

# Industry & Trade Summary

## Bakery Products

USITC Publication 3635

September 2003

OFFICE OF INDUSTRIES  
U.S. International Trade Commission  
Washington, DC 20436



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# PREFACE

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In 1991 the United States International Trade Commission initiated its current *Industry and Trade Summary* series of informational reports on the thousands of products imported into and exported from the United States. Each summary addresses a different commodity/industry area and contains information on product uses, U.S. and foreign producers, and customs treatment. Also included is an analysis of the basic factors affecting trends in consumption, production, and trade of the commodity, as well as those bearing on the competitiveness of U.S. industries in domestic and foreign markets.<sup>1</sup>

This report on bakery products covers the period 1998 through 2002. Listed below are the individual summary reports published to date on the agriculture and forest products sectors.

<i>USITC publication number</i>	<i>Publication date</i>	<i>Title</i>
2459	November 1991 .....	Live Sheep and Meat of Sheep
2462	November 1991 .....	Cigarettes
2477	January 1992 .....	Dairy Products
2478	January 1992 .....	Oilseeds
2511	March 1992 .....	Live Swine and Fresh, Chilled, or Frozen Pork
2520	June 1992 .....	Poultry
2544	August 1992 .....	Fresh or Frozen Fish
2545	November 1992 .....	Natural Sweeteners
2551	November 1992 .....	Newsprint
2612	March 1993 .....	Wood Pulp and Waste Paper
2615	March 1993 .....	Citrus Fruit
2625	April 1993 .....	Live Cattle and Fresh, Chilled, or Frozen Beef and Veal
2631	May 1993 .....	Animal and Vegetable Fats and Oils
2635	June 1993 .....	Cocoa, Chocolate, and Confectionery
2636	May 1993 .....	Olives
2639	June 1993 .....	Wine and Certain Fermented Beverages
2693	October 1993 .....	Printing and Writing Paper
2702	November 1993 .....	Fur Goods
2726	January 1994 .....	Furskins
2737	March 1994 .....	Cut Flowers

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<sup>1</sup> The information and analysis provided in this report are for the purposes of this report only. Nothing in this report should be construed to indicate how the Commission would find in an investigation conducted under statutory authority covering the same or similar subject matter.

## **PREFACE—Continued**

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<i>USITC publication number</i>	<i>Publication date</i>	<i>Title</i>
2749	March 1994 .....	Paper Boxes and Bags
2762	April 1994 .....	Coffee and Tea
2859	May 1995 .....	Seeds
2865	April 1995 .....	Malt Beverages
2875	May 1995 .....	Certain Fresh Deciduous Fruits
2898	June 1995 .....	Certain Miscellaneous Vegetable Substance and Products
2917	October 1995 .....	Lumber, Flooring, and Siding
2918	August 1995 .....	Printed Matter
2928	November 1995 .....	Processed Vegetables
3015	February 1997 .....	Hides, Skins, and Leather
3020	March 1997 .....	Nonalcoholic Beverages
3022	April 1997 .....	Industrial Papers and Paperboards
3080	January 1998 .....	Dairy Products
3083	February 1998 .....	Canned Fish, Except Shellfish
3095	March 1998 .....	Milled Grains, Malts, and Starches
3096	April 1998 .....	Millwork
3145	December 1998 .....	Wool and Related Animal Hair
3148	December 1998 .....	Poultry
3171	March 1999 .....	Dried Fruits Other Than Tropical
3268	December 1999 .....	Eggs
3275	January 2000 .....	Animal Feeds
3350	September 2000 .....	Grain (Cereals)
3352	September 2000 .....	Edible Nuts
3355	September 2000 .....	Newsprint
3373	November 2000 .....	Distilled Spirits
3391	January 2001 .....	Cotton
3461	October 2001 .....	Cured Fish
3463	October 2001 .....	Fresh or Frozen Fish
3490	February 2002 .....	Wood Pulp and Waste Paper
3576	February 2003 .....	Oilseeds
3579	February 2003 .....	Live Sheep and Meat of Sheep
3580	February 2003 .....	Cut Flowers
3592	April 2003 .....	Pasta

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## ABSTRACT

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This summary analyzes trade and industry conditions in the U.S. bakery products market for the period 1998-2002. Bakery products include bread, rolls, tortillas, cakes, pastries, cookies, crackers, mixes and dough, and related products.

- Imports increased significantly during the 1998-2002 period; however, imports still account for a small portion of total consumption. Imports increased by approximately 50 percent; however, they still accounted for only 2.4 percent of apparent U.S. consumption in 2001. Canada is the largest source of imports of all types of bakery products, and imports from Canada increased significantly.
- The United States has a sizeable, and growing, trade deficit in bakery products. U.S. exports have increased only marginally, while imports have grown significantly. The U.S. trade deficit in bakery products increased from \$395 million in 1998 to \$778 million in 2002. However, the United States does have a slight trade surplus in mixes and dough products. This appears, in part, to be attributable to lower levels of imports, which face tariff barriers, unlike most other bakery products.
- There has been some merger and acquisition activity in the U.S. bakery products industry, which has led to some rationalization of production capacity. Improvements in processing technology now allow producers to ship fresh bakery products longer distances and to serve wider markets. Further improvements in, and adoption of, new processing technologies will likely further increase competition, both from domestic producers serving previously distant markets and from increasing imports.
- During 2002, producers faced sharply rising input costs for wheat flour, cocoa, and other ingredients. Wheat flour prices increased sharply as a result of drought conditions in major wheat producing regions that resulted in lower wheat production. Cocoa costs increased as a result of political strife in Côte D'Ivoire, the major cocoa producing region.



# INTRODUCTION

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This summary provides information on bakery products, such as bread, rolls, cookies, crackers, pastries, and mixes and dough. Bread, roll, cake, cookie, cracker, and pastry products are classified under heading 1905 of the Harmonized Tariff Schedule of the United States (HTS). However, snack food products classified under HTS subheading 1905.90.90 are excluded from this summary. Flour mixes and dough products are classified under HTS subheading 1901.20. This report provides information on the U.S. and some foreign industries, domestic and foreign tariff and nontariff barriers, and the conditions of competition in these markets. This analysis generally covers the period from 1998-2002; however, some limited historical data are included to show long-term trends and significant industry changes.

U.S. industries producing bakery products are experiencing a variety of changes in their markets. Consolidation has recently occurred in certain segments of the domestic industry, such as wholesale bakeries. International trade is an increasingly important and significant factor both through goods trade and foreign direct investment. Imports have increased substantially from 1998 through 2002. Canada is the largest source of bakery products imports and is the largest export market for U.S.-produced products.

## U.S. INDUSTRY PROFILE

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U.S. industries producing bakery products represent a wide range of products, including fresh and frozen bread, cakes, cookies, mixes and dough, and tortillas. These industries are classified under several different six-digit North American Industry Classification System (NAICS) codes. The relevant NAICS codes include 311811, retail bakeries; 311812, commercial bakeries; 311813, frozen cakes, pies, and other pastries manufacturing; 311821, cookie and cracker manufacturing; 311822, flour mixes and dough manufacturing from purchased flour; and 311830, tortilla manufacturing. In total there were 10,637 establishments classified under these NAICS codes in 1999, the latest year for which establishment data are available (table B-1). These industries employed 318,680 workers in 2001, which is an increase of approximately 2.6 percent from 1999.<sup>1</sup> The value of shipments from all these industries totaled \$47.9 billion in 2001, an increase of 5.4 percent since 1999.<sup>2</sup> According to data published in the 2001 Bakery Production and Marketing Red Book, there are more than 3,400 bakery operations producing these products. This figure approximates

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<sup>1</sup> Calculations of trends in the bakery industry, as a whole, based on U.S. Census Bureau data for 1998 are not possible because of a misclassification error in the 1998 data for retail bakeries. This error led to the inclusion of firm data that should not have been classified as retail bakeries. Trends not incorporating data for the retail bakery segment are possible as these data are properly classified.

<sup>2</sup> U.S. Bureau of the Census, *Annual Survey of Manufacturers 2002*, Dec. 20, 2002.

the number of baking operations along product type; therefore, a single plant may be counted more than once if multiple products are produced in the same facility.<sup>3</sup>

## **Commercial and Retail Bakeries**

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Commercial bakeries had shipments valued at \$25.7 billion in 2001, an increase of 17.6 percent from \$21.9 billion in 1998 (table B-1). Products produced by commercial bakeries classified under NAICS 311812 include fresh and frozen bread, rolls, bagels, and fresh snack cakes, cakes, pies and other pastry products. Major commercial bread producers include Interstate Bakeries Corp., Sara Lee Corp., Flowers Foods, Pepperidge Farm, Alpha Baking Company, and United States Bakery. There is significant foreign participation in the U.S. commercial baking market. Bimbo Bakeries USA, is an affiliate of Grupo Bimbo, Mexico's largest wholesale bakery company. Two Canadian companies, Canada Bread (owned by Maple Leaf Foods) and George Weston Ltd., also have a significant presence in the U.S. market.

