net return with govt payments	-14.21	-53.88	26.66
Cost of Production			
Total direct expense per bushel	3.04	4.34	2.18
Total dir & ovhd exp per bushel	3.72	5.34	2.67

With labor & management	4.12	5.88	2.94
Total exp less govt & oth income	3.39	4.95	2.39

TABLE 11 - 6
Crop Enterprise Analysis, 2001
North Dakota Farm Business Management Education Program
State Report
(Farms Sorted By Net Return)

Wheat, Spring on Share Rent

	Avg. Of All Farms	Low 20%	High 20%
Number of fields	216	34	48
Number of farms	83	16	17
Acres	123.11	83.42	143.63
Yield per acre (bushel)	32.86	30.93	40.59
Operators share of yield %	67.73	70.32	68.01
Value per bushel	2.91	2.77	2.94
Total product return per acre	64.59	60.44	80.77
Miscellaneous income per acre	2.28	1.41	2.02
Gross return per acre	66.87	61.85	82.79
Direct Expenses			
Seed	7.01	8.10	6.92
Fertilizer	15.89	19.15	14.74
Crop chemicals	10.91	15.25	11.28
Crop insurance	5.12	5.95	4.66
Fuel & oil	7.77	7.96	7.21
Repairs	10.39	15.94	9.04
Custom hire	2.10	4.56	1.26
Operating interest	2.54	3.67	1.74
Miscellaneous	0.95	0.40	1.06
Total direct expenses per acre	62.68	80.98	57.90
Return over direct exp per acre	4.19	-19.13	24.89
Overhead Expenses			
Hired labor	2.88	3.90	2.83
Machinery & bldg leases	1.60	0.93	1.80
Farm insurance	1.46	2.54	1.47
Utilities	1.20	1.34	1.07
Dues & professional fees	0.41	0.99	0.44
Interest	3.45	5.98	2.95
Mach & bldg depreciation	6.63	10.69	5.43
Miscellaneous	1.80	2.00	1.90
Total overhead expenses per acre	19.44	28.37	17.88
Total dir & ovhd expenses per acre	82.12	109.35	75.79
Net return per acre	-15.25	-47.50	7.01
Lbr & mgt charge per acre	12.29	15.12	10.93
Net return over lbr & mgt	-27.55	-62.62	-3.92
Government payments	12.26	12.28	11.97
Net return with govt payments	-15.29	-50.35	8.05
Cost of Production			
Total direct expense per bushel	2.82	3.72	2.10
Total dir & ovhd exp per bushel	3.69	5.03	2.75
With labor & management	4.24	5.72	3.14
Total exp less govt & oth income	3.59	5.09	2.63

TABLE 11 - 4
Crop Enterprise Analysis, 2002
North Dakota Farm Business Management Education Program
State Report
(Farms Sorted By Net Return)

Wheat, Spring on Owned Land

	Avg. Of All Farms	Low 20%	High 20%
Number of fields	223	41	50
Number of farms	129	26	26
Acres	131.96	143.19	131.47
Yield per acre (bu.)	22.34	14.81	30.19
Operators share of yield %	100.00	100.00	100.00
Value per bu.	4.00	3.89	4.07
Other product return per acre	1.48	1.83	1.86
Total product return per acre	90.88	59.42	124.85
Miscellaneous income per acre	20.53	13.97	21.29
Gross return per acre	111.41	73.39	146.14
Direct Expenses			
Seed	7.08	7.66	7.80
Fertilizer	15.24	16.98	16.27
Crop chemicals	12.62	12.92	12.91
Crop insurance	5.38	4.59	5.46
Fuel & oil	5.84	5.98	5.59
Repairs	9.77	10.51	8.08
Custom hire	2.40	2.72	1.61
Operating interest	2.06	2.77	1.46
Miscellaneous	0.53	1.05	0.36
Total direct expenses per acre	60.92	65.20	59.54
Return over direct exp per acre	50.49	8.19	86.60
Overhead Expenses			
Hired labor	2.83	4.31	3.41
Machinery & bldg leases	0.89	0.96	0.92
RE & pers. property taxes	4.35	3.87	4.47
Farm insurance	1.82	1.95	1.76
Utilities	1.50	1.40	1.51
Interest	12.97	19.34	6.82
Mach & bldg depreciation	8.54	6.85	10.58
Miscellaneous	2.54	2.91	2.51
Total overhead expenses per acre	35.44	41.59	31.99
Total dir & ovhd expenses per acre	96.36	106.79	91.53
Net return per acre	15.05	-33.40	54.62
Lbr & mgt charge per acre	12.73	12.19	13.07
Net return over lbr & mgt	2.33	-45.59	41.54
Government payments	8.49	8.90	8.43
Net return with govt payments	10.82	-36.69	49.98
Cost of Production			
Total direct expense per bu.	2.73	4.40	1.97
Total dir & ovhd exp per bu.	4.31	7.21	3.03
With labor & management	4.88	8.03	3.46

Total exp less govt & oth income	3.52	6.37	2.42

TABLE 11 - 5
Crop Enterprise Analysis, 2002
North Dakota Farm Business Management Education Program
State Report
(Farms Sorted By Net Return)

Wheat, Spring on Cash Rent

	Avg. Of All Farms	Low 20%	High 20%
Number of fields	389	61	92
Number of farms	145	29	29
Acres	157.26	184.40	116.32
Yield per acre (bu.)	23.54	15.84	29.71
Operators share of yield %	100.00	100.00	100.00
Value per bu.	4.05	3.80	4.24
Other product return per acre	0.72	0.73	0.44
Total product return per acre	96.12	60.85	126.29
Miscellaneous income per acre	19.88	20.89	26.22
Gross return per acre	116.00	81.74	152.51
Direct Expenses			
Seed	7.23	7.07	7.85
Fertilizer	14.83	16.11	13.83
Crop chemicals	12.57	13.58	13.44
Crop insurance	5.45	4.77	6.44
Fuel & oil	5.32	5.92	6.01
Repairs	9.09	8.26	9.24
Custom hire	3.02	1.78	2.16
Land rent	29.72	28.74	29.31
Operating interest	2.23	2.04	2.03
Miscellaneous	0.54	0.32	0.06
Total direct expenses per acre	89.99	88.58	90.36
Return over direct exp per acre	26.01	-6.85	62.14
Overhead Expenses			
Hired labor	2.83	5.30	1.99
Machinery & bldg leases	1.67	2.76	1.13
Farm insurance	1.48	1.95	1.30
Utilities	1.21	1.26	1.24
Interest	2.32	2.68	2.57
Mach & bldg depreciation	8.52	7.82	6.55
Miscellaneous	2.18	3.01	2.20
Total overhead expenses per acre	20.21	24.79	16.99
Total dir & ovhd expenses per acre	110.20	113.37	107.35
Net return per acre	5.80	-31.64	45.16
Lbr & mgt charge per acre	11.66	10.58	12.79
Net return over lbr & mgt	-5.86	-42.21	32.37
Government payments	8.76	8.95	8.68
Net return with govt payments	2.90	-33.26	41.04
Cost of Production			
Total direct expense per bu.	3.82	5.59	3.04
Total dir & ovhd exp per bu.	4.68	7.16	3.61
With labor & management	5.18	7.83	4.04

Total exp less govt & oth income	3.93	5.90	2.85

TABLE 11 - 6
Crop Enterprise Analysis, 2002
North Dakota Farm Business Management Education Program
State Report
(Farms Sorted By Net Return)

Wheat, Spring on Share Rent

	Avg. Of All Farms	Low 20%	High 20%
Number of fields	172	22	55
Number of farms	79	16	16
Acres	134.30	205.81	101.08
Yield per acre (bu.)	26.07	14.40	36.58
Operators share of yield %	67.70	67.64	69.07
Value per bu.	4.05	3.76	4.21
Other product return per acre	0.04	-	-
Total product return per acre	71.52	36.63	106.49
Miscellaneous income per acre	7.27	9.81	3.88
Gross return per acre	78.80	46.44	110.37
Direct Expenses			
Seed	6.04	6.07	6.53
Fertilizer	13.49	16.40	12.35
Crop chemicals	10.41	10.93	10.59
Crop insurance	4.05	4.46	4.19
Fuel & oil	5.42	5.27	6.42
Repairs	9.83	10.53	9.53
Custom hire	1.20	1.10	0.38
Operating interest	1.97	1.34	2.35
Miscellaneous	0.44	2.08	0.05
Total direct expenses per acre	52.87	58.18	52.40
Return over direct exp per acre	25.93	-11.74	57.97
Overhead Expenses			
Hired labor	2.67	2.86	2.42
Machinery & bldg leases	1.19	1.05	2.04
Farm insurance	1.42	1.87	1.30
Utilities	1.23	0.79	1.28
Interest	2.23	2.18	2.81
Mach & bldg depreciation	6.70	6.54	6.15
Miscellaneous	1.77	1.95	1.14
Total overhead expenses per acre	17.22	17.24	17.13
Total dir & ovhd expenses per acre	70.09	75.42	69.53
Net return per acre	8.71	-28.98	40.84
Lbr & mgt charge per acre	11.17	9.65	12.29
Net return over lbr & mgt	-2.46	-38.62	28.55
Government payments	6.02	6.77	6.13
Net return with govt payments	3.56	-31.85	34.68
Cost of Production			
Total direct expense per bu.	3.00	5.97	2.07
Total dir & ovhd exp per bu.	3.97	7.74	2.75
With labor & management	4.60	8.73	3.24
Total exp less govt & oth income	3.85	7.03	2.84

SOUTH DAKOTA

NOTES

Crop Production by Enterprise

This section of the analysis specifically looks at the crops raised by the producers in the program. The tables and charts show the income generated crop by crop and the corresponding expense categories. Three key factors determining long term profitability for any crop are:

1 Consistent high yields
2 Price received (marketable value)
3 Low total production costs

Several of the crop tables have pie charts which visually show where money was spent on the 2001 crop. The line charts show the average yields combined with the average value at harvest. Government payments received are not included in the graphs.

Crop Return:

The analysis tables show average yield and the gross return per acre for 2001. Other crop income includes aftermath grazing, straw, and crop insurance receipts.

Variable Costs:

Out-of-pocket costs for fertilizer, crop chemicals, seed, hired labor and other direct expenses. These are actual costs that were assigned to each crop by the producer.

Allocated Costs:

These costs include fuel, repairs and upkeep, depreciation, and other overhead expenses, that must be paid for by the business. The computer allocates these expenses using the work unit designation listed on line 52.

Actual Land Ownership or Rental Costs are the dollars spent by the cooperator to either own or rent land. Actual land ownership costs are all real estate interest actually paid plus real estate taxes divided evenly over all of the operators owned land. If the land was rented, line 37 would then be the value of the landlord's share of the crop minus the value of the expenses or the cash rent paid.

Supplementary Management Information:

This section shows the costs and returns per unit for each crop and the computed amount needed to cover family living expenses and break even yields. The average sales price received is for all sales of that crop during the year.

Note:

Some crop tables have been deleted from this report because of the small number of farms engaged in these crops and to maintain confidentiality of those contributing to this report.

The columns headed 'Average', 'High', and 'Low' in this section show the average for all the fields in that category. The figures in the 'High' and 'Low' columns are split based on the 'Return Over Variable Costs', line 21.