Retail bakeries, as classified under NAICS 311811, had shipments valued at \$2.5 billion in 2001. Shipments increased from \$2.2 billion in 1999 to \$2.6 billion in 2000, before declining slightly in 2001. Most retail bakeries are small, independently owned operations with one or two production/retail locations. Major retail chains include, Panera Bread Company, Krispy Kreme Bakery, Montana Mills Bread Company, Dunkin' Donuts, and Tim Horton's.

### ***Employment***

Employment in the commercial and retail bakery sectors increased slightly during the 1999-2001 period. Total employment increased by approximately 2.2 percent, while production-related employment increased by approximately 0.7 percent (table B-1). However, all the growth in employment can be attributed to the commercial bakery segment. Total employment in the commercial bakery segment increased by 13,314 positions between 1999-2001. The number of production-related workers increased by 7,067 positions. Total employment in the retail bakery segment declined by 539 positions, while production-related workers declined by 945 positions between 1999-2001.<sup>4</sup>

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<sup>3</sup> Data published in the Bakery Production and Marketing Red Book are based on surveys of the industry. The sample, data collection, and survey methods may vary from those used by the U.S. Bureau of the Census. Therefore, direct comparison of these data is not possible; however, the data are useful in corroborating trends in the U.S. Bureau of the Census data.

<sup>4</sup> Calculations of trends in the bakery industry, as a whole, based on U.S. Census Bureau data for 1998 are not possible because of a misclassification error in the 1998 data for retail bakeries. This error led to the inclusion of firm data that should not have been classified as retail bakeries. Trends not incorporating data for the retail bakery segment are possible as these data are properly classified.

## ***Capacity and Capacity Utilization***

The commercial bakery industry has experienced some recent consolidation and is currently undergoing significant changes in how products are marketed and distributed. This consolidation may have been spurred by some excess capacity in the industry. The latest figures from the U.S. Census Bureau (Census) reported capacity utilization rates of only 72 percent for commercial bakeries in 2000. This is down from utilization rates of 76 percent in 1999 and 74 percent in 1998.<sup>5</sup> Examples of consolidations within this segment include the purchase of Metz Baking by The Earthgrains Company and the subsequent purchase of The Earthgrains Company by Sara Lee in 2002. This acquisition vaulted Sara Lee to the second overall position in fresh bread production, behind Interstate Bakeries Corp. Other examples of consolidation in the industry are the purchase of Bestfoods Baking by George Weston Ltd. (which had made Weston the number two bakery in the United States prior to the Earthgrains - Sara Lee merger), and the purchase of Mrs. Baird's bakery operations in the South and Southwest United States by Grupo Bimbo USA. In the retail sector, Krispy Kreme recently purchased Montana Mills Bread Company.

Consolidation has resulted in a significant decline in bakery operations. Census data indicate that the number of commercial and retail bakery operations declined from 10,438 to 9,509 from 1998 to 1999, the latest year for which data are available.<sup>6</sup> The decline in retail bakery operations was more significant than the decline in commercial operations and accounted for the majority of the total reduction in number of operations. The number of retail bakeries fell from 7,673 in 1998 to 6,780 in 1999.<sup>7</sup> The number of commercial bakeries declined from 2,765 in 1998 to 2,729 in 1999. More recent data indicate these declines continued after 1999. Data compiled in the *Bakery Production and Marketing Red Book* indicate that the number of commercial bakery plants declined from 1,441 in 1998 to 1,151 in 2001.<sup>8</sup> Production operations associated with multi-store, retail bakeries declined from 213 facilities in 1998 to 160 facilities in 2001.<sup>9</sup>

A greater share of the contraction in production facilities was accounted for by smaller operations. The number of commercial operations employing 1-99 workers fell from 983 in 1998 to 794 in 2001. The number of multi-store, retail production facilities with 1-99 employees fell from 180 to 124 during the same period. Generally, however, the number of facilities of all sizes declined. The number of commercial operations with 100-499 employees declined from 365 to 293 and those with 500 or more employees declined from 93 to 64. The number of multi-store, retail facilities with 100-499 employees increased from 28 in 1998 to 32 in 2001, while those with 500 or more employees declined slightly from 5 to 4.

Not captured in these figures, however, is the impact of improvements in production technology. High speed production lines have doubled production speed over the last 10 years. Thus, bakeries have been able to significantly increase production without corresponding increases in employment.

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<sup>5</sup> U.S. Bureau of the Census, *Survey of Plant Capacity 2000*, Jan. 2002.

<sup>6</sup> U.S. Bureau of the Census, *Annual Survey of Manufacturers 2002*, Dec. 20, 2002.

<sup>7</sup> It is unclear to what degree this decline in operations is the result of the missclassification error in the Census data and how much of the decline represents an actual reduction in the industry.

<sup>8</sup> *Bakery Production and Marketing Red Book*, 1998 and 2001.

<sup>9</sup> *Ibid.*

# **Frozen Cakes, Pies, and Other Pastries Manufacturers**

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Many of the major commercial bakery companies are also involved in the frozen cakes, pies, and other pastries manufacturing. For example, Sara Lee Corp., Pepperidge Farm, and Mrs. Smith's Bakeries are leading producers of frozen cakes and pies. Additionally, several companies active in the mixes and dough segment also produce frozen bakery products, such as the Pillsbury Co. Another company involved in the frozen segment is Edwards Fine Foods. Shipments of frozen cakes, pies, and other pastry products have increased steadily from 1998 to 2001. Shipments remained largely stable in 1998 and 1999 at approximately \$2.6 billion. However, shipments increased to \$2.9 billion in 2000, and increased to over \$3.0 billion in 2001.

## ***Employment***

Employment in the frozen cakes, pies and other pastries manufacturing sector increased by approximately 8 percent from 1998 to 2001. The total number of employees increased from 15,402 in 1998 to 16,742 in 2001.<sup>10</sup> The number of production-related workers increased from 12,554 in 1998 to 13,744 in 2001.

## ***Capacity and Capacity Utilization***

The merger and acquisition activity that characterized the commercial bakery market during 1998-2002 also impacted producers of frozen products, since many commercial producers of fresh products also produce frozen products. A recent example of merger and acquisition activity specifically relating to frozen cakes and pies is the sale by Flowers Foods of its Mrs. Smith's frozen dessert business to the Schwan Food Company.

U.S. Census Bureau data indicate that despite an increase in employment in this sector, the number of production facilities has declined. Specifically, the Census data show a decline in the number of facilities from 242 in 1998 to 233 in 1999. Although not directly comparable, data on the number of operations producing cakes, pies and other pastries of all types, frozen and non-frozen, indicate a decline in the number of operations as well. Data from the Bakery Production and Marketing Red Book indicate a decline from 4,512 in 1998 to 4,201 in 2001.<sup>11</sup>

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<sup>10</sup> U.S. Bureau of the Census, *Annual Survey of Manufacturers 2002*, Dec. 20, 2002.

<sup>11</sup> Bakery Production and Marketing Red Book, 1998 and 2001.

# **Cookie and Cracker Manufacturers**

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Cookies, crackers, sweet biscuits, waffles, and wafers represent a fairly diverse group of products. The industry in this segment is characterized by a very high rate of product introductions and market share is dominated by a handful of major corporations. Nabisco (now owned by Kraft Foods) and the Keebler Co. (now owned by the Kellogg Company) account for the vast majority of the market. In 2001, cookie products produced by Nabisco and the Keebler Co. accounted for 8 of the top 10 cookie brands.<sup>12</sup> Shipments in the cookie and cracker market increased from \$10.3 billion in 1998 to \$10.5 billion in 2001.

## ***Employment***

Employment in the cookie and cracker segment has declined. Total employment declined from 42,189 in 1998 to 39,556 in 2001.<sup>13</sup> The number of production-related workers declined from 32,726 in 1998 to 31,129 in 2001.

## ***Capacity and Capacity Utilization***

The number of production facilities in the cookie and cracker segment declined from 411 in 1998 to 401 in 1999 according to Census data.<sup>14</sup> Data published in the Bakery Production and Marketing Red Book indicate a decline in production operations from 1,182 in 1998 to 947 in 2001. This segment also experienced some transformation with the mergers and acquisitions of Nabisco and Kraft Foods and the acquisition of Keebler Foods by Kellogg. While these mergers and acquisitions increased industry concentration in the cookie and cracker market, a number of other firms are also significant participants. In 2002, Kraft Foods and Nabisco branded products combined accounted for approximately 49 percent of all retail sales of cracker products.<sup>15</sup> Branded products produced by Keebler Foods accounted for approximately 25 percent of all retail sales.<sup>16</sup> Other significant participants in the retail cracker market include Pepperidge Farm, Lance Inc., and Red Oval Farms. These three firms accounted for approximately 11.5 percent of retail sales in 2002.<sup>17</sup> The latest data from Census indicated significant underutilization of plant capacity in 2000. Census reported a utilization rate of only 67 percent in 2000.

Although this is an improvement from a utilization rate of 63 percent in 1999, it is down from a utilization rate of 70 percent in 1998.<sup>18</sup>

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<sup>12</sup> *Snack Food & Wholesale Bakery*, June 2002.

<sup>13</sup> U.S. Bureau of the Census, *Annual Survey of Manufacturers 2002*, Dec. 20, 2002.

<sup>14</sup> *Ibid.*

<sup>15</sup> *Milling & Baking News*, *Cracker Sales Grow*, Apr. 29, 2003.

<sup>16</sup> *Ibid.*

<sup>17</sup> *Ibid.*

<sup>18</sup> U.S. Bureau of the Census, *Survey of Plant Capacity 2000*, Jan. 2002.

# Flour Mixes and Dough Manufacturers

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Products manufactured by this industry consist of products utilized by in-store bakery departments, other retail bakery operations, and the food service industry, as well as retail products. Commercial operations, such as retail and in-store bakeries, often utilize pre-made mixes and dough in their operations.

Major retail frozen and refrigerated dough manufacturers include The Earthgrains Company (now owned by Sara Lee), Pillsbury (now owned by General Mills), Mrs. Smith's Bakeries, and the Nestlé company. Major wholesale mix and dough producers are Bunge Foods, Rich Products Corp., Dawn Food Products, George Weston Bakeries, and the Canada Bread Company (the latter two are Canadian companies). Significant merger activity occurred in 2001 as General Mills purchased Pillsbury and Sara Lee Corp. acquired The Earthgrains Company. Pillsbury holds approximately 80 percent of the retail market for branded refrigerated dough, with Nestle as the number two supplier. Sara Lee controls much of the private label segment of the market.<sup>19</sup> These three companies now control virtually all the retail refrigerated dough market.<sup>20</sup> Growth in the retail market for refrigerated dough products is driven primarily by new product development.<sup>21</sup>

The value of shipments in the mixes and dough segment has declined irregularly during the 1998-2001 period. Shipments increased from \$5.0 billion in 1998 to \$5.3 billion in 1999. However, shipments declined to \$4.6 billion in 2000, before recovering slightly to \$4.8 billion in 2001.

## ***Employment***

Employment in the flour mixes and dough segment increased steadily during the 1998 to 2001 period. Total employment increased from 15,232 in 1998 to 19,962 in 2001.<sup>22</sup> The number of production-related workers increased from 11,843 in 1998 to 15,914 in 2001.

## ***Capacity and Capacity Utilization***

The latest available Census data indicate that despite the increase in employment in this sector the number of production facilities has declined. Census data show a decline from 250 facilities in 1998 to 247 facilities in 1999. Census data further indicate an irregular decline in capacity utilization rates from 79 in 1998 to 76 percent in 2000.<sup>23</sup> The 2001 edition of the *Bakery Production and Marketing Red Book* identifies 347 operations producing frozen dough. This is a sharp decline from 420 such operations in 1998. The majority of mix and dough operations are wholesale producers, while the next largest segment consists of operations that are part of larger baked goods manufacturers.

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<sup>19</sup> Milling & Baking News, *Refrigerated Dough Showdown*, Apr. 13, 2002.

<sup>20</sup> Ibid.

<sup>21</sup> Milling & Baking News, *Taking Shape*, Jan. 21, 2003.

<sup>22</sup> U.S. Bureau of the Census, *Annual Survey of Manufacturers 2002*, Dec. 20, 2002.

<sup>23</sup> U.S. Bureau of the Census, *Survey of Plant Capacity 2000*, Jan. 2002.

# Tortilla Manufacturers

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There is somewhat less industry concentration in the tortilla manufacturing segment than in other segments of the bakery products market. There are over 20 tortilla manufacturers active in the United States. Major producers include Azteca Foods, Harvest States Foods, and Mission Foods. Additionally, General Mills owns Old El Paso, which produces dinner kits containing tortillas. The value of shipments in the tortilla segment have grown irregularly from 1998 to 2001. Shipments remained stable in 1998 and 1999 at approximately \$1.2 billion. However, shipments increased to \$1.3 billion in 2000 and to nearly \$1.4 billion in 2001. Retail sales data on tortillas may overstate tortilla consumption as both tortillas and dinner kits, containing tortillas, salsa, beans, cheese, and other fillings, are included in the same category. However, the retail sales data indicate significant growth. Retail sales were approximately \$809.7 million in 1999 and increased to \$878.2 million in 2000.

## *Employment*

Census data show a slight rise in total employment in the tortilla manufacturing segment. Total employment increased from 11,395 in 1998 to 12,040 in 2001.<sup>24</sup> The number of production-related workers increased more than the increase in total employment, up from 8,766 in 1998 to 10,072 in 2001.

## *Capacity and Capacity Utilization*

Capacity utilization data for the tortilla manufacturing industry are not available prior to 1999. Capacity utilization rates in 1999 and 2000 were 78 percent and 77 percent, respectively.<sup>25</sup> Census data report a small decline in the number of production facilities, from 249 in 1998 to 247 in 1999. However, the number of tortilla-producing operations reported by the Bakery Production and Marketing Red Book increased substantially, from 54 in 1998 to 96 in 2001. The trend reported in the Bakery Production and Marketing Red Book appears to more closely coincide with the growth in the tortilla market in the United States.

# Marketing Practices and Prices

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## *Channels of Distribution*

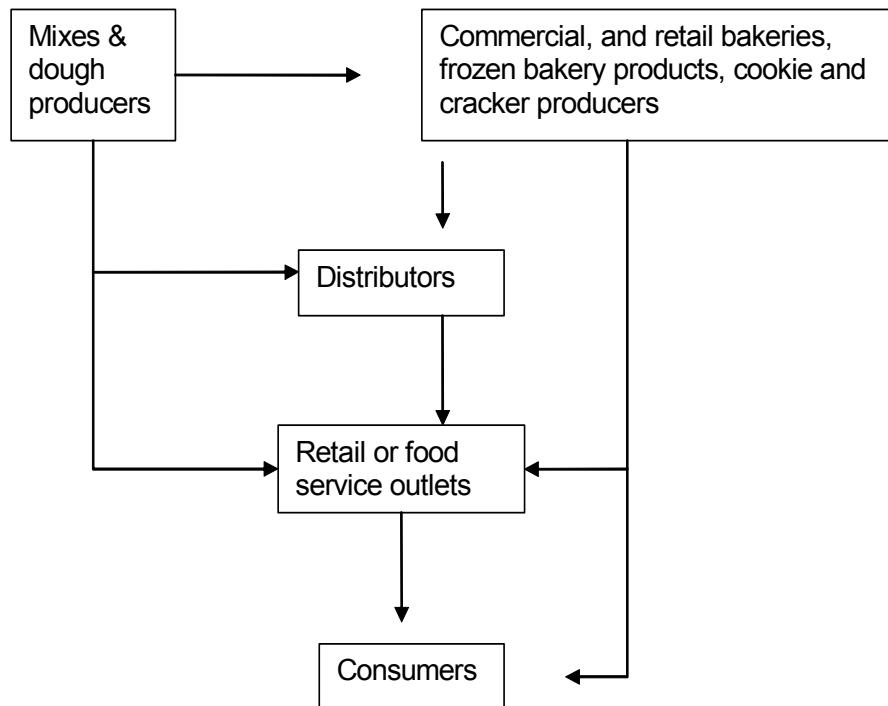
Figure 1 presents the channels of distribution for the bakery products industry. Marketing and distribution operations in the fresh bread and bakery segment are undergoing significant changes. The consolidation in the baking industry has resulted in fewer bakery operations.

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<sup>24</sup> U.S. Bureau of the Census, *Annual Survey of Manufacturers 2002*, Dec. 20, 2002.

<sup>25</sup> U.S. Bureau of the Census, *Survey of Plant Capacity 2000*, Jan. 2002.