1997

Table 10

	Spring Wheat	Average of all Fields		High Return Fields		Low Return Fields	
3	Acres		74.9		100.4		59.7
			Per Acre		Per Acre		Per Acre
4	Yield Per Acre (bushels)		35.6		44.9		25.5
5	Value per Bushel	$	2.93	$	2.96	$	2.87
6	Crop Product Return	$	104.26	$	132.85	$	73.28
7	Other Crop Income*		6.92		10.01		0.44
8	Total Crop Return	$	111.18	$	142.86	$	73.72
	Variable Costs						
10	Fertilizer		20.01		16.80		26.62
11	Chemicals		8.57		7.44		13.07
12	Seed Expense		7.62		6.29		9.95
13	Crop Drying		0.35		0.43		0.64
14	Crop Insurance		4.09		3.61		6.65
15	Other Expenses		0.92		0.14		2.58
16	Special Hired Labor		0.09		0.21		
17	Custom Work Hired & Lease Expense		2.66		2.00		2.98
18	Irrigation Operation						
19	Assigned Interest						
20	Total Variable Costs	39.8%	44.31	29.6%	36.92	58.1%	62.49
21	Return Over Variable Costs	$	66.87	$	105.94	$	11.23
	Allocated Costs (Variable & Fixed)						
31	Farm Power & Machinery - Ownership		5.66		6.39		6.70
32	Farm Power & Machinery - Operation		11.39		11.37		9.48
33	Building & Fence Cost		1.44		1.46		1.31
34	Irrigation Ownership Cost						
37	Actual Land Ownership or Rental Costs		35.37		53.37		17.13
38	Utilities & General Farm Expense		3.90		4.08		3.13
39	Hired Labor		3.30		4.68		0.69
41	Actual Non-Real Estate Int. Allocated		6.03		6.42		6.62
42	Total Allocated Costs	60.2%	67.09	70.4%	87.77	41.9%	45.06
43	Total Listed Costs		111.40		124.69		107.55
44	Return Over Listed Costs	$	(0.22)	$	18.17	$	(33.83)
			Supplementary Management Information				
50	Land Opportunity Ownership Cost	$	30.28	$	31.40	$	25.32
51	Total Cost Adj to a Min 7% Interest	$	111.76	$	125.15	$	114.99
52	Work Units Assigned per Acre		0.30		0.30		0.30
53	Power Cost Allocation Factor		0.99		1.00		0.98
54	Total Listed Cost per Bushel	$	3.13	$	2.78	$	4.22
54A	Total Prod Costs Incl. Net Family Living	$	3.49	$	3.05	$	4.68
55	Total Adjusted Cost per Bushel	$	3.14	$	2.79	$	4.51
56	Cash Variable Cost per Bushel	$	1.94	$	1.41	$	3.23
57	Return Over Listed Costs per Bushel	$	(0.01)	$	0.40	$	(1.33)
58	Breakeven Yield - Bushels per Acre (xx.xx)		38.04		42.14		37.43
59	Total Acre Inches of Water Applied						
60	Cost of Irrigation**						
61	Average Price Received per Bushel Sold	$	2.17	$	2.65	$	2.78
62	Bushels Sold (Operator's Share)		1,298		1,685		1,213

* Includes crop insurance receipts and stubble grazing.

** Does not include interest costs

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Spring wht Table

Table 10

Spring Wheat		24 Fields Average of all Fields	12 High Return Fields	12 Low Return Fields
3	Acres	142.0	118.6	132.6
		Per Acre	Per Acre	Per Acre
4	Yield Per Acre (bushels)	48.0	53.9	44.4
5	Value per Bushel	$ 2.95	$ 3.28	$ 2.66
6	Crop Product Return	$ 144.32	$ 176.79	$ 117.92
7	Other Crop Income*	6.72	14.31	1.58
8	Total Crop Return	$ 151.04	$ 191.10	$ 119.50
	Variable Costs			
10	Fertilizer	24.74	21.78	25.34
11	Chemicals	11.32	7.60	11.32
12	Seed Expense	7.40	6.04	7.99
13	Crop Drying	0.03		0.06
14	Crop Insurance	4.88	6.21	3.95
15	Other Expenses	1.15	0.62	1.80
16	Special Hired Labor			
17	Custom Work Hired & Lease Expense	3.44	2.95	4.52
18	Irrigation Operation			
19	Assigned Interest			
20	Total Variable Costs	40.3% 62.97	30.7% 45.40	49.5% 54.78
21	Return Over Variable Costs	$ 98.07	$ 145.70	$ 64.72
	Allocated Costs (Variable & Fixed)			
31	Farm Power & Machinery - Ownership	6.99	6.56	4.88
32	Farm Power & Machinery - Operation	13.72	16.81	11.78
33	Building & Fence Cost	1.25	1.33	1.05
34	Irrigation Ownership Cost			
37	Actual Land Ownership or Rental Costs	39.25	50.34	29.85
38	Utilities & General Farm Expense	4.59	6.91	2.88
39	Hired Labor	6.63	11.19	1.82
41	Actual Non-Real Estate Int. Allocated	5.90	7.12	3.81
42	Total Allocated Costs	59.7% 78.33	69.3% 102.26	50.5% 55.97
43	Total Listed Costs	100.0% 131.30	100.0% 147.66	100.0% 110.75
44	Return Over Listed Costs	$ 19.74	$ 43.44	$ 8.75

$19.74 * 1 Ac / .30 WU * 1 WU / 10 Hrs = $6.58/Hour

Supplementary Management Information

50	Land Opportunity Ownership Cost	$ 27.85	$ 44.61	$ 16.41
51	Total Cost Adj to a Min 7% Interest	$ 133.02	$ 151.26	$ 111.94
52	Work Units Assigned per Acre	0.30	0.30	0.30
53	Power Cost Allocation Factor	1.00	1.00	1.00
54	Total Listed Cost per Bushel	$ 2.88	$ 2.74	$ 2.49
54A	Total Prod Costs Incl. Net Family Living	$ 2.96	$ 2.94	$ 2.76
55	Total Adjusted Cost per Bushel	$ 2.71	$ 2.81	$ 2.52
56	Cash Variable Cost per Bushel	$ 1.71	$ 1.80	$ 1.89
57	Return Over Listed Costs per Bushel	$ 0.40	$ 0.81	$ 0.20
58	Breakeven Yield - Bushels per Acre (xx.xx)	44.58	45.02	41.70
59	Total Acre Inches of Water Applied			
60	Cost of Irrigation**			
61	Average Price Received per Bushel Sold	$ 2.58	$ 2.55	$ 2.49
62	Bushels Sold (Operator's Share)	2,957	3,427	883

* Includes crop insurance receipts and stubble grazing.

** Does not include interest costs

2004

Table 10

	Spring Wheat	Average of all Fields		High Return Fields		Low Return Fields	
3	Acres		141.5		76.8		186.9
			Per Acre		Per Acre		Per Acre
4	Yield Per Acre (bushels)		49.3		58.8		44.9
5	Value per Bushel	$	2.68	$	2.67	$	2.66
6	Crop Product Return	$	131.00	$	157.01	$	119.28
7	Other Crop Income*		4.69		16.93		0.33
8	Total Crop Return	$	135.69	$	173.94	$	119.61
	Variable Costs						
10	Fertilizer		28.64		25.72		27.72
11	Chemicals		10.05		4.75		12.95
12	Seed Expense		5.84		6.63		5.47
13	Crop Drying		0.11		0.08		
14	Crop Insurance		4.13		3.72		4.18
15	Other Expenses		0.88		0.30		1.27
16	Special Hired Labor						
17	Custom Work Hired & Lease Expense		5.35		11.55		3.80
18	Irrigation Operation						
19	Assigned Interest						
20	Total Variable Costs	40.5%	55.00	33.4%	52.75	42.6%	55.39
21	Return Over Variable Costs		80.69		121.19		64.22
	Allocated Costs (Variable & Fixed)						
31	Farm Power & Machinery - Ownership		7.19		9.18		6.74
32	Farm Power & Machinery - Operation		17.37		18.44		17.43
33	Building & Fence Cost		2.27		2.53		2.03
34	Irrigation Ownership Cost						
37	Actual Land Ownership or Rental Costs		38.00		56.53		33.12
38	Utilities & General Farm Expense		5.12		6.80		4.30
39	Hired Labor		4.65		6.97		4.49
41	Actual Non-Real Estate Int. Allocated		6.04		4.93		6.58
42	Total Allocated Costs	59.5%	80.64	66.6%	105.38	57.4%	74.69
43	Total Listed Costs		135.64		158.13		130.08
44	Return Over Listed Costs	$	0.05	$	15.81	$	(10.47)
			Supplementary Management Information				
50	Land Opportunity Ownership Cost	$	32.05	$	47.56	$	29.60
51	Total Cost Adj to a Min 7% Interest	$	136.90	$	163.05	$	129.87
52	Work Units Assigned per Acre		0.30		0.30		0.30
53	Power Cost Allocation Factor		1.00		1.00		1.00
54	Total Listed Cost per Bushel	$	2.75	$	2.69	$	2.90
54A	Total Prod Costs Incl. Net Family Livin	$	3.03	$	2.88	$	3.30
55	Total Adjusted Cost per Bushel	$	2.78	$	2.77	$	2.89
56	Cash Variable Cost per Bushel	$	1.79	$	1.53	$	1.96
57	Return Over Listed Costs per Bushel	$		$	0.27	$	(0.23)
58	Breakeven Yield - Bushels per Acre (xx.xx)		51.05		59.22		48.97
59	Total Acre Inches of Water Applied						
60	Cost of Irrigation**						
61	Average Price Received per Bushel Sold	$	2.29	$	3.07	$	2.16
62	Bushels Sold (Operator's Share)		953		282		1,730

* Includes crop insurance receipts and stubble grazing.

** Does not include interest costs

2002

Table 10

	Spring Wheat	Average of all Fields		High Return Fields		Low Return Fields	
3	Acres		131.6		140.9		105.9
			Per Acre		Per Acre		Per Acre
4	Yield Per Acre (bushels)		33.9		43.9		21.8
5	Value per Bushel		$ 3.72		$ 3.72		$ 3.71
6	Crop Product Return		$ 126.05		$ 163.43		$ 80.98
7	Other Crop Income*		0.59				1.53
8	Total Crop Return		$ 126.64		$ 163.43		$ 82.51
	Variable Costs						
10	Fertilizer	21.0%	25.16	16.2%	22.97	30.3%	26.47
11	Chemicals	4.8%	5.75	3.8%	5.45	6.1%	5.37
12	Seed Expense	6.8%	8.11	4.1%	5.81	12.5%	10.95
13	Crop Drying						
14	Crop Insurance	4.0%	4.82	3.4%	4.86	5.8%	5.06
15	Other Expenses	1.6%	1.89	1.7%	2.41	1.1%	0.96
16	Special Hired Labor	5.4%	0.36	0.5%	0.70		
17	Custom Work Hired & Lease Expense	2.3%	2.72	2.3%	3.27	2.8%	2.42
18	Irrigation Operation						
19	Assigned Interest						
20	Total Variable Costs	40.7%	48.81	32.0%	45.47	58.5%	51.23
21	Return Over Variable Costs		$ 77.83		$ 117.96		$ 31.28
	Allocated Costs (Variable & Fixed)						
31	Farm Power & Machinery - Ownership	4.9%	5.93	5.1%	7.23	4.8%	4.23
32	Farm Power & Machinery - Operation	11.1%	13.35	12.8%	18.18	9.5%	8.29
33	Building & Fence Cost	2.0%	2.40	2.8%	3.92	0.7%	0.63
34	Irrigation Ownership Cost						
37	Actual Land Ownership or Rental Costs	28.2%	33.87	32.0%	45.51	18.5%	16.22
38	Utilities & General Farm Expense	4.8%	5.71	5.9%	8.31	2.8%	2.48
39	Hired Labor	5.8%	7.01	7.1%	10.13	2.8%	2.46
41	Actual Non-Real Estate Int. Allocated	2.4%	2.85	2.3%	3.27	2.2%	1.96
42	Total Allocated Costs	59.3%	71.12	68.0%	96.55	41.5%	36.27
43	Total Listed Costs	100.0%	119.93	100.0%	142.02	100.0%	87.50
44	Return Over Listed Costs		$ 6.71		$ 21.41		$ (4.99)
	Supplementary Management Information						
50	Land Opportunity Ownership Cost		$ 25.97		$ 32.31		$ 19.65
51	Total Cost Adj to a Min 7% Interest		$ 125.11		$ 150.55		$ 92.64
52	Work Units Assigned per Acre		0.30		0.30		0.30
53	Power Cost Allocation Factor		1.00		1.00		1.00
54	Total Listed Cost per Bushel		$ 3.54		$ 3.24		$ 4.01
54A	Total Prod Costs Incl. Net Family Living		$ 3.88		$ 3.43		$ 4.47
55	Total Adjusted Cost per Bushel		$ 3.69		$ 3.43		$ 4.25
56	Cash Variable Cost per Bushel		$ 2.29		$ 1.94		$ 3.05
57	Return Over Listed Costs per Bushel		$		$ 0.49		$ (0.23)
58	Breakeven Yield - Bushels per Acre (xx.xx)		32.25		38.15		23.56
59	Total Acre Inches of Water Applied						
60	Cost of Irrigation**						
61	Average Price Received per Bushel Sold		$ 3.39		$ 3.57		$ 3.05
62	Bushels Sold (Operator's Share)		1,773		2,416		622

* Includes crop insurance receipts and stubble grazing.