**Figure 1**  
**Channels of distribution of the U.S. bakery products industry**



As a result, the remaining bakeries are serving wider geographic markets. Prior studies found that in 1993, shipments from bakeries to their customers averaged 74 miles per shipment.<sup>26</sup> Consolidation, improvement in transportation methods, and the development of extended shelf life (ESL) products increased the average miles per shipment to 96 miles by 1997. For all milled grain and bakery products, the average miles per shipment increased from 89 miles in 1993 to 122 miles in 1997.<sup>27</sup> Additional consolidation and technology improvements have likely increased average miles per shipment further since 1997.<sup>28</sup> In some cases industry participants reported shipments of fresh bakery products to markets 400 miles from the

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<sup>26</sup> U.S. Bureau of the Census, *Transportation Commodity Flow Survey 1997*, Dec. 9, 1999.

<sup>27</sup> Ibid.

<sup>28</sup> For example, in the last few years Interstate Bakeries has significantly increased the shelf life of its products and a Canadian company has reportedly achieved a shelf life of up to 21 days for its products. See Factors Affecting Production section below for additional information.

bakery.<sup>29</sup> Additionally, these distribution and marketing changes have increased the ability of imported products to successfully compete in U.S. markets. Previously, the perishable nature of many bakery products limited the ability of imported products to have a significant role in the market.

Many bakery products, including breads, cookies and crackers, and pastry products, are distributed to the retail and vending outlets through direct-to-store delivery (DSD) systems. This system utilizes dedicated delivery staff who are responsible for a specific route or group of stores. The delivery driver is responsible for ensuring that fresh product remains on the store shelves and that the store is sufficiently stocked with product.

The overwhelming majority of retail purchases of bread and other bakery products are made at grocery stores. Mass merchandisers, such as Wal Mart and Costco, represent the next largest distribution outlet. Additionally, the food service market is an extremely important market for bread products. This market includes hospital, school, and prison cafeterias, as well as restaurants and catering outlets. Although not as large as the retail market, the foods service market is sizeable.

Product distribution for cookie and cracker products is somewhat more diverse than for bread products. Although a significant share of sales is made through the grocery store/mass merchant outlets, a significant portion of sales also occur through the convenience store and vending machine outlets.

## ***Prices***

Consumer price index (CPI) data for bread indicate a fairly regular increase in bread prices between January 1998 and December 2002 (table B-2). The CPI data for bread are also fairly stable, with few large swings in bread prices from month to month. The CPI data for cookies are somewhat more volatile. The data exhibit several instances of significant swings in prices on a month to month basis. This includes sharp increases in prices during the September-December 1999, February-March 2000, and August-December 2002 periods. The sharp increases in prices during the latter half of 2002 may be partially attributable to a sharp rise in ingredient costs in 2002. The CPI data for crackers are even more volatile, exhibiting numerous sharp increases and decreases in prices during the 1998-2002 period. Prices for frozen bakery products exhibited significant increases during 1998-99 and 2000-01 and 2001-02.

Prices for bread products can vary significantly across geographic regions. Data collected by the Economist Intelligence Unit table for seven major U.S. cities indicate a wide range of prices for white pan bread (table B-3).<sup>30</sup> The average price fluctuated somewhat, decreasing from \$2.94 to \$2.88 per kilogram from 1998 to 1999. The average price then increased to \$2.92 per kg in 2000 and to \$3.04 in 2001. Price variations across cities fluctuated to an even greater degree. The average difference from the highest reported price to the lowest reported price in any year averaged \$1.89 per kg. During the 1998 to 2001 period the highest reported price averaged \$3.70 per kg, while the lowest reported price

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<sup>29</sup> U.S. industry officials, interview by USITC staff, Washington, DC, Sep. 4, 2002.

<sup>30</sup> These seven U.S. cities are Boston, Chicago, Cleveland, Detroit, New York City, Pittsburgh, and Washington, DC.

averaged \$1.82 per kg. When the highest and lowest reported prices for each year are disregarded, the variability in prices is still significant, with the reported prices differing by \$0.45 in 1998, \$0.41 in 1999, \$1.12 in 2000, and \$1.27 in 2001.

Additionally, recent analysis appears to indicate that bread prices are an important and potentially leading indicator of the movement in prices in other grain-based foods. A vector-autoregression model of the impact of shocks on the price of wheat on wheat-based foods revealed that changes in the price of bread accounted for an important portion of changes in the prices of cookie and cracker products, flour products, and mix and dough products.<sup>31</sup> CPI data for bread products are widely reported among the bakery industry. Thus, other segments of the grain-based foods industry may be following the lead of bread prices.

## U.S. MARKET

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U.S. consumption of bakery products was estimated to be \$48.5 billion in 2001 (table B-4). U.S. consumption increased each year from 1998 to 2001 by approximately 3 percent per year. Imports as a share of consumption increased slightly during this period, from 2.0 percent in 1998 to 2.4 percent in 2001.

## Consumer Characteristics and Factors Affecting Demand

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Consumption of bakery products generally increased over the 1998-2001 period. However, this trend varies, depending on the market segment and region examined (tables B-4, B-5, and B-6). In 2001, the national average weekly expenditure on cereal and bakery products was \$8.69.<sup>32</sup> This is a slight decline from the average weekly expenditures of \$8.71 in 2000. However, average weekly expenditures increased in the Northeast and South regions of the United States, while average weekly expenditure declined in the Midwest and West. From 1998 to 2001, average expenditures increased in all four regions. Bakery products account for approximately two-thirds of the expenditures on cereal and bakery products. In 2001, the average weekly expenditure on bakery products was \$5.69; this is a slight decline from \$5.71 in 2000. The regional trend in bakery product expenditures mirrors that of cereal and bakery product expenditures.

As a result of the mature nature of the bakery products markets, growth in the retail segment of the market is driven primarily by new product introductions and extensions of existing product lines. In 2002, bakery products producers introduced 1,145 new products.<sup>33</sup> The

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<sup>31</sup> For a more detailed review see USITC Office of Industries Working Paper: Dynamic Relationships Among Selected U.S. Commodity-Based, Value-Added Markets— Applying Directed Acyclic Graphs to a Time Series Model, Publication ID-07, July 2003.

<sup>32</sup> Bureau of Labor Statistics, U.S. Department of Labor, *Consumer Expenditure Survey*, Apr. 2002.

<sup>33</sup> Milling & Baking News, *New Product Introductions Expand in 2002; Confectionary, Bakery Strong*, Jan. 21, 2003.

cookie and cracker segment alone had 493 new product introductions, while the baking ingredients and mixes category had 251 new introductions. The bread and bread products category had 185 new products.<sup>34</sup> Producers of cakes, pastries, and other sweet goods introduced 216 new products in 2002.

Several factors have been suggested to explain recent changes in bakery product consumption. The three most important are increasing convenience/quick preparation time in the marketing of foods, the prevalence of fad diets that stress the avoidance of carbohydrate rich foods, and the detection of acrylamide, a potentially cancer causing substance in baked and fried foods.

Consumers are increasingly relying on semi-prepared, restaurant-prepared, and other convenient, ready-to-eat meal options. Restaurant industry sales are expected to increase 4.5 percent in 2003.<sup>35</sup> At least some of this anticipated growth comes at the expense of supermarkets and grocery stores, which have been experiencing declines in sales values. The overall impact of these trends is unclear on the bakery products market. Both the restaurant and grocery store markets are important channels for bakery products. However, as discussed below, the drive for increased convenience may be shifting consumption between different types of bakery products.

The most recent years analyzed in this report are characterized by the surging popularity of low-carbohydrate diets, such as the Atkin's diet. These diets have changed consumers' perceptions regarding the health benefits of grain-based foods. A Gallup Poll, sponsored by the American Bakers Association and the Wheat Foods Council, found a significant increase in the number of American consumers that believe grain-based foods are fattening.<sup>36</sup> The survey results found that consumers who believe bread is fattening rose from 38 percent in 1996 to 56 percent of respondents in 2002.<sup>37</sup> This perception has had a negative impact on the consumption of grain-based foods. To date the grain-based foods industry has attempted to deal with this perception in several ways. Industry associations have stressed the importance of a balanced diet, including grain-based foods. Additionally, some members of the industry have reformulated product to reduce the amount of carbohydrates. For example, Flowers Foods is marketing a reduced carbohydrate loaf of bread.<sup>38</sup> Another company, FACT Corporation in Freehold, NJ, provides a low carbohydrate mix that can be used to produce bread and bagel products.<sup>39</sup>

On April 24, 2002, researchers at the Swedish National Food Administration and Stockholm University reported finding the chemical acrylamide, in a variety of fried and oven-baked foods. The initial Swedish finding most closely associated the presence of acrylamide with high temperature cooking processes for carbohydrate-rich foods, including bakery products.<sup>40</sup> Acrylamide is a potential human carcinogen.<sup>41</sup> The World Health Organization

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<sup>34</sup> Ibid.

<sup>35</sup> Milling & Baking News, *Restaurant industry group sees 4.5% sales increase in new year*, Jan. 7, 2003.

<sup>36</sup> World-Grain.com, *Survey affirms worsening U.S. image of grain foods*, Mar. 26, 2003.

<sup>37</sup> Ibid.

<sup>38</sup> Atlanta Journal Constitution, *Even bread cutting carbs*, Feb. 24, 2003.

<sup>39</sup> FACT Company Press Release, Apr. 17, 2003.

<sup>40</sup> U.S. Food and Drug Administration, U.S. Department of Health and Human Services, *FDA Draft Action Plan for Acrylamide in Food*, Sep. 20, 2002.

<sup>41</sup> Ibid.

and the Food and Agriculture Organization issued statements in June 2002 recommending that consumers eat a balanced diet, but neither of these organizations, nor the U.S. Food and Drug Administration, have altered their current dietary recommendations as a result of this research. Most of the focus on acrylamide in food has been on fried foods, such as potato chips and french fries. To date, the presence of acrylamide in foods has somewhat impacted consumption patterns. Two surveys conducted by the Grocery Manufacturers Association over the last two years found that 8 percent and 12 percent of consumers surveyed had changed their diets as a result of acrylamide in food.<sup>42</sup>

## ***Commercial and Retail Bakery Products***

Consumption of all bread products, both pan bread and specialty/hearth breads, has been relatively stable during the past five years. There has been significant competition within the bread segment between white bread, variety bread, and artisan breads. Brand names are an important factor in bread products; however, they do not appear to be as important as in other segments of the bakery products market and also tend to be most influential in bread products other than fresh bread. While a number of fresh bread brands are national, private label fresh bread holds a dominant market share. In 2002, private label fresh bread held a 28.3 percent share of supermarket retail sales.<sup>43</sup> This is up slightly from its share in 2001 of 27.0 percent share of supermarket retail sales.<sup>44</sup> This continues a slight, and irregular, increase in private label's share of the retail market, which was 26.4 percent in 1999 and 26.2 percent in 2000. Wonder Bread, the leading fresh bread brand, held a market share of approximately 5.6 percent in 2002, which is virtually unchanged from the 1999-2001 period.<sup>45</sup> Private label products hold an even larger share of the fresh roll market, at 47.6 percent in 2001.<sup>46</sup> In contrast private label products play a smaller role in the frozen bread and roll markets, where they held only a 9.7 percent market share in 2001.<sup>47</sup>

The bread market is a mature market, with nearly complete market penetration. Approximately 98 percent of all households purchase fresh bread.<sup>48</sup> Sales volume in the retail market has actually trended slightly downward. The volume of retail purchases of fresh bread for 1999, 2000, 2001, and 2002 was 4.6 billion pounds, 4.5 billion pounds, 4.4 billion pounds, and 4.4 billion pounds, respectively.<sup>49</sup> Conversely, the dollar value of sales through this channel has trended upward. For 1999, 2000, 2001, and 2002 sales values were \$5.4 billion, \$5.5 billion, \$5.6 billion, and \$5.8 billion, respectively.<sup>50</sup> The growth in sales value can partially be attributed to the increased demand for super premium bread products and fresh artisan bread.<sup>51</sup> Both of these products are marketed at higher price points than

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<sup>42</sup> Milling & Baking News, *Consumers watch prices closely, but most ignore acrylamide issue*, Mar. 25, 2003.

<sup>43</sup> Milling & Baking News, *Fiercely fighting for growth*, Mar. 18, 2003.

<sup>44</sup> Snack Food & Wholesale Bakery, June 2002, June 2001, and June 2000.

<sup>45</sup> Ibid., and Milling & Baking News, *Fiercely fighting for growth*, Mar. 18, 2003.

<sup>46</sup> Ibid.

<sup>47</sup> Ibid.

<sup>48</sup> Baking Production and Marketing Red Book, 2001.

<sup>49</sup> Snack Food & Wholesale Bakery, June 2000, June 2001, and June 2002 and Milling & Baking News, *Fiercely fighting for growth*, Mar. 18, 2003.

<sup>50</sup> Ibid.

<sup>51</sup> Milling & Baking News, *Grain-based foods industry outlook 2003: Qualified optimism*, Mar. 18, 2003.

conventional loaves of white or wheat bread. Consumption of bagels continues to grow, although at a modest pace. This slowing growth in the bagel segment can be partially attributed to a decline in bagel consumption as a breakfast food for both at home and away from home meals since 1998.<sup>52</sup> Bagels have also reached a mature market position with only limited growth projected in the next few years.<sup>53</sup>

One sector of the bread industry that is experiencing more significant growth is the parbaked market. Parbaked products are cooked to 80 to 95 percent completion and then flash frozen.<sup>54</sup> These products are generally purchased by the restaurant, retail bakery, institutional and in-store bakery market segments. The benefit of these products is that they eliminate much of the time and labor associated with scratch baking but restaurants and in-store bakeries can still provide fresh bakery products to their customers. In-store bakeries are particularly increasing their use of parbaked products.<sup>55</sup> In-store bakeries typically use the parbaked products to produce artisan style fresh bread products.

Certain segments of the retail bakery market in the United States are growing. Differing from other countries, especially Europe, consumers do not appear to have as significant a preference for retail bakery products over those produced in commercial operations. Growth in retail bakeries has occurred in conjunction with increased trends in convenience and during recent period of economic growth, when consumers upgraded to more expensive products. Many retail bakeries provide additional consumer offerings besides bakery products, such as coffees, sandwiches, soups, other food products. As a result, trends in retail bakeries may somewhat mirror those in the restaurant industry.

### ***Frozen Cakes, Pies, and Other Pastry Products***

The market for frozen cakes, pies, and other pastry products has been characterized by significant product innovation, new product introductions, and an overall shift in the market to higher quality, premium products. New product introductions from the Sara Lee Corp, Pillsbury, and Kraft Foods have focused on higher quality products using better ingredients and improved production and freezing technology.<sup>56</sup> This has led to increases in retail sales value, as consumers purchase higher-priced products, without as significant increases in retail sales volumes. Another new development in the frozen dessert market has been the increasing number of single-serving products available. In keeping with the overall trend of increased convenience and shorter preparation time, a number of producers are marketing single-serving frozen cake and pie products.

Based on market share data, brand names are important in the frozen dessert market. For example, Mrs. Smith's, Sara Lee, and Edwards Foods were the three leading frozen pie producers in 1999, 2000, and 2001.<sup>57</sup> Additionally, different segments of the frozen dessert market experienced different degrees of growth. For example, the retail market for frozen pies has increased steadily from \$259.6 million in 1998, to \$271.6 million in 1999, to \$289.5 million in 2000, to \$318.8 million in 2001. However, other frozen sweet good

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<sup>52</sup> *Snack Food & Wholesale Bakery*, June 2000, June 2001, and June 2002.

<sup>53</sup> *Ibid.*

<sup>54</sup> *Milling & Baking News, Moisture is key*, Nov. 26, 2002.

<sup>55</sup> *Milling & Baking News, Par-baked goods*, Nov. 26, 2002.

<sup>56</sup> *Snack Food & Wholesale Bakery*, June 2000, June 2001, and June 2002.

<sup>57</sup> *Ibid.*

products, which includes other pastry products such as strudels, brownies, and cake products, declined from \$374.3 million in 1998, to 350.8 million in 1999, to \$326.3 million in 2000.<sup>58</sup> As a result of these opposing trends, frozen pie products will account for the majority of sales in this segment.

### ***Cookie and Cracker Products***

Census data indicate that cookie and cracker consumption generally increased during the 1998-2002 period (table B-5). However, data on cookie and cracker sales through the retail market channel indicate that sales of cookies have declined, both in value and volume terms. Retail sales of cookies for 1999, 2000, and 2001 were estimated at \$4.5 billion, \$4.6 billion, and \$4.0 billion, respectively.<sup>59</sup> Sales volumes for these three years also declined from 1.8 billion pounds in 1999 to 1.5 billion pounds in 2001.<sup>60</sup> This situation can partially be attributed to the fact that in-home cookie consumption as a dessert product has fallen significantly since 1990.<sup>61</sup> Additionally, increases in sales of any one particular brand of cookie often come at the expense of competing brands, as opposed to overall increases in consumption.