** Does not include interest costs

APPENDIX G

USDA FARM SERVICE AGENCY FACT SHEETS ON WHEAT, FEBRUARY 2001 AND AUGUST 2003, AND NATIONAL ANNUAL TOTALS OF WHEAT LOAN DEFICIENCY PAYMENTS AND AVERAGE MARKETING LOAN GAINS, 1999-2002

USDA United States Department of Agriculture

Fact Sheet

February 2001

Wheat

Summary of 1999-2000 Support Program and Related Information

Statutory Background

The 1996 farm bill provides for fixed, but declining transition payments; nonrecourse marketing assistance loans with marketing loan provisions; and loan deficiency payments for the 1996-2002 crops of wheat.

Production Flexibility Contracts

Payment Eligibility

Producers who enrolled in 7-year production flexibility contracts (PFC) during the one-time signup held in 1996 are eligible to receive contract payments. A farm was eligible for enrollment if it had a wheat acreage base established for 1996. Once the farm is enrolled, the crop acreage base becomes contract acreage. Farms not enrolled during the one-time signup period are ineligible for program benefits, unless they are currently under a Conservation Reserve Program (CRP) contract with an associated crop acreage base reduction.

Payments

For each of the 1996-2002 crops of wheat, the 1996 farm bill allotted a fixed amount of funds to holders of wheat production flexibility contracts. For wheat, the funds, allotted by fiscal year, are:

FY 1996 $1.463 billion
FY 1997 $1.414 billion
FY 1998 $1.523 billion
FY 1999 $1.471 billion
FY 2000 $1.347 billion
FY 2001 $1.085 billion
FY 2002 $1.053 billion

Wheat PFC payment rates are based on the eligible contract quantities that are computed by multiplying a producer's wheat contract acres times the wheat program yield on the farm times 0.85. Actual payment rates for FY 1996 through FY 2000 and estimated payment rates for FY 2001 to 2002 are listed in the table below.

Payment Rates For Wheat: FY 1996 - 2002 1/ ($ per bu.)

Fiscal Year	PFC Payments	Additional Payments	Total 1/ Payments
1996	.87	—	.87
1997	.63	—	.63
1998	.66	.33	.99
1999	.64	.64	1.28
2000	.59	.64	1.23
2001	.47	—	.47
2002	.46	—	.46

1/ Actual payments for FY 1996-2001. Estimated payments for FY 2002.

Additional Payments to Holders of PFCs

The Omnibus Consolidated and Emergency Supplemental Appropriations Act, 1999, provided additional payments of $2.857 billion to PFC holders for the FY 1998 contract period, of which $750 million was allocated to wheat PFC holders. The Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Act, 2000, provided additional payments of $5.544 billion to PFC holders for the FY 1999 contract period, of which about $1.471 billion was allocated to wheat PFC holders. The Agricultural Risk Protection Act of 2000 provided additional payments to 2000-crop wheat PFC holders at the same rate as was paid on the 1999 crop. These payments were to be made between September 1 and September 30, 2000. The payment rates applicable to the additional payments are listed in the table above.

Planting Flexibility

Any commodity or crop may be planted on contract acreage on the farm, except fruits and vegetables (other than lentils, mung beans, and dry peas). However, fruits and vegetables may be grown under the following situations:

1. In any region with a history of double cropping of contract commodities with fruits and vegetables;
2. On a farm with a history of planting fruits or vegetables, except that the contract

continues ▶

payment will be reduced by an acre for each acre planted to a fruit or vegetable on the farm; and

3. By a producer with an established history of planting a specific fruit or vegetable, except that the area planted may not exceed the producer's average annual plantings in the 1991-1995 crop years (excluding any year with no plantings) and that a contract payment will be reduced by an acre for each acre planted to the fruit or vegetable.

Marketing Loan Provisions

Marketing loan provisions enable producers to either obtain a nonrecourse marketing assistance loan or a loan deficiency payment on all or a part of their eligible production.

Eligibility Requirements

To qualify for a marketing assistance loan or a loan deficiency payment on wheat, producers must:

- Have, with the exception of the 2000 crop, produced the wheat on a farm that is enrolled in a production flexibility contract (For the 2000 crop only, the Agricultural Risk Protection Act of 2000 extended eligibility to receive LDPs for contract commodities to producers on a farm not enrolled in a PFC),
- Comply with applicable conservation and wetland protection requirements,
- Report the planted acreage for the crop, and
- Have beneficial interest in the commodity on the date the loan or a loan deficiency payment is requested and, in the case of a loan, be retained while the loan is outstanding.

Beneficial Interest

A producer has beneficial interest in the commodity if all of the following remain with the producer: (1) control of the commodity, (2) risk of loss, and (3) title to the commodity.

For further information on beneficial interest, see the fact sheet on "Beneficial Interest Requirements For Loans and Loan Deficiency Payments, Excluding Sugar and Tobacco" or contact a local FSA county office.

Loan Rates

The 1999, 2000, and 2001 national average marketing assistance loan rate for wheat is $2.58 per bushel. Rates are set annually based on a formula and the discretion of the Secretary of Agriculture.

Generally, the loan rate cannot exceed $2.58 per bushel or be lower than 85 percent of the simple average price received by producers during the marketing years for the immediate preceding five crops, excluding the highest and lowest prices. However, if the stock to use ratio (S/U) is greater than or equal to 15 percent, but less than 30 percent, the Secretary has the discretion to reduce the formula loan rate up to 5 percent. If the S/U equals or exceeds 30 percent, the Secretary may reduce the loan rate up to 10 percent.

Loan rates: (1) vary among counties, (2) are based on the county where stored, and (3) may be adjusted by the Commodity Credit Corporation (CCC) with premiums and discounts to reflect grade, subclass, and quality factors of a given quantity placed under loan.

Loan Settlements

Loans mature on the last day of the ninth calendar month following the month in which the loan is approved.

Producers may settle their outstanding nonrecourse loan:

- During the 9-month loan period by repaying the loan, or
- Upon maturity by forfeiting the commodity to the CCC.

Marketing loan provisions enable producers (under certain conditions) to either: (1) repay a marketing assistance loan at less than the loan rate plus accrued interest and other charges, or (2) receive a loan deficiency payment in lieu of obtaining a loan.

Loan Repayment Rates

The loan repayment rate is the lower of (1) the applicable county loan rate plus accrued interest and other charges (per bushel), or (2) the local posted county price (PCP).

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PCPs are established daily at each county FSA office. They are based upon the previous day's prices for wheat at two CCC-assigned terminal markets. The PCPs are then adjusted to reflect quality and location.

Marketing Loan Gains and Loan Deficiency Payments

Producers may realize a marketing loan gain if they repay their loans when the PCP is less than the loan rate. The marketing loan gain rate equals the amount by which the applicable county loan rate exceeds the loan repayment rate for the respective loan.

Producers who are eligible to obtain a loan, but who agree to forgo the loan, may obtain a loan deficiency payment. The loan deficiency payment rate equals the amount by which the applicable county loan rate exceeds the PCP for wheat. The loan deficiency payment equals the loan deficiency payment rate times the eligible bushels of wheat for which the loan deficiency payment is requested.

Final Loan/Loan Deficiency Payment Availability Dates

The final loan/loan deficiency payment availability date for 2000-crop wheat is March 31, 2001.

Production Evidence

Any producer who repays a loan at less than the loan rate plus accrued interest and other charges or receives a loan deficiency payment may be required to provide production evidence acceptable to CCC, such as evidence of sales, warehouse receipts, and load summaries from the warehouse, buyer, or processor.

Payment Limitations

In general, the total amount of production flexibility contract payments to an individual may not exceed $40,000 for all commodities. In addition, the sum of loan deficiency payments and marketing loan gains for all commodities is limited to $75,000 per person, except for the 1999 and 2000 crops.

The payment limit for LDPs/MLGs was mandated at $150,000 for the 1999 crop only by the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act (Appropriations Act), 2000. The payment limit for the 2000 crop is mandated at $150,000 by the 2001 Appropriations Act. When a producer is likely to reach the payment limit for LDPs/MLGs, commodity certificates may be used to exchange the outstanding loan obligation at or before loan maturity.

Wheat Marketing Loan/Loan Deficiency Payment Examples

Marketing Loan Examples Under Various Price Scenarios
($ per bushel)

	Price Scenario 1	2	3
a) Applicable county loan rate	2.58	2.58	2.58
b) Accrued interest	0.14	0.14	0.14
c) Loan rate plus accrued interest 1/	2.72	2.72	2.72
d) PCP	3.00	2.65	2.50
e) Loan repayment rate; (lower of c or d)	2.72	2.65	2.50
f) Marketing Loan Gain; [greater of 0 or (a - e)]	0.00	0.00	0.08
g) Waived interest, lesser of ([greater of 0 or (c - e)] or b)	0.00	0.07	0.14

1/ Interest for 9 months based on 7 percent annual interest rate.