Similar market dynamics have impacted retail sales of cracker products. Sales values for 1999, 2000, and 2001 are estimated at \$3.5 billion, \$3.6 billion, and \$3.3 billion, respectively.<sup>62</sup> However, retail market data indicate an upward swing in the value of cracker sales in 2002, despite a decline in unit sales. Retail cracker sales in 2002 were estimated at \$3.4 billion.<sup>63</sup> Similar to the retail bread, market sales values are increasing despite declines in unit sales.<sup>64</sup> Sales are largely being driven by product line extensions and new, more convenient packaging. The sandwich cracker portion of the cracker market has seen more significant growth over the last five years. Sandwich cracker sales volumes and values have increased by 37 percent over the last five years.<sup>65</sup> Sandwich crackers are generally defined as two cracker wafers containing a filling, often cheese or peanut butter.

Unlike the bread market, private label products do not hold as important a position in the cookie and cracker market. In 2001, private label products held an 8.5 percent retail market share for cookies.<sup>66</sup> In 2002, private label products accounted for 7.5 percent of retail cracker sales.<sup>67</sup> However, the private label portion of the market is believed to be a major outlet for imported products, particularly products imported from Canada.<sup>68</sup>

For both the cookie and cracker markets, the most recent trend in consumption reflects a decline in the health-focused segments of the market. In 1996, more than one-quarter of new products in the cookie market made low-fat or no-fat claims on their packaging, while

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<sup>58</sup> Ibid.

<sup>59</sup> Ibid.

<sup>60</sup> Ibid.

<sup>61</sup> *Bakery Production and Marketing: Red Book*, 2001.

<sup>62</sup> *Snack Food & Wholesale Bakery*, June 2000, June 2001, and June 2002.

<sup>63</sup> Milling & Baking News, *Cracker Sales Grow*, Apr. 29, 2003.

<sup>64</sup> Ibid.

<sup>65</sup> *Bakery Production and Marketing: Red Book*, 2001.

<sup>66</sup> *Snack Food & Wholesale Bakery*, June 2002.

<sup>67</sup> Milling & Baking News, *Cracker Sales Grow*, Apr. 29, 2003.

<sup>68</sup> U.S. industry officials, interview by USITC staff, July 7-9, 2002.

projections for 2002 put the percentage of new cookie products that will have reduced amounts of fat at only 9 percent.<sup>69</sup> However, demand for sugar-free products may be increasing, possibly due to the improved quality of non-sugar sweeteners. Demand for low-fat or low-calorie products has declined and consumers are increasingly turning to richer, more indulgent varieties.<sup>70</sup>

## ***Mixes and Dough Products***

Consumption of mixes and dough products fluctuated during the 1998-2001 period. Overall the value of shipments fell from \$5.0 billion in 1998 to \$4.6 billion in 2000 (table B-6). However, shipments increased from \$4.6 billion in 2000 to \$4.7 in 2001. Some of the decline in consumption in mixes and dough products may be attributable to the growing use of parbaked products. Producers can use parbaked products instead of mixes and dough products for a number of bread and roll products. The U.S. market for mixes and frozen dough depends primarily on the demand for products produced by in-store bakeries, food service, and retail bakeries. Many of these establishments utilize pre-made mixes and doughs as opposed to scratch baking in their operations.

About 80 percent of all grocery stores, or approximately 25,000 stores, have in-store bakeries.<sup>71</sup> Of these in-store bakeries, 77 percent use either pre-made mixes or frozen dough to produce their bread and rolls.<sup>72</sup> Additionally, in-store bakeries use mixes and/or frozen dough to produce a number of other bakery products. For example, 75 percent use mixes or frozen dough for cookies, 58 percent use them in baking muffins, and 84 percent use them for baking other sweet goods.<sup>73</sup> Increased consumer demand for fresh artisan bread has increased the demand for in-store bakery products. In addition, the cost and availability of qualified labor has been a driving force in the use of mixes and frozen dough. Scratch baking requires higher-quality and higher-cost labor. Future growth in this sector will depend on a number of factors, including customers' willingness to pay a premium for fresh store baked products, the availability and cost of labor in in-store bakeries, and competition from par-baked products.

U.S. wholesale mix and dough producers are increasingly active in international markets, particularly in Canada. Recently, two U.S. producers announced expansion plans in Canada. Dawn Food Products purchased CSP Foods, a distributor of food ingredients, from the Saskatchewan Wheat Pool.<sup>74</sup> Rich Products is making a \$15 million capital investment in a new facility in Fort Erie, Ontario.<sup>75</sup>

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<sup>69</sup> Baking Business.Com, *82% of Americans Indulge in Cookies, Pushing Market Sales to \$6.2 Billion*, July 17, 2002.

<sup>70</sup> Ibid.

<sup>71</sup> Milling & Baking News, *Frozen Dough from niche to core product* June 11, 2002.

<sup>72</sup> Ibid.

<sup>73</sup> Ibid.

<sup>74</sup> Saskatchewan Wheat Pool Company Press Release, *Saskatchewan Wheat Pool Enters Agreement to Sell CSP Food To Dawn Food Products*, Feb. 25, 2002.

<sup>75</sup> The Buffalo News, *Rich Products to Spend \$15 million, add 40 jobs in Fort Erie Expansion*, July 29, 2002.

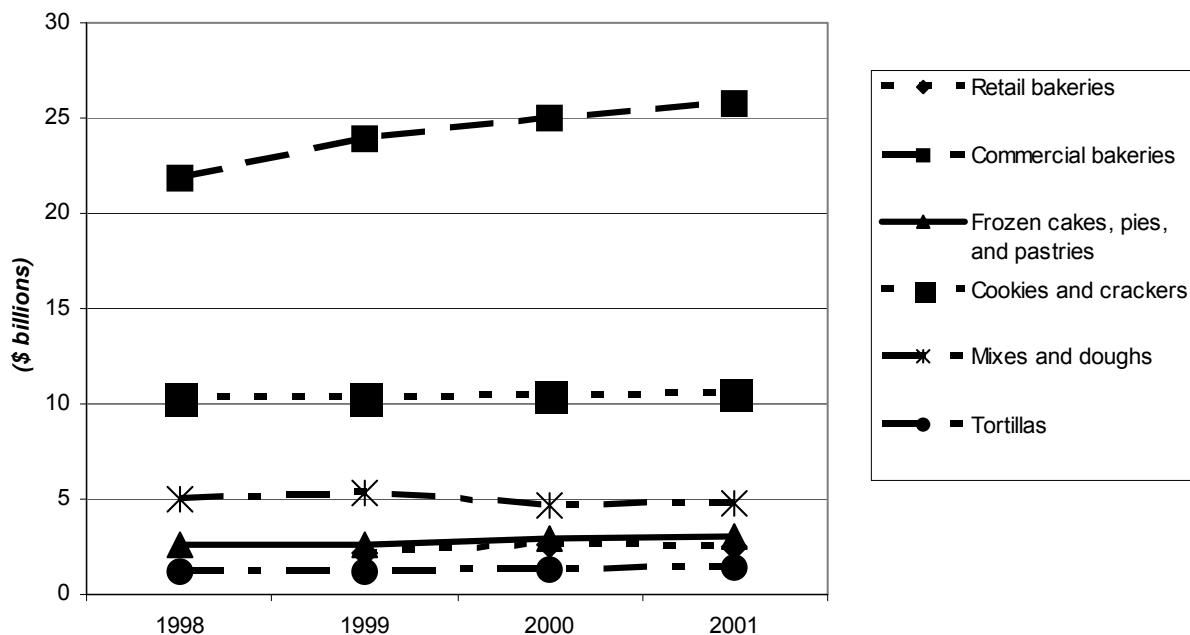
## ***Tortilla Products***

Sales of tortilla products in 2000 were estimated at approximately \$4 billion, only slightly behind sales of fresh bread.<sup>76</sup> There has been rapid growth in tortilla consumption. The tortilla market has grown from \$2.8 billion in 1996 to \$4.4 billion in 2000 and is expected to grow to \$5.7 billion in 2002.<sup>77</sup> Although the growth in the Hispanic population in the United States is an important factor in this growth, most market participants believe that the growing popularity of tortillas among non-Hispanics is the main source of growth.<sup>78</sup>

## **U.S. Shipments**

Figure 2 presents the value of U.S. shipments for each segment of the bakery products industry. Overall, total shipments have increased from 1998 to 2001.

**Figure 2**  
**Trends in U.S. shipments of bakery products, 1998-2001**



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

<sup>76</sup> Tortilla Industry Association, *The State of the Tortilla Industry: 2000*.

<sup>77</sup> Data provided by the Tortilla Industry Association.