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WHEAT PROGRAM SUMMARY

Crop Year	Number of Farms Participating	Acreage Allotment/Base on Farms Participating	National Acreage Allotment/Base 1/	Acreage Diversion Set-Aside on Farms Participating	Payments, Diversion & SG&H 2/	Deficiency/ Contract Payments
1960	not avail.	not avail.	55,000,000	none	none	none
1961	not avail.	not avail.	55,000,000	none	none	none
1962	777,714	41,183,000	55,000,000	10,699,000	$285,524,000	none
1963	409,890	25,023,000	55,000,000	7,161,000	163,394,000	$79,200,000 3/
1964	584,955	39,267,000	53,200,000	5,123,000	32,716,000	410,176,000
1965	819,535	43,465,000	53,300,000	7,185,000	36,882,000	472,338,000
1966	809,079	42,120,000	51,600,000	8,257,000	26,156,000	655,186,000
1967	769,295	56,887,000	68,200,000	none	none	727,053,000
1968	803,050	50,155,000	59,300,000	none	none	745,974,000
1969	953,318	45,243,000	51,600,000	11,097,000	71,612,000	784,336,000
1970	923,302	39,867,000	45,500,000	15,723,000	62,548,000	808,458,000
1971	1,011,954	18,122,000	19,700,000 4/	13,500,000 5/	none	885,653,000
1972	976,338	18,314,000	19,700,000 4/	20,106,000	132,000,000	726,670,000
1973	1,053,360	17,783,000	18,700,000 4/	7,372,000	103,024,000	375,226,000
1974	N/A	N/A 6/	55,000,000	N/A	N/A	N/A
1975	N/A	N/A	53,500,000	N/A	N/A	N/A
1976	N/A	N/A	61,600,000	N/A	N/A	N/A
1977	N/A	N/A	62,200,000	none	none	996,416,000
1978	not avail.	41,965,000	58,800,000 7/	9,600,000 8/	15,116,000	617,353,000
1979	not avail.	36,142,300	70,100,000 7/	8,200,000 8/	none	none
1980	666,143	73,349,613	75,000,000 7/	none	none	none
1981	782,608	81,725,768 9/	84,500,000 7/	none	none	414,588,000
1982	222,912	43,753,209	90,661,347 7/	5,800,000	none	476,500,000
1983	498,013	70,152,741	90,186,265	30,017,000	309,200,000	769,700,000
1984	317,565	56,146,824	93,961,821	18,449,800	506,100,000	1,049,800,000
1985	472,886	69,970,117	94,035,775	18,824,021	652,700,000	1,555,300,000
1986	456,725	78,101,983	91,599,459	21,014,243	215,400,000	3,457,000,000
1987	557,203	76,606,731	87,551,977	23,931,737	none	3,287,000,000
1988	547,012	72,693,872	84,761,610	22,462,977	none	1,216,400,000
1989 10/	433,758	64,369,632	82,315,009	9,580,558	none	572,100,000
1990	463,859	66,696,372	80,492,510	7,520,564	none	2,420,300,000
1991	462,882	67,644,101	79,202,505	15,924,272	none	2,246,100,000
1992	433,990	65,650,430	78,873,913	7,321,461	none	1,370,503,000
1993	475,590	68,565,784	78,365,734	5,696,746	none	1,900,079,000
1994	461,039	67,996,895	78,113,657	5,194,652	none	1,145,514,000
1995	417,038	65,846,523	77,653,599	6,129,239	none	265,764,000
1996 11/	953,995	76,673,982 12/	N/A	N/A	none	1,940,519,000
1997	966,349	76,662,592	N/A	N/A	none	1,396,798,000
1998	988,032	78,904,816	N/A	N/A	none	1,496,191,000
1999 13/	1,006,583	79,038,119	N/A	N/A	none	1,446,875,000
2000 14/	1,016,618	79,000,000	N/A	N/A	none	1,330,000,000

1/ 1964 through 1969 includes the increase in small farm allotment authorized by law
2/ SG&H: Special Grazing and Hay Program
3/ Price support payments in 1963
4/ Domestic allotment
5/ Required set-aside
6/ N/A: not applicable
7/ National program acreage
8/ Includes set-aside and special grazing and hay program acreage
9/ Acreage on which program payments were based
10/ Acreage base complying with program provisions
11/ 1996-1999 includes only production flexibility contract payments
12/ Contract acreage
13/ Preliminary
14/ Forecast based on October 2000 World Agricultural Supply and Demand Estimates (WASDE)

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PRODUCTION OF WHEAT

Crop Year	Acreage Planted million acres	Acreage Harvested million acres	Yield bu. (per harvested ac.)	Production million bushels
1960	54.9	51.9	26.1	1,354.7
1961	55.7	51.6	23.9	1,232.4
1962	49.3	43.7	25.0	1,092.0
1963	53.4	45.5	25.2	1,146.8
1964	55.7	49.8	25.8	1,283.4
1965	57.4	49.6	26.5	1,315.6
1966	54.1	49.6	26.3	1,304.9
1967	67.3	58.4	25.8	1,507.6
1968	61.9	54.8	28.4	1,556.7
1969	53.5	47.1	30.6	1,442.7
1970	48.7	43.6	31.0	1,351.6
1971	53.8	47.7	33.9	1,618.6
1972	54.9	47.3	32.7	1,546.2
1973	59.3	54.1	31.6	1,710.8
1974	71.0	65.4	27.3	1,781.9
1975	74.9	69.5	30.6	2,126.9
1976	80.4	70.9	30.3	2,148.8
1977	75.4	66.7	30.7	2,045.5
1978	66.0	56.5	31.4	1,775.5
1979	71.4	62.5	34.2	2,134.1
1980	80.8	71.1	33.5	2,380.9
1981	88.3	80.6	34.5	2,785.4
1982	86.2	77.9	35.5	2,765.0
1983	76.4	61.4	39.4	2,419.8
1984	79.2	66.9	38.8	2,594.8
1985	75.5	64.7	37.5	2,424.1
1986	72.0	60.7	34.4	2,090.6
1987	65.8	55.9	37.7	2,107.7
1988	65.5	53.2	34.1	1,812.2
1989	76.6	62.2	32.7	2,036.6
1990	77.0	69.1	39.5	2,729.8
1991	69.9	57.8	34.3	1,980.1
1992	72.2	62.8	39.3	2,466.8
1993	72.2	62.7	38.2	2,396.4
1994	70.3	61.8	37.6	2,321.0
1995	69.0	61.0	35.8	2,182.7
1996	75.1	62.8	36.3	2,277.4
1997	70.4	62.8	39.5	2,481.5
1998	65.8	59.0	43.2	2,547.3
1999 1/	62.7	53.8	42.7	2,299.0
2000 2/	62.5	53.2	42.1	2,239.2

1/ Preliminary
2/ Forecast based on October WASDE

continues ▶

USE OF WHEAT

(million bushels)

Crop Year	Domestic Food & Industrial Use	Feed, Seed & Residual Use	Exports 1/	Total Use	Ending Carryover	CCC Inventory	Reseal/ Farmer-Owned Reserve 2/
1960	496.5	94.7	653.5	1,245.0	1,502.0	1,242.0	38.0
1961	504.0	100.3	715.7	1,320.0	1,421.0	1,097.0	37.0
1962	502.7	96.1	649.4	1,248.0	1,270.0	1,082.0	29.0
1963	487.9	93.5	845.6	1,427.0	994.0	829.0	10.0
1964	514.4	120.4	722.7	1,358.0	921.0	646.0	—
1965	517.9	207.4	852.0	1,577.0	660.0	340.0	3.0
1966	505.1	178.0	771.0	1,454.0	513.0	124.0	8.0
1967	517.8	108.1	765.0	1,391.0	630.0	102.0	—
1968	522.4	217.3	544.0	1,284.0	904.0	163.0	—
1969	520.1	243.9	603.0	1,367.0	983.0	301.0	—
1970	517.1	255.1	741.0	1,513.0	823.0	370.0	8.0
1971	523.7	325.6	610.0	1,459.0	984.0	367.0	13.0
1972	531.8	266.9	1,135.0	1,934.0	597.0	144.0	11.0
1973	544.3	209.1	1,217.0	1,970.0	340.0	19.0	—
1974	545.0	126.9	1,018.0	1,690.0	435.0	1.0	—
1975	589.0	137.3	1,173.0	1,899.0	666.0	0.0	—
1976	588.0	166.0	950.0	1,704.0	1,113.0	0.0	—
1977	587.0	272.0	1,124.0	1,983.0	1,178.0	48.0	342.0
1978	592.0	245.0	1,194.0	2,031.0	924.0	51.0	403.0
1979	596.0	187.0	1,375.0	2,158.0	902.0	188.0	260.0
1980	611.0	172.0	1,514.0	2,296.0	989.0	200.0	360.0
1981	602.0	245.0	1,771.0	2,618.0	1,159.0	190.0	560.0
1982	616.0	292.0	1,509.0	2,417.0	1,515.0	192.0	1,061.0
1983	643.0	471.0	1,426.0	2,540.0	1,399.0	188.0	611.0
1984	651.0	506.0	1,421.0	2,578.0	1,425.0	378.0	654.0
1985	674.0	377.0	909.0	1,960.0	1,905.0	602.0	596.0
1986	712.0	485.0	999.0	2,196.0	1,821.0	830.0	632.0
1987	721.0	365.0	1,598.0	2,684.0	1,261.0	283.0	467.0
1988	726.0	253.0	1,415.0	2,394.0	702.0	190.0	287.0
1989	749.0	244.0	1,232.0	2,225.0	536.0	117.0	144.0
1990	790.0	576.0	1,069.0	2,435.0	868.0	163.0	14.0
1991	789.0	343.0	1,282.0	2,414.0	475.0	152.0	50.0
1992	834.0	293.0	1,354.0	2,481.0	531.0	150.0	28.0
1993	872.0	367.0	1,228.0	2,467.0	568.0	150.0	6.0
1994	853.0	433.6	1,188.3	2,474.8	506.6	142.0	0
1995	882.9	257.2	1,241.1	2,381.2	376.0	118.0	0
1996	890.7	409.9	1,001.5	2,302.1	443.6	93.0	N/A
1997	914.1	343.0	1,040.4	2,297.5	722.5	94.0	N/A
1998	909.7	475.0	1,042.2	2,426.9	945.9	128.0	N/A
1999 3/	924.7	375.4	1,089.5	2,389.7	949.7	104.0	N/A
2000 4/	940.0	336.0	1,125.0	2,401.0	888.0	105.0	N/A

1/ Includes foreign currency and long-term credit, donations, barter, and agency development programs
2/ The Farmer-Owned Reserve Program started in crop year 1977. Prior to that the Reseal was in effect. Beginning in 1985, includes wheat in the Special Producer Storage Loan Program
3/ Preliminary
4/ Forecast based on October WASDE

◄ continues

WHEAT

Crop Year 1/	Production (million bushels)	National Average Support Price: Target Price ($per bushel)	National Average Support Price: Payment Rate ($per bushel)	Loan Rate ($per bushel)	Average Price to Farmers ($per bushel)	Value of Production (million$)	Government Payments (million$)	
1960 2/	1,354.7		1.78		$1.74	$2,361.2		
1961	1,232.4		1.79		1.83	2,254.7		
1962	1,092.0		2.00		2.04	2,225.7	$ 285.5	Diversion
1963	1,146.8	2.00 3/	.18 4/	1.82 5/	1.85 (2.03) 6/	2,125.3	242.6	Div. & Price Sup.
1964	1,283.4	2.00 7/	.70 8/	.25 9/ 1.30 5/	1.37 (1.80) 6/	1,757.0	442.9	Div. & Certificates
1965	1,315.6	2.00 7/	.75 8/	.30 9/ 1.25 5/	1.35 (1.79) 6/	1,774.5	509.2	Div. & Certificates
1966	1,304.9	2.57 7/	1.32 8/	1.25 5/	1.63 (2.22) 6/	2,129.9	681.3	Div. & Certificates
1967	1,507.6	2.61 7/	1.36 8/	1.25 5/	1.39 (1.87) 6/	2,090.1	727.1	Certificates
1968	1,556.7	2.63 7/	1.38 8/	1.25 5/	1.24 (1.79) 6/	1,929.1	746.0	Certificates
1969	1,442.7	2.77 7/	1.52 8/	1.25 5/	1.25 (1.89) 6/	1,795.7	855.9	Div. & Certificates
1970	1,351.6	2.82 7/	1.57 8/	1.25 5/	1.33 (2.08) 6/	1,803.2	871.0	Div. & Certificates
1971	1,618.6	2.93 7/	1.63 10/	1.25 5/	1.34 (1.88) 6/	2,167.8	885.7	Div. & Certificates
1972	1,546.2	3.02 7/	1.34 10/	1.25 5/	1.76 (2.23) 6/	2,706.1	858.7	Div. & Certificates
1973	1,710.8	3.39 7/	.68 10/	1.25 5/	3.95 (4.17) 6/	6,744.6	478.2	Div. & Certificates
1974	1,781.9	2.05 11/	—	1.37 5/	4.09 —	7,287.3	101.5	Disaster
1975	2,126.9	2.05 11/	—	1.37 5/	3.56 —	7,549.8	51.2	Disaster
1976	2,148.8	2.29 11/	—	2.25 5/	2.73 —	5,867.8	143.4	Disaster
1977	2,045.5	2.90 12/	.65 13/	2.25 5/	2.33 —	4,764.6	1,157.2	Def. & Disaster
1978	1,775.5	3.40 14/	.52 13/	2.35 5/	2.97	5,280.6	719.3	Def/Hay&Grz, Dis.
1979 15/	2,134.1	3.40 14/	—	2.50 5/	3.80	8,109.0	72.3	Disaster
1980	2,380.9	3.08/3.63 16/	—	3.00/3.30 17/	3.99	9,303.0	228.2	Disaster
1981	2,785.4	3.81 14/	.15 13/	3.20/3.50 17/	3.69	10,172.0	635.2	Deficiency & Dis.
1982	2,765.0	4.05 14/	.50 13/	3.55/4.00 17/	3.45	9,489.0	488.8	Deficiency & Dis.
1983	2,419.8	4.30 14/	.65 13/	3.65/3.65 17/	3.51	10,883.0 18/	1,079.5	Def., Div. & Dis.
1984	2,594.8	4.38 14/	1.00 13/	3.30 5/	3.39	9,246.0 18/	1,555.9	Def. & Diversion
1985	2,424.1	4.38 14/	1.08 13/	3.30 5/	3.08	7,371.0	2,188.0	Def. & Diversion
1986	2,090.6	4.38 14/	1.98 13/	2.40 5/	2.42	5,042.0	3,672.4	Def. & Diversion
1987	2,107.7	4.38 14/	1.81 13/	2.28 5/	2.57	5,498.0	3,287.0	Deficiency
1988	1,812.2	4.23 14/	.69 13/	2.21 5/	3.72	6,741.0	1,688.0	Def. & Disaster
1989	2,036.6	4.10 14/	.32 13/	2.06 5/	3.72	7,542.0	1,046.0	Def. & Disaster
1990	2,729.8	4.00 14/	1.28 13/	1.95 5/	2.61	7,184.0	2,420.3	Deficiency
1991	1,980.1	4.00 14/	1.35 13/	2.04 5/	3.00	5,957.0	2,246.1	Deficiency
1992	2,466.8	4.00 14/	.81 13/	2.21 5/	3.24	7,984.0	1,370.5	Deficiency
1993	2,396.4	4.00 14/	1.03 13/	2.45 5/	3.26	7,812.0	1,900.1	Deficiency
1994	2,321.0	4.00 14/	.61 13/	2.58 5/	3.45	8,007.0	1,145.5	Deficiency
1995	2,182.7	4.00 14/	.00 13/	2.58 5/	4.55	9,787.0	265.8	Deficiency
1996 19/	2,277.4	N/A	.874	2.58 5/	4.30	9,782.0	1,940.5	PFC, LDP, MLG
1997	2,481.5	N/A	.631	2.58 5/	3.38	8,287.0	1,412.5	PFC, LDP, MLG
1998 20/	2,547.3	N/A	.663	2.58	2.65	6,781.0	2,717.6	PFC, LDP, MLG, MLA
1999 21/	2,299.0	N/A	.637	2.58	2.48	5,702.0	3,830.3	PFC, LDP, MLG, MLA
2000 22/	2,239.2	N/A	.588	2.58	2.55	5,710.0	3,593.3	PFC, LDP, MLG, MLA

See footnotes on page 8.

Foonotes for table on page 7:

1/ For statistics for 1933 through 1959, see Wheat Commodity Fact Sheet for 1979.
2/ For 1960 through 1963 crops, support outside the commercial area was 75 percent of the rate reflecting the U.S. average level.
3/ Total support.
4/ Price support payment.
5/ Loan rate.
6/ Blended average price to program participants, reflecting national average price received by farmers and the marketing certificate value average for participants total production.
7/ Support for wheat used for domestic food.
8/ Domestic marketing certificate value.
9/ Export marketing certificate value.
10/ The marketing certificate payment rate was the difference between the price received by farmers the first 5 months (July-November) of the marketing year and 100 percent of wheat parity on July 1. An advance payment equal to 75 percent of the estimated face value of the certificate was made to eligible producers.
11/ Established target price, guaranteed on production from allotment acreage.
12/ Established target price on planted allotment acreage; established target price on unplanted allotment acreage was $2.47.
13/ Deficiency payment; 1996 and forward, contract rate.
14/ Established target price.
15/ Beginning with 1979, marketing average prices are being use in lieu of season average prices.
16/ Target price $3.63 if planted within NCA; $3.08, if exceeded NCA.
17/ Loan rate for regular loans/loan rate for wheat in the farmer-owned reserve.
18/ Includes estimated value of PIK compensation.
19/ 1996-1997 include production flexibility contract payments, loan deficiency payments, and marketing loan gains.
20/ 1998-2000 include production flexibility contract payments, loan deficiency payments, marketing loan gains, and market loss assistance payments.
21/ Preliminary.
22/ Forecast based on October WASDE.

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PRICE SUPPORT PROGRAMS FOR WHEAT

Crop Year	Support Price/ Target Price ($/bushel)	Direct Payments ($/bushel)	Loan Rate ($/bushel)	Total Quantity Placed Under Loan (million bu.)
1960	$1.78	—	$1.74	424.0
1961	1.79	—	1.83	271.2
1962	2.00	—	2.04	297.3
1963	2.00	.18	1.88	177.4
1964	2.00	.70/.25	1.30	205.8
1965	2.00	.75/.30	1.25	172.4
1966	2.57	1.32	1.25	132.7
1967	2.61	1.36	1.25	281.5
1968	2.63	1.38	1.25	453.1
1969	2.77	1.52	1.25	407.6
1970	2.82	1.57	1.25	254.3
1971	2.93	1.63	1.25	441.8
1972	3.02	1.34	1.25	185.1
1973	3.39	.68	1.25	59.9
1974	2.05	—	1.37	37.2
1975	2.05	—	1.37	51.3
1976	2.29	—	2.25	492.8
1977	2.90	.65	2.25	604.1
1978	3.40	.52	2.35	256.4
1979	3.40	—	2.50	182.0
1980	3.08/3.63	—	3.00/3.30	331.8
1981	3.81	.15	3.20/3.50	452.7
1982	4.05	.50	3.55/4.00	646.2
1983	4.30	.65	3.65	635.2
1984	4.38	1.00	3.30	284.7
1985	4.38	1.08	3.30	842.6
1986	4.38	1.98	2.40	514.1
1987	4.38	1.81	2.28	472.3
1988	4.23	.69	2.21	106.2
1989	4.10	.32	2.06	113.5
1990	4.00	1.28	1.95	405.1
1991	4.00	1.35	2.04	143.2
1992	4.00	.81	2.21	240.3
1993	4.00	1.03	2.45	258.3
1994	4.00	.61	2.58	231.1
1995	4.00	.00	2.58	114.2
1996	N/A	.874 1/	2.58	194.8
1997	N/A	.631	2.58	262.7
1998	N/A	.663	2.58	425.0
1999 2/	N/A	.637	2.58	154.2
2000 3/	N/A	.588	2.58	235.0

1/ Production flexibility contract rate
2/ Preliminary
3/ Forecast

Fact Sheet

August 2003

USDA United States Department of Agriculture

Wheat

Summary of 2002-2007 Program

Overview

The Farm Security and Rural Investment Act of 2002 (2002 Act) provides for direct and counter-cyclical payments, nonrecourse marketing assistance loans, and loan deficiency payments for the 2002-2007 crops, which help ensure a strong and viable U.S. agriculture sector. Direct payments under the 2002 Act are similar to production flexibility contract (PFC) payments under the Federal Agriculture Improvement and Reform Act of 1996 (1996 Act). Counter-cyclical payment rates depend on market prices and increase as market prices decline below specified levels. Counter-cyclical payments replace ad hoc market loss assistance payments, which supplemented PFC payments under the 1996 Act. Marketing assistance loans and loan deficiency payment provisions of previous legislation are continued under the 2002 Act, providing interim financing on eligible production and facilitating orderly marketing of loan eligible commodities throughout the year.

Commodities eligible for direct and counter-cyclical payments and nonrecourse marketing assistance loans for the 2002-2007 crops are wheat, corn, grain sorghum, barley, oats, soybeans, other oilseeds (including sunflowers, canola, safflower, flaxseed, rapeseed, mustard seed, crambe, and sesame), rice, upland cotton, and peanuts. Other commodities eligible for nonrecourse marketing assistance loans are Extra Long Staple (ELS) cotton, honey, wool, mohair, dry peas, lentils, and small chickpeas. For ELS cotton, marketing assistance loans must be repaid at the loan rate plus interest, and loan deficiency payment provisions do not apply.

Direct payments are decoupled from current production and prices. Counter-cyclical payments are decoupled from current production, but linked to current prices.

Eligibility Requirements

Direct and Counter-cyclical Payments - Producers are eligible for direct and counter-cyclical payments on farms with eligible acreage bases. To be eligible for payments on these farms, producers must annually:

1. Sign a direct and counter-cyclical program (DCP) agreement with the Farm Service Agency (FSA);
2. Report how they use all their farm's cropland acreage;
3. Comply with conservation and wetland protection requirements on all their farms;
4. Comply with the planting flexibility requirements;
5. Use the cropland for agricultural or related activities; and
6. Control noxious weeds and maintain land in sound condition, if the field is not cultivated.

Nonrecourse Marketing Assistance Loans - To be eligible for marketing assistance loans, producers must:

1. Comply with conservation and wetland protection requirements; and
2. Report how they use all their cropland acreage on the farm.

Direct and counter-cyclical payment agreements are not required for marketing assistance loan eligibility.

Acreage Base and Program Yield Election

Landowners have a one-time opportunity to either:

1. Use their farm's 2002 PFC acreage and add acreage bases for oilseeds and peanuts that reflect average 1998-2001 plantings; or
2. Update their farm's acreage bases to reflect average 1998-2001 plantings for all commodities eligible for direct and counter-cyclical payments.

If they choose to update their farm's acreage bases, they may also update their counter-cyclical payment yields using one of the following two methods:

1. 93.5 percent of the 1998-2001 average yield; or
2. The direct program payment yield (the PFC payment yield in

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effect under the 1996 Act) plus 70 percent of the difference between the 1998-2001 average and the direct program payment yield. Direct payment yields are the same as the payment yields that were used for making PFC payments.

If no election is made before the 2002-crop sign-up period ends, acreage bases for the farm will be established using the farm's 2002 PFC acreage and adding acreage bases for oilseeds. Direct and counter-cyclical payment yields will be the same as the payment yields that were used for making PFC payments.

Direct Payments

The direct payment equals the direct payment rate *times* 85 percent of the farm's base acreage *times* the farm's direct payment yield. The 2002-2007 wheat direct payment rate is $0.52 per bushel.

Timing of Payments

Payments for the 2002 crop begin as soon as the farm is enrolled for direct payments.

For the 2003-2007 crops, direct payments are made after October 1 of the year the crop is harvested. Producers may request up to 50 percent of the direct payment in advance, but no earlier than December 1 of the year before the crop is harvested. Table 1 shows the 2003 wheat direct and counter-cyclical payment cycles.

Table 1. 2003 Wheat Direct and Counter-cyclical Payment Cycles

Payment	Time for Payment
Advance Direct	December 2002
Final Direct	October 2003
1st Counter-Cyclical	October 2003
2nd Counter-Cyclical	February 2004
Final Counter-Cyclical	July 2004

Counter-cyclical payments

For each commodity, the counter-cyclical payment equals the counter-cyclical payment rate *times* 85 percent of the farm's base acreage *times* the farm's counter-cyclical payment yield. Counter-cyclical payments are made when a commodity's effective price is below its target price. The effective price (EP) equals the direct payment rate (DPR) *plus* the higher of: (1) the season average farm price (SAFP) producers received during the marketing year, or (2) the national loan rate (NLR). The wheat target price for the 2002-2003 crops is $3.86 per bushel and $3.92 per bushel for the 2004-2007 crops. The wheat loan rate for the 2002-2003 crops is $2.80 per bushel and $2.75 per bushel for the 2004-2007 crops.