<sup>78</sup> Ibid.

# Factors Affecting Production

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Overall, the cost of materials as a share of the total value of shipments in the bakery industry has declined slightly from 37 percent in 1998 to 35 percent in 2001 (table B-7). Manufacturers of frozen cakes and pies and producers of cookie and cracker products experienced some increase from 2000 to 2001. However, these data do not capture significant increases in ingredient costs during 2002.

## ***Energy and Other Manufacturing Costs***

For almost all producers of grain based foods, energy costs are an important factor. Most of these products are baked or dried in high temperature ovens. Therefore, rising energy costs, and in particular spikes in energy costs in the recent past, have adversely impacted the profitability of grain-based food producers. An example of the impact of energy shortages is the rolling blackouts in California in 2001, which shut down bakeries without notice. These energy outages resulted in bakeries losing entire production runs.<sup>79</sup>

## ***Labor Costs***

Recent increases in the costs associated with health care and retirement expenses have raised concern among bakery product producers.<sup>80</sup> Bakery production tends to be relatively more labor-intensive, because the short shelf life of the products requires frequent inventory turnover and prevents companies from achieving large economies of scale. This requires multiple production locations to serve different geographic markets. According to projections developed by the American Bakers Association (ABA), health care expenses are projected to increase by approximately 76 percent between 2002 and 2007.<sup>81</sup> Salary costs are projected by the ABA to increase approximately 22 percent over the same period.

## ***Wheat and Wheat Flour Costs***

For bread and roll producers, flour is estimated to represent between 15 percent and 20 percent of the cost of production. The supply and price of wheat flour are important factors in bakery operations. The type of wheat flour utilized depends on the type of bakery product. Bread and roll producers generally use hard wheat, which has higher protein levels. Conversely, cookie, pastry, cake, and cereal producers generally use soft wheat.<sup>82</sup> For all classes of wheat, prices generally declined until 2002, although hard red spring and soft red winter wheat prices increased somewhat in the 2000/01 crop year (table B-8). As a result of poor weather in 2002 in several wheat-producing regions, prices for hard and soft wheat increased sharply. Hard wheat prices have averaged approximately \$1.00 per bushel more

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<sup>79</sup> U.S. industry officials, telephone interview by USITC staff, United States, Aug. 13, 2002.

<sup>80</sup> Milling & Baking News, *Surging health care costs to baking fore*, Dec. 10, 2002.

<sup>81</sup> Ibid.

<sup>82</sup> Harwood, Joy, Leath, Mack, and Heid, Walto, USDA, ERS, *The U.S. Milling and Baking Industries*, Dec. 1989.

during the 2002/03 crop year than in the 2001/02 crop year. Prices for soft wheat have averaged approximately \$0.80 per bushel more during the 2002/03 crop year.

U.S. flour production fluctuated considerably during the 1998-2002 period. Flour prices were generally on a steady decline until 2002 (table B-9). Wheat flour prices are strongly tied to wheat prices; thus, as wheat prices spiked in 2002, flour prices increased sharply as well. The Bureau of Labor Statistics Producer Price Index (PPI) for wheat flour shows a great deal of volatility, with a particularly sharp rise during 2002 (table B-10). During 2002, the PPI for wheat flour rose from 109.6 in January to 123.0 in October. Preliminary statistics for the first two months of 2003 do not indicate any significant declines in wheat flour prices.<sup>83</sup>

### ***Sugar Costs***

For cookie, pastry, and other sweet good products, sugar is also an important factor of production. Sugar as a share of the total cost of production varies considerably among these products. U.S. sugar prices have also fluctuated considerably during this period (table B-11). U.S. sugar prices are significantly higher than world prices, averaging 12.5 cents per pound more during the 1998-2002 period (tables B-11 and B-12). This differential in sugar prices may result in a competitive disadvantage for U.S. producers versus imports, particularly imports from Canada where bakers have access to sugar at world prices.

### ***Other Ingredient Costs***

There were significant increases in other bakery product ingredient costs, such as shortening and honey, in 2002. Honey prices rose sharply in 2001 and 2002, from approximately \$0.59 per pound in 2001 to more than \$1.26 per pound in 2002. The sharp increase in honey prices is a result of declines in U.S. production and yields and the imposition of antidumping and countervailing duties on imports of honey from China and Argentina.<sup>84</sup> Cocoa prices increased during 2002 as a result of turmoil in the Côte D'Ivoire, a major cocoa producing country. Bakery shortening prices have also increased.

### ***Production Process and Technology Changes***

There have been important production technology advancements in the commercial bakery industry. These advancements center on the development of ESL technology. A standard cost for commercial bakeries is the cost associated with returns of unsold, stale bread and other fresh bakery products. ESL technology extends the shelf life of the bread or other bakery products, allowing the product to remain on the store shelves longer and thus reducing returns. The ability to extend the shelf life of bread and other bakery products can have a profound impact on the cost structure of the manufacturer and on related markets as well. For example, according to trade press reports the development of ESL technology has enabled Interstate Bakeries to eliminate more than 1,000 delivery routes. This has resulted

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<sup>83</sup> Bureau of Labor Statistics, U.S. Department of Labor, PPI series WPU02120301.

<sup>84</sup> See USITC *Honey from Argentina and China*, Inv. Nos. 701-TA-402 and 731-TA-892-893 (Final), USITC pub. no. 3470, Nov. 2001.

in cost savings in labor, trucks, fuel, insurance, and delivery vehicle accidents.<sup>85</sup> Additionally, as a result of fewer returns, bakeries need to produce fewer loaves of bread and other bakery products to maintain store inventories. The impact of ESL technology has prompted members of the flour milling industry to consider capacity reductions, as bakeries will need less flour.<sup>86</sup> Several other bakery companies have begun implementing ESL technology, including Flowers Foods and Sara Lee.<sup>87</sup> ESL technology has the potential to radically alter the structure of the baking industry. By extending the shelf life of bakery products, manufacturers are able to serve more customers in a wider geographic market. This opens regional markets to greater competition as more bakeries have the capability to serve additional markets. Widespread implementation of ESL technology could result in significant increases in competition between bakeries.

## U.S. TRADE

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### Overview

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The United States has a significant and growing trade deficit in bakery products (table B-13). The trade deficit increased from \$394.6 million in 1998 to \$777.5 million in 2002. The majority of the trade deficit can be attributed to deficits with Canada and the EU. The U.S. trade deficit with Canada increased from \$155.8 million in 1998 to \$372.6 million in 2002, an increase of 139 percent. The U.S. trade deficit with the EU has also increased, although at a slower pace. The U.S. deficit with the EU increased from \$240.5 million in 1998 to \$310.7 million in 2002. The only major trading partner with which the U.S. has a trade surplus in bakery products is Japan. The U.S. trade surplus with Japan has fluctuated during the 1998-2002 period, but was larger in 2002 than in 1998. The United States ran a slight trade surplus with all other countries in 1998, however, that surplus has steadily become a trade deficit during the 1999-2002 period.

In spite of rising import levels, imports of bakery products are still small relative to the size of the total U.S. market. However, imports can have a significant impact on certain segments of the market or geographic regions along the U.S.-Canadian border. Improved transportation systems and ESL technology have enabled imports to penetrate heretofore distant markets.

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<sup>85</sup> Milling & Baking News, *Transforming baking for less than a penny a loaf*, Aug. 6, 2002.