The wheat marketing year is June 1-May 31.

Average Market Price Producers Received

The National Agricultural Statistics Service (NASS) determines the average market price producers received for the marketing year. NASS publishes monthly average prices for selected commodities near the end of each month in *Agricultural Prices* listed on the NASS reports calendar Web site at: http://www.usda.gov/nass/pubs/rptscal.htm

Counter-cyclical Payment Rate Calculation Example

On January 31, 2003, the 2002 wheat counter-cyclical payment rate was calculated using a forecast season average farm price of $3.65 per bushel. The effective price was determined as follows:

EP = DPR + higher of (SAFP, NLR)

$0.52 + (higher of ($2.80 or $3.65))
= $0.52 + $3.65 = $4.17

Because the effective price exceeded the target price, no counter-cyclical payment was projected for the 2002 crop. The season average farm price NASS reports at the end of the marketing year must be below $3.34 per bushel to require a counter-cyclical payment for the

2002 and 2003 crops. For the 2004-2007 crops, a farm price below $3.40 per bushel is required to trigger a payment.

Timing of Payments

For crop years 2002-2006, three partial counter-cyclical payments are made.

- If authorized, a first partial payment, based on up to 35 percent of the projected payment rate, is made after October 1 of the year the crop is harvested.
- If authorized, a second partial payment, based on up to 70 percent of the projected payment rate, is made after February 1 of next calendar year, less any first partial payments already received.
- The final payment is made after the end of the marketing year.
- For crop year 2007, the counter-cyclical payment cycle consists of two payments.
- If authorized, a first partial payment, based on up to 40 percent of the projected payment rate, is made after the first six months of the marketing year.
- The final payment is made after the end of the marketing year.

If the partial payments received exceed the final calculated payment, then producers are required to refund the balance.

Nonrecourse Marketing Assistance Loans and Loan Deficiency Payments

Under marketing loan provisions, producers may (under certain conditions) repay a 9-month nonrecourse marketing assistance loan at less than the loan rate plus accrued interest and other charges whenever CCC estimates that the local market price is lower. Producers are also eligible for a loan deficiency payment (LDP) in lieu of obtaining a loan. The wheat loan rate for the 2002-2003 crops is $2.80 per bushel and $2.75 per bushel for the 2004-2007 crops.

Wheat loan rates:

- Vary among counties;
- Are based on the wheat class produced;
- Are based on the county where the wheat is stored; and
- May be adjusted by CCC with premiums and discounts to reflect quality factors of a given quantity placed under loan.

Other Loan Eligibility Requirements

Producers must:

- Have beneficial interest in the commodity on the date the loan or LDP is requested and, in the case of a loan, be retained while the loan is outstanding; and
- Ensure that the grain meets the CCC minimum grade and quality standards.

Beneficial Interest

A producer retains beneficial interest in the commodity if all of the following remain with the producer:

Control of the commodity - The producer retains the ability to make all decisions affecting the commodity, including movement, sale, and the request for a loan or LDP;
Risk of loss in the commodity - The producer is responsible for loss or damage to the commodity. If the commodity is insured, any indemnity must be payable to the producer; and
Title to the commodity - The producer has not sold or has not delivered the commodity or warehouse receipt to the buyer. Title may be considered to be transferred before the producer receives payment for the commodity.

Once beneficial interest in the commodity is lost, the commodity loses eligibility for a loan or an LDP and remains ineligible even if the producer later regains beneficial interest. For further information see the Farm Program fact sheet on "Beneficial Interest Requirements For Loans and LDPs, Excluding Sugar and Tobacco" or contact a local FSA county office.

Loan Settlements

Loans mature on the last day of the ninth calendar month following the month in which the loan is approved.

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Producers may settle their outstanding nonrecourse loan:

- During the 9-month loan period by repaying the loan; or
- Upon maturity by forfeiting the commodity to CCC.

Loan Repayment Rates

The loan repayment rate is the lower of:

1. The applicable county loan rate plus accrued interest and other charges (per bushel); or
2. The marketing loan repayment.

Loan repayment rates are established and available at each local USDA Service Center based upon the previous day's market prices for each wheat class at appropriate U.S. terminal markets, as CCC determines, adjusted to reflect quality and location.

Marketing Loan Gains

Producers realize a marketing loan gain if they repay their loans when the loan repayment rate is less than loan principal. The marketing loan gain rate equals the amount by which the loan rate exceeds the marketing loan repayment rate.

Loan Deficiency Payments (LDPs)

Producers eligible to obtain a loan, but who agree to forgo the loan, may obtain an LDP. The LDP rate equals the amount by which the applicable county loan rate where the grain is stored exceeds the loan repayment rate. The LDP equals the LDP rate times the quantity of wheat for which the LDP is requested and is otherwise eligible to be placed under loan.

Table 2. Wheat Marketing Loan/LDP Examples

Wheat Marketing Loan Examples Under Various Price Scenarios ($ per bushel)			
	Price Scenario		
	1	2	3
1) Loan rate	2.80	2.80	2.80
2) Loan rate plus accrued interest	2.88	2.88	2.88
3) Posted County Price	2.90	2.85	2.55
4) Loan repayment rate (lower of 2 or 3)	2.88	2.85	2.55
5) Marketing Loan Gain or LDP rate	0.00	0.00	0.25

Final Loan/LDP Availability Dates

The final loan/LDP availability date is March 31 of the calendar year after the calendar year the grain is harvested. For example, for crop year 2003, wheat loans may be requested through March 31, 2004.

Producers may either obtain a loan or receive an LDP on all or part of their eligible production during the loan availability period.

Grazing Payments in Lieu of LDPs

Wheat producers electing to use their wheat acreage for livestock grazing may receive grazing payments if they would otherwise be eligible for LDPs. Producers receiving grazing payment must forgo any mechanical harvesting of the crop. The grazing payment is determined by multiplying the wheat acreage grazed *times* the farm's direct payment yield *times* the LDP rate on the date of the payment request. Grazing payments may be requested no earlier than the normal harvesting date. Grazing payments must be requested by the final loan availability date.

Grazing payments are also available for barley, oats, and triticale. Triticale is a hybrid offspring developed from crossing wheat and rye. Triticale grazing payments are determined using the farm's wheat direct payment yield and wheat LDP rate.

Commodity Certificates

Commodity certificates are available to producers for acquiring 2002- through 2007-crop marketing assistance loan collateral pledged to CCC. Commodity certificates will be available for sale at local USDA Service Centers to producers with outstanding nonrecourse marketing assistance loans. The exchange rate will be the effective posted county price (PCP) on the date the commodity certificate is purchased. Commodity certificate exchanges will not be available when the exchange rate exceeds the applicable loan rate.

For further information, see the fact sheet "Commodity Certificates," contact a local USDA Service

Center, or visit the FSA Web site at: www.fsa.usda.gov

Production Evidence

Producers repaying a loan at less than the loan rate plus accrued interest and other charges or receiving an LDP must provide production evidence acceptable to CCC, such as evidence of sales, warehouse receipts, or load summary or assembly sheets.

Planting Flexibility

The 2002 Act continues wild rice, fruit, and vegetable (WR/FAVs) planting restrictions, but slightly eases restrictions compared with those under the 1996 Act. To be eligible for loan benefits and payments under the 1996 Act, producers signed 7-year contracts and fruit and vegetable restrictions applied to the entire contract period. Under the 2002 Act, producers may annually opt out of eligibility for direct and counter-cyclical payments and plant fruits, vegetables, and wild rice without restrictions.

Producers seeking to receive direct and counter-cyclical payments relative to the farm are prohibited from planting wild rice, fruits, and vegetables (other than lentils, mung beans, and dry peas) on base acres unless the commodity, if planted, is destroyed before harvest or meets the following statutory exceptions. Plantings of WR/FAVs are not limited:

1. In any region with a history of double cropping commodities eligible for direct and counter-cyclical payments with WR/FAVs;
2. On a farm with a history of planting WR/FAVs except that direct and counter-cyclical payments will be reduced acre for acre planted to WR/FAVs; and
3. For a producer with an established history of planting a specific WR/FAV, except that the acreage may not exceed the average annual plantings in the 1991-1995 or the 1998-2001 crop years (excluding any crop year with no plantings) and that direct and counter-cyclical payments shall be reduced acre for acre planted to WR/FAVs.

Adjusted Gross Income and Payment Limitations

Adjusted Gross Income Limitations

Starting with the 2003 crop, individuals and entities whose previous 3-year average adjusted gross income (AGI) exceeds $2.5 million are ineligible for many program benefits unless they can establish that at least 75 percent of their AGI is derived from agriculture. Program benefits for which individuals or entities exceeding the AGI limit will be ineligible include:

- Direct payments;
- Counter-cyclical payments;
- Loan deficiency payments;
- Marketing loan gains;
- Agricultural Management Assistance Program;
- Conservation Security Program;
- Conservation Reserve Program;
- Environmental Quality Incentives Program;
- Farmland Protection Program;
- Grassland Reserve Program;
- Ground and Surface Water Conservation Program; and
- Wetland Reserve Program.

Payment Limitations

The 2002 Act also establishes limits on payments a "person" may receive from farm programs. The definition of "person" includes individual farmers, but also encompasses limited partnerships, corporations, and other types of organizations. The 3-entity rule, carried over from previous legislation, limits to three the number of entities through which a "person" may receive payments.

The sum of LDPs and marketing loan gains for the commodities listed below is subject to a $75,000-per-person payment limitation for each crop year. This payment limitation is separate from the $40,000-per-person limitation for direct payments and $65,000-per-person limitation for counter-cyclical payments. For more information on payment limitations see the FSA fact sheet *Payment Eligibility and Limitations*, contact a local USDA Service Center, or visit the FSA Web site at: www.fsa.usda.gov

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The per "person" payment limitations apply for each crop year for the following:

Direct Payments
- $40,000 total for wheat, corn, grain sorghum, barley, oats, upland cotton, rice, soybeans, and other oilseeds; and
- $40,000 for peanuts.

Counter-cyclical Payments
- $65,000 total for wheat, corn, grain sorghum, barley, oats, upland cotton, rice, soybeans, and other oilseeds; and
- $65,000 for peanuts.

Marketing Loan Gains and Loan Deficiency Payments
- $75,000 total for wheat, corn, grain sorghum, barley, oats, upland cotton, rice, soybeans, other oilseeds, dry peas, lentils, and small chickpeas; and
- $75,000 total for peanuts, wool, mohair, and honey.

Hard White Wheat Incentive Payments

The 2002 Act made available $20 million of CCC funds, providing hard white wheat incentive payments for the 2003-2005 crops. The production incentive payment rate is $0.20 per bushel on production up to 60 bushels per acre. An additional incentive payment of $2.00 per acre is available to producers who plant certified seed. However, planting certified seed is not a requirement for receiving the per bushel incentive payment.

To receive the per bushel payment, the hard white wheat must grade #2 or higher under the grading standards, established by the Federal Grain Inspection Service (FGIS). In addition, it must be sold for domestic food use or export. Hard white wheat production enrolled in the hard white wheat incentive program retains eligibility for marketing assistance loan program. Producers can apply for incentive payments at their local USDA Service Centers.

WHEAT PROGRAM SUMMARY

Crop Year	Number of Farms Participating	Acreage Allotment/Base on Farms Participating	National Acreage Allotment/Base 1/	Acreage Diversion Set-Aside on Farms Participating	Payments, Diversion & SG&H 2/	Deficiency/ Contract Payments
1960	not avail.	not avail.	55,000,000	none	none	none
1961	not avail.	not avail.	55,000,000	none	none	none
1962	777,714	41,183,000	55,000,000	10,699,000	$285,524,000	none
1963	409,890	25,023,000	55,000,000	7,161,000	163,394,000	$79,200,000 3/
1964	584,955	39,267,000	53,200,000	5,123,000	32,716,000	410,176,000
1965	819,535	43,465,000	53,300,000	7,185,000	36,882,000	472,338,000
1966	809,079	42,120,000	51,600,000	8,257,000	26,156,000	655,186,000
1967	769,295	56,887,000	68,200,000	none	none	727,053,000
1968	803,050	50,155,000	59,300,000	none	none	745,974,000
1969	953,318	45,243,000	51,600,000	11,097,000	71,612,000	784,336,000
1970	923,302	39,867,000	45,500,000	15,723,000	62,548,000	808,458,000
1971	1,011,954	18,122,000	19,700,000 4/	13,500,000 5/	none	885,653,000
1972	976,338	18,314,000	19,700,000 4/	20,106,000	132,000,000	726,670,000
1973	1,053,360	17,783,000	18,700,000 4/	7,372,000	103,024,000	375,226,000
1974	N/A 6/	N/A	55,000,000	N/A	N/A	N/A
1975	N/A	N/A	53,500,000	N/A	N/A	N/A
1976	N/A	N/A	61,600,000	N/A	N/A	N/A
1977	N/A	N/A	62,200,000	none	none	996,416,000
1978	not avail.	41,965,000	58,800,000 7/	9,600,000 8/	15,116,000	617,353,000
1979	not avail.	36,142,300	70,100,000 7/	8,200,000	none	none
1980	666,143	73,349,613	75,000,000 7/	none	none	none
1981	782,608	81,725,768 9/	84,500,000 7/	none	none	414,588,000
1982	222,912	43,753,209	90,661,347 7/	5,800,000	none	476,500,000
1983	498,013	70,152,741	90,186,265	30,017,000	309,200,000	769,700,000
1984	317,565	56,146,824	93,961,821	18,449,800	506,100,000	1,049,800,000
1985	472,886	69,970,117	94,035,775	18,824,021	652,700,000	1,555,300,000
1986	456,725	78,101,983	91,599,459	21,014,243	215,400,000	3,457,000,000
1987	557,203	76,606,731	87,551,977	23,931,737	none	3,287,000,000
1988	547,012	72,693,872	84,761,610	22,462,977	none	1,216,400,000
1989	433,758	64,369,632 10/	82,315,009	9,580,558	none	572,100,000
1990	463,859	66,696,372	80,492,510	7,520,564	none	2,420,300,000
1991	462,882	67,644,101	79,202,505	15,924,272	none	2,246,100,000
1992	433,990	65,650,430	78,873,913	7,321,461	none	1,370,503,000
1993	475,590	68,565,784	78,365,734	5,696,746	none	1,900,079,000
1994	461,039	67,996,895	78,113,657	5,194,652	none	1,145,514,000
1995	417,038	65,846,523	77,653,599	6,129,239	none	265,764,000
1996	953,995	76,673,982 11/	N/A	N/A	none	1,940,519,000
1997	966,349	76,662,592	N/A	N/A	none	1,396,798,000
1998	988,032	78,904,816	N/A	N/A	none	1,496,191,000
1999	1,006,583	79,038,119	N/A	N/A	none	1,446,875,000
2000	1,016,618	78,937,785	N/A	N/A	none	1,337,332,000
2001	1,022,961	78,464,094	N/A	N/A	none	1,076,048,000
2002	1,034,803	78,444,102 13/	N/A	N/A	none	1,045,980,000

1/ 1964 through 1969 includes the increase in small farm allotment authorized by law.
2/ SG&H: Special Grazing and Hay Program.
3/ Price support payments in 1963.
4/ Domestic allotment.
5/ Required set-aside.
6/ N/A: not applicable.
7/ National program acreage.
8/ Includes set-aside and special grazing and hay program acreage.
9/ Acreage on which program payments were based.
10/ Acreage base complying with program provisions.
11/ Contract acreage.
12/ 1996-2002 includes only production flexibility contract payments.
13/ PFC base only, does not include updated bases for 2002 Act.

continues ►

WHEAT PROGRAM SUMMARY -- Continued

Crop Year 1/	Support Price/ Target Price	Direct Payment Rate		Loan Rate	Loan Placements	Average Price to Farmers	Value of Production	Government Payments	
	($ per bushel)				(million bushels)	($ per bushel)	(million $)	(million $)	
1960	1.78 2/				424.0	1.74	2,361.2		
1961	1.79				271.2	1.83	2,254.7		
1962	2.00				297.3	2.04	2,225.7	285.5	Diversion
1963	2.00 3/	0.18 4/		1.82 5/	177.4	1.85 (2.03) 6/	2,125.3	242.6	Div. & Price Sup.
1964	2.00 7/	0.70 8/	0.25 9/	1.30 5/	205.8	1.37 (1.80) 6/	1,757.0	442.9	Div. &Certificates
1965	2.00 7/	0.75 8/	0.30 9/	1.25 5/	172.4	1.35 (1.79) 6/	1,774.5	509.2	Div. & Certificates
1966	2.57 7/	1.32 8/		1.25 5/	132.7	1.63 (2.22) 6/	2,129.9	681.3	Div. & Certificates
1967	2.61 7/	1.36 8/		1.25 5/	281.5	1.39 (1.87) 6/	2,090.1	727.1	Certificates
1968	2.63 7/	1.38 8/		1.25 5/	453.1	1.24 (1.79) 6/	1,929.1	746.0	Certificates
1969	2.77 7/	1.52 8/		1.25 5/	407.6	1.25 (1.89) 6/	1,795.7	855.9	Div. & Certificates
1970	2.82 7/	1.57 8/		1.25 5/	254.3	1.33 (2.08) 6/	1,803.2	871.0	Div. & Certificates
1971	2.93 7/	1.63 10/		1.25 5/	441.8	1.34 (1.88) 6/	2,167.8	885.7	Div. & Certificates
1972	3.02 7/	1.34 10/		1.25 5/	185.1	1.76 (2.23) 6/	2,706.1	858.7	Div. & Certificates
1973	3.39 7/	0.68 10/		1.25 5/	59.9	3.95 (4.17) 6/	6,744.6	478.2	Div. & Certificates
1974	2.05 11/	—		1.37 5/	37.2	4.09	7,287.3	101.5	Disaster
1975	2.05 11/	—		1.37 5/	51.3	3.56	7,549.8	51.2	Disaster
1976	2.29 11/	—		2.25 5/	492.8	2.73	5,867.8	143.4	Disaster
1977	2.90 12/	0.65 13/		2.25 5/	604.1	2.33	4,764.6	1,157.2	Def. & Disaster
1978	3.40 14/	0.52 13/		2.35 5/	256.4	2.97	5,280.6	719.3	Def/Hay&Grz, Dis
1979	3.40 14/	—		2.50 5/	182.0	3.80 15/	8,109.0	72.3	Disaster
1980	3.08/3.63 16/	—		3.00/3.30 17/	331.8	3.99	9,303.0	28.2	Disaster
1981	3.81 14/	0.15 13/		3.20/3.50 17/	452.7	3.69	10,172.0	635.2	Deficiency & Dis.
1982	4.05 14/	0.50 13/		3.55/4.00 17/	646.2	3.45	9,489.0	488.8	Deficiency & Dis.
1983	4.30 14/	0.65 13/		3.65/3.65 17/	635.2	3.51	10,883.0 18/	1,079.5	Def., Div. & Dis.
1984	4.38 18/	1.00 13/		3.30 5/	284.7	3.39	9,246.0 18/	1,555.9	Def. & Diversion
1985	4.38 14/	1.08 13/		3.30 5/	842.6	3.08	7,371.0	2,188.0	Def. & Diversion
1986	4.38 14/	1.98 13/		2.40 5/	514.1	2.42	5,042.0	3,672.4	Def. & Diversion
1987	4.38 14/	1.81 13/		2.28 5/	472.3	2.57	5,498.0	3,287.0	Deficiency
1988	4.23 14/	0.69 13/		2.21 5/	106.2	3.72	6,741.0	1,688.0	Def. & Disaster
1989	4.10 14/	0.32 13/		2.06 5/	113.5	3.72	7,542.0	1,046.0	Def. & Disaster
1990	4.00 14/	1.28 13/		1.95 5/	405.2	2.61	7,184.0	2,420.3	Deficiency
1991	4.00 14/	1.35 13/		2.04 5/	143.2	3.00	5,957.0	2,246.1	Deficiency
1992	4.00 14/	0.81 13/		2.21 5/	240.3	3.24	7,984.0	1,370.5	Deficiency
1993	4.00 14/	1.03 13/		2.45 5/	258.2	3.26	7,812.0	1,900.1	Deficiency
1994	4.00 14/	0.61 13/		2.58 5/	231.1	3.45	8,007.0	1,145.9	Deficiency
1995	4.00 14/	0.00 13/		2.58 5/	114.0	4.55	9,787.0	100.0	Deficiency
1996 19/	N/A	0.874 13/		2.58 5/	194.2	4.30	9,782.0	1,940.5	PFC, LDP, MLG
1997	N/A	0.631 13/		2.58 5/	263.8	3.38	8,287.0	1,412.4	PFC, LDP, MLG
1998	NA	0.992 13/		2.58	362.2	2.65	6,781.0	2,394.0	PFC, LDP, MLG, MLA
1999	N/A	1.274 13/		2.58	154.2	2.48	5,594.0	3,827.6	PFC, LDP, MLG, MLA
2000	N/A	1.225 13/		2.58	181.1	2.62	5,872.1	3,608.7	PFC, LDP, MLG, MLA
2001	N/A	1.014 13/		2.58	196.7	2.78	5,440.2	2,474.1	DP, CCP, LDP, MLG
2002 21/	3.86 14/	0.52		2.80	120.0	3.60	5,819.0		
2003 22/	3.86 14/	0.52		2.80	210.0	NA	NA	NA	

1/ For 1933 through 1959 statistics, see 1979 Wheat Commodity Fact Sheet.
2/ For 1960 through 1963 crops, support outside the commercial area was 75 percent of the rate reflecting the U.S. average level.
3/ Total support.
4/ Price support payment.
5/ Loan rate.
6/ Blended average price to program participants, reflecting national average price farmers received and the marketing certificate value average for participants total production.
7/ Support for wheat used for domestic food.
8/ Domestic marketing certificate value.
9/ Export marketing certificate value.
10/ The marketing certificate payment rate was the difference between the price farmers received the first 5 months (July-November) of the marketing year and 100 percent of wheat parity on July 1. An advance payment equal to 75 percent of the estimated face value of the certificate was made to eligible producers
11/ Established target price, guaranteed on production from allotment acreage.
12/ Established target price on planted allotment acreage; established target price on unplanted allotment acreage was $2.47
13/ Deficiency payment, 1977-1995; production flexibility contract rate (including market loss assistance for 1998-2001), 1996-2001; direct payment rate, 2002-2003.
14/ Established target price.

WHEAT SUPPLY

Crop Year	Acreage Planted million acres	Acreage Harvested million acres	Yield bushels per acre	Production million bushels	Beginning Stocks million bushels	Imports million bushels	Supply 1/ million bushels
1960	54.9	51.9	26.1	1,354.7	1,384.2	8.0	2,746.9
1961	55.7	51.6	23.9	1,232.4	1,502.4	5.9	2,740.7
1962	49.3	43.7	25.0	1,092.0	1,420.6	5.8	2,518.4
1963	53.4	45.5	25.2	1,146.8	1,269.7	4.1	2,420.6
1964	55.7	49.8	25.8	1,283.4	993.5	1.8	995.3
1965	57.4	49.6	26.5	1,315.6	921.1	0.9	2,237.6
1966	54.1	49.6	26.3	1,304.9	660.5	1.7	1,967.1
1967	67.3	58.4	25.8	1,507.6	512.8	1.0	2,021.4
1968	61.9	54.8	28.4	1,556.7	630.2	1.1	2,187.9
1969	53.5	47.1	30.6	1,442.7	904.0	2.9	2,349.5
1970	48.7	43.6	31.0	1,351.6	982.6	1.4	2,335.7
1971	53.8	47.7	33.9	1,618.6	822.8	1.1	2,442.5
1972	54.9	47.3	32.7	1,546.2	983.4	1.3	2,530.9
1973	59.3	54.1	31.6	1,710.8	597.1	2.6	2,310.5
1974	71.0	65.4	27.3	1,781.9	340.1	3.4	2,125.4
1975	74.9	69.5	30.6	2,126.9	435.0	2.4	2,564.3
1976	80.4	70.9	30.3	2,148.8	665.6	2.7	2,817.1
1977	75.4	66.7	30.7	2,045.5	1,113.2	1.9	3,160.6
1978	66.0	56.5	31.4	1,775.5	1,177.8	1.9	2,955.2
1979	71.4	62.5	34.2	2,134.1	924.1	2.1	3,060.3
1980	80.8	71.1	33.5	2,380.9	902.0	2.5	3,285.4
1981	88.3	80.6	34.5	2,785.4	989.1	2.8	3,777.3
1982	86.2	77.9	35.5	2,765.0	1,159.4	7.6	3,932.0
1983	76.4	61.4	39.4	2,419.8	1,515.1	3.8	3,938.8
1984	79.2	66.9	38.8	2,594.8	1,398.6	9.4	4,002.8
1985	75.5	64.7	37.5	2,424.1	1,425.2	16.3	3,865.6
1986	72.0	60.7	34.4	2,090.6	1,905.0	21.3	4,016.8
1987	65.8	55.9	37.7	2,107.7	1,820.9	16.1	3,944.7
1988	65.5	53.2	34.1	1,812.2	1,260.8	22.7	3,095.7
1989	76.6	62.2	32.7	2,036.6	701.6	22.5	2,760.7
1990	77.0	69.1	39.5	2,729.8	536.5	36.4	3,302.6
1991	69.9	57.8	34.3	1,980.1	868.1	40.7	2,889.0
1992	72.2	62.8	39.3	2,466.8	475.0	70.0	3,011.8
1993	72.2	62.7	38.2	2,396.4	530.7	108.8	3,035.9
1994	70.3	61.8	37.6	2,321.0	568.5	91.9	2,981.4
1995	69.0	61.0	35.8	2,182.7	506.6	67.9	2,757.2
1996	75.1	62.8	36.3	2,277.4	376.0	92.3	2,745.7
1997	70.4	62.8	39.5	2,481.5	443.6	94.9	3,020.0
1998	65.8	59.0	43.2	2,547.3	722.5	103.0	3,372.8
1999	62.7	53.8	42.7	2,299.0	945.9	94.5	3,339.4
2000	62.6	53.1	42.0	2,232.5	949.7	89.8	3,272.0
2001 2/	59.6	48.6	40.2	1,957.0	876.2	107.5	2,940.8
2002 3/	60.4	45.8	35.3	1,616.4	777.1	70.0	2,463.6

1/ Totals may not add due to rounding.
2/ Preliminary.
3/ Forecast based on April 2003 WASDE.

continues ►

USE OF WHEAT
(million bushels)

Crop Year	Food & Industrial Use	Feed, Seed & Residual Use	Exports 1/	Total Use	Ending Stocks	CCC Inventory	Reseal/ Farmer-Owne Reserve 2/
1960	496.5	94.7	653.5	1,244.7	1,502.4	1,242.0	38.0
1961	504.0	100.3	715.7	1,320.0	1,420.6	1,097.0	37.0
1962	502.7	96.1	649.4	1,248.2	1,269.7	1,082.0	29.0
1963	487.9	93.5	845.6	1,427.0	993.5	829.0	10.0
1964	514.4	120.4	722.7	1,357.5	921.1	646.0	—
1965	517.9	207.4	851.8	1,577.1	660.5	340.0	3.0
1966	505.1	178.0	771.3	1,454.3	512.8	124.0	8.0
1967	517.8	108.1	765.3	1,391.2	630.2	102.0	—
1968	522.4	217.3	544.2	1,283.9	904.0	163.0	—
1969	520.1	243.9	603.0	1,367.0	982.6	301.0	—
1970	517.1	255.1	740.8	1,512.9	822.8	370.0	8.0
1971	523.7	325.6	609.8	1,459.1	983.4	367.0	13.0
1972	531.8	266.9	1,135.1	1,933.8	597.1	144.0	11.0
1973	544.3	209.1	1,217.0	1,970.4	340.1	19.0	—
1974	545.0	126.9	1,018.5	1,690.4	435.0	1.0	—
1975	588.5	137.3	1,732.9	1,898.7	665.6	0.0	—
1976	588.0	166.4	949.5	1,703.9	1,113.2	0.0	—
1977	586.5	272.5	1,123.8	1,982.8	1,177.8	48.0	342.0
1978	592.4	244.5	1,194.2	2,031.1	924.1	51.0	403.0
1979	596.1	187.0	1,375.3	2,158.3	902.0	188.0	260.0
1980	610.5	172.0	1,513.8	2,296.3	989.1	200.0	360.0
1981	602.4	244.8	1,770.7	2,617.9	1,159.4	190.0	560.0
1982	616.4	291.8	1,508.7	2,416.9	1,515.1	192.0	1,061.0
1983	642.6	471.2	1,426.4	2,540.2	1,398.6	188.0	611.0
1984	651.0	505.1	1,421.4	2,577.6	1,425.2	376.0	654.0
1985	674.3	377.2	909.1	1,960.7	1,905.0	602.0	596.0
1986	712.2	485.2	998.5	2,195.9	1,820.9	830.0	632.0
1987	720.7	365.2	1,587.9	2,683.8	1,260.8	283.0	467.0
1988	725.8	253.5	1,414.9	2,394.1	701.6	190.0	287.0
1989	748.9	243.4	1,232.0	2,224.3	536.5	117.0	144.0
1990	789.8	575.3	1,069.5	2,434.5	868.1	163.0	14.0
1991	789.5	342.2	1,282.3	2,413.9	475.0	152.0	50.0
1992	834.8	292.7	1,353.6	2,481.2	530.7	150.0	28.0
1993	871.7	368.0	1,227.8	2,467.4	568.5	150.0	6.0
1994	853.0	433.6	1,188.3	2,474.8	506.6	142.0	0
1995	882.9	257.2	1,241.1	2,381.2	376.0	118.0	0
1996	890.7	409.9	1,001.5	2,302.1	443.6	93.0	N/A
1997	914.1	343.0	1,040.4	2,297.5	722.5	94.0	N/A
1998	909.1	471.8	1,046.0	2,426.9	945.9	128.0	N/A
1999	921.0	380.1	1,088.6	2,389.7	949.7	104.0	N/A
2000	949.6	384.2	1,062.0	2,395.9	876.2	97.0	N/A
2001 3/	926.3	276.1	961.3	2,163.7	777.1	99.0	N/A
2002 4/	935.0	209.0	875.0	2,019.0	444.6	59.0	N/A

1/ Includes foreign currency and long-term credit, donations, barter, and agency development programs.
2/ The Farmer-Owned Reserve Program started in crop year 1977. Prior to that the Reseal was in effect. Beginning in 1985, includes wheat in the Special Producer Storage Loan Program.
3/ Preliminary.
4/ Forecast based on April 2003 WASDE.

Farm Service Agency Online

PSL-82R

Prepared Thursday, August 07, 2003

Price Support Division
Loan Deficiency Payment and Price Support Cumulative Activity As of 7/30/2003

IMPORTANT: (1) Data in this report is updated **weekly**. (2)Quantities and Amounts are in **1000's**. (3)Units of Measure: Wheat, Corn, Barley, Soybeans, and Oats in *Bushels*, Flaxseed, Grain Sorghum, Sunflower Oil & Other, Canola, Rapeseed, Safflower, Mustard Seed, and Rice in *CWT*,; Upland Cotton in *Pounds*. (4)Upload Cotton Loan/LDP Data provides *Form A* (FSA County Office) and *Form G* (Approved Cotton Co-op) Activity

1999 National Totals								
.	Loan Deficiency Payments			Loan Activity				
Comm	Total Quantity	Total Payment	Average Payment	Quantity Under Loan	Total Repayment Quantity	Market Gain Quantity	Market Gain Amount	Average Market Gain
WHT	1,911,504.78	$890,023.81	.47	141,324.22	123,684.39	115,169.50	$47,597.61	.41

End of Report

Farm Service Agency Online

PSL-82R

Prepared Thursday, August 07, 2003

Price Support Division

Loan Deficiency Payment and Price Support Cumulative Activity As of 7/30/2003

IMPORTANT: (1) Data in this report is updated **weekly**. (2)Quantities and Amounts are in **1000's**. (3)Units of Measure: Wheat, Corn, Barley, Soybeans, and Oats in *Bushels*, Flaxseed, Grain Sorghum, Sunflower Oil & Other, Canola, Rapeseed, Safflower, Mustard Seed, and Rice in *CWT*,; Upland Cotton in *Pounds*. (4)Upload Cotton Loan/LDP Data provides *Form A* (FSA County Office) and *Form G* (Approved Cotton Co-op) Activity

2000 National Totals

.	Loan Deficiency Payments			Loan Activity				
Comm	Total Quantity	Total Payment	Average Payment	Quantity Under Loan	Total Repayment Quantity	Market Gain Quantity	Market Gain Amount	Average Market Gain
WHT	1,782,252.83	$791,074.44	.44	178,915.50	167,841.41	100,307.83	$43,482.31	.43

End of Report

PSL-82R

Prepared Tuesday, August 05, 2003

Price Support Division

Loan Deficiency Payment and Price Support Cumulative Activity As of 7/30/2003

IMPORTANT: (1) Data in this report is updated **weekly**. (2)Quantities and Amounts are in **1000's**. (3)Units of Measure: Wheat, Corn, Barley, Soybeans, and Oats in *Bushels*, Flaxseed, Grain Sorghum, Sunflower Oil & Other, Canola, Rapeseed, Safflower, Mustard Seed, and Rice in *CWT*,; Upland Cotton in *Pounds*. (4)Upload Cotton Loan/LDP Data provides *Form A* (FSA County Office) and *Form G* (Approved Cotton Co-op) Activity

2001 National Totals

	Loan Deficiency Payments			Loan Activity				
Comm	Total Quantity	Total Payment	Average Payment	Quantity Under Loan	Total Repayment Quantity	Market Gain Quantity	Market Gain Amount	Average Market Gain
WHT	687,720.11	$162,528.97	.24	194,851.87	186,264.53	52,505.93	$6,550.40	.12

End of Report

Farm Service Agency Online

PSL-82R

Prepared Tuesday, August 05, 2003

Price Support Division

Loan Deficiency Payment and Price Support Cumulative Activity As of 7/30/2003

IMPORTANT: (1) Data in this report is updated **weekly**. (2)Quantities and Amounts are in **1000's**. (3)Units of Measure: Wheat, Corn, Barley, Soybeans, and Oats in *Bushels*, Flaxseed, Grain Sorghum, Sunflower Oil & Other, Canola, Rapeseed, Safflower, Mustard Seed, and Rice in *CWT*,; Upland Cotton in *Pounds*. (4)Upload Cotton Loan/LDP Data provides *Form A* (FSA County Office) and *Form G* (Approved Cotton Co-op) Activity

2002 National Totals

	Loan Deficiency Payments			Loan Activity				
Comm	Total Quantity	Total Payment	Average Payment	Quantity Under Loan	Total Repayment Quantity	Market Gain Quantity	Market Gain Amount	Average Market Gain
WHT	93,581.46	$14,604.45	.16	118,124.57	89,094.13	12,130.57	$1,360.53	.11

End of Report