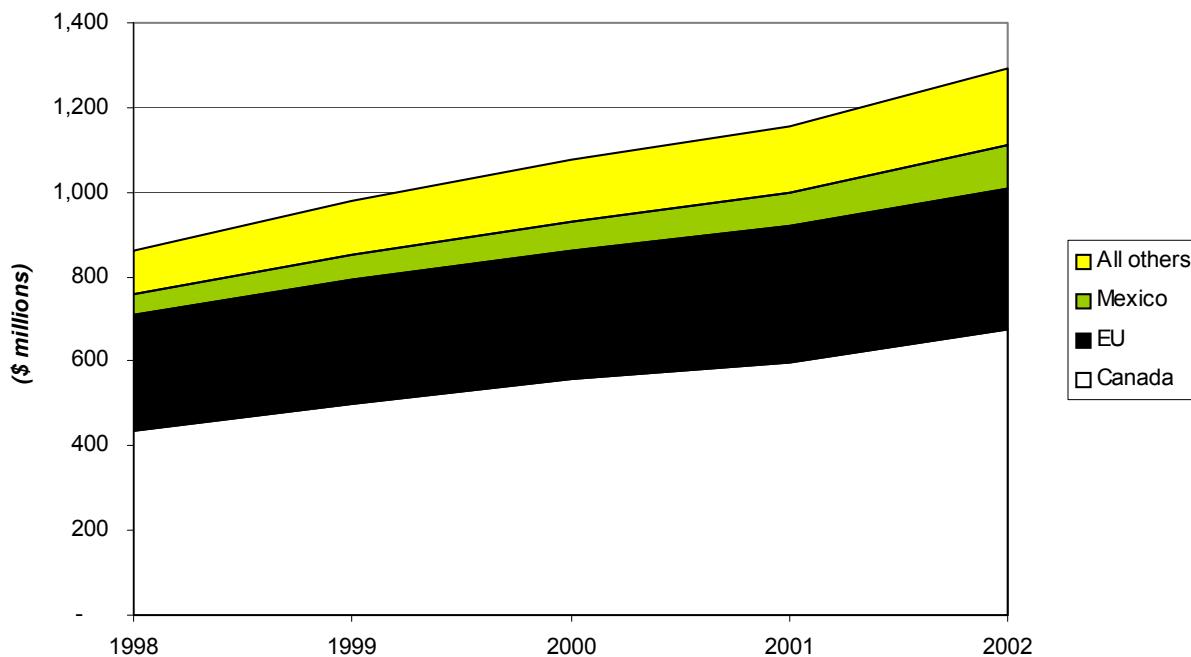
<sup>86</sup> World-grain.com, *Shelf life gains may require ADM milling capacity cuts*, Aug. 1, 2002.

<sup>87</sup> Milling & Baking News, *Full impact of ESL emerging*, Dec. 10, 2002.

## U.S. Imports

Figure 3 shows U.S. imports of all bakery products by major import source for the 1998-2002 period. Imports of all bakery products increased by 50 percent between 1998 and 2002. Imports from Canada experienced the largest increase in dollar terms, from \$434.2 million in 1998 to \$673.3 million in 2002 (table B-14). Imports from Brazil, Indonesia, China and Mexico showed the sharpest increase in percentage terms.

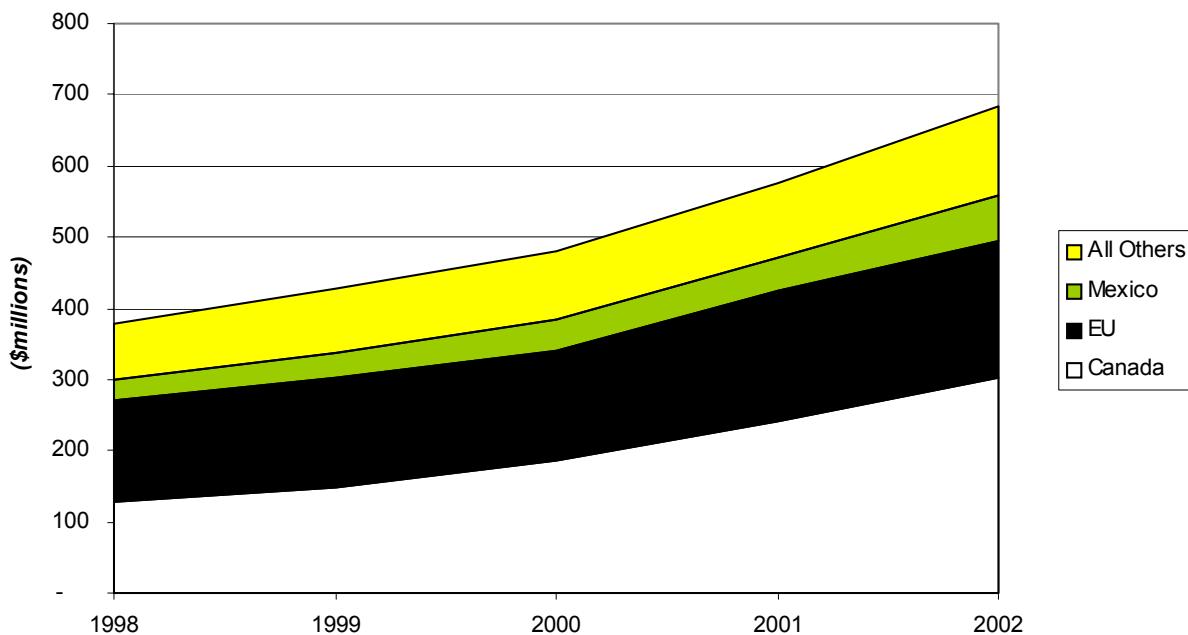
**Figure 3**  
**U.S. imports for consumption of all bakery products, by major sources, 1998-2002**



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

Figure 4 shows the share of total U.S. imports of bread, cake, and pastry products by import source for the 1998-2002 period. Fresh bread products are generally classified under HTS subheading 1905.90.10.70, which includes not only loaves of bread, but such products as bread crumbs, pitas, and tortillas. Fresh rolls and similar products are generally classified under subheading 1905.90.10.90. Frozen bread and rolls, including parbaked products, are classified under subheading 1905.90.10.41 and subheading 1905.90.10.49. However, these subheadings, particularly subheadings 1905.90.10.41 and subheading 1905.90.10.90, contain a number of other pastry products that would not commonly be referred to as bread. Therefore, definitive import levels for bread versus rolls versus other bakery products cannot be determined. The total import value of bread, rolls, pastry and related products has increased during the 1998-2002 period. The value of imports increased from approximately \$378.6 million in 1998 to approximately \$685.0 million in 2002 (table B-15).

**Figure 4**  
**U.S. imports for consumption of bread, cake, and pastry products, by major sources, 1998-2002**



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

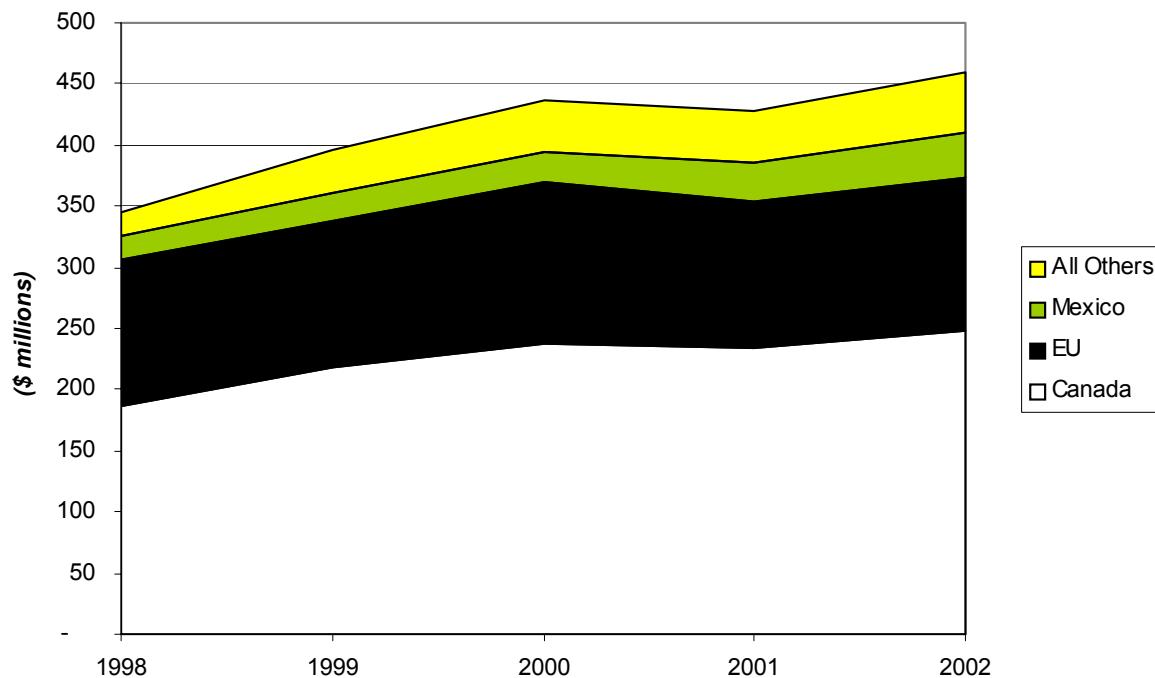
Imports of products classified under HTS subheadings 1905.31, sweet biscuits and 1905.32, waffles and wafers, can generally be considered cookie and cracker products. Figure 5 shows the share of total U.S. imports of cookie products by import sources for the 1998-2002 period. Imports of these products grew considerably during the 1998-2002 period. The value of imports increased from approximately \$345.8 million in 1998 to approximately \$458.8 million in 2002, an increase of 33 percent (table B-16).

### ***Principal Suppliers and Import Levels***

#### **Canada**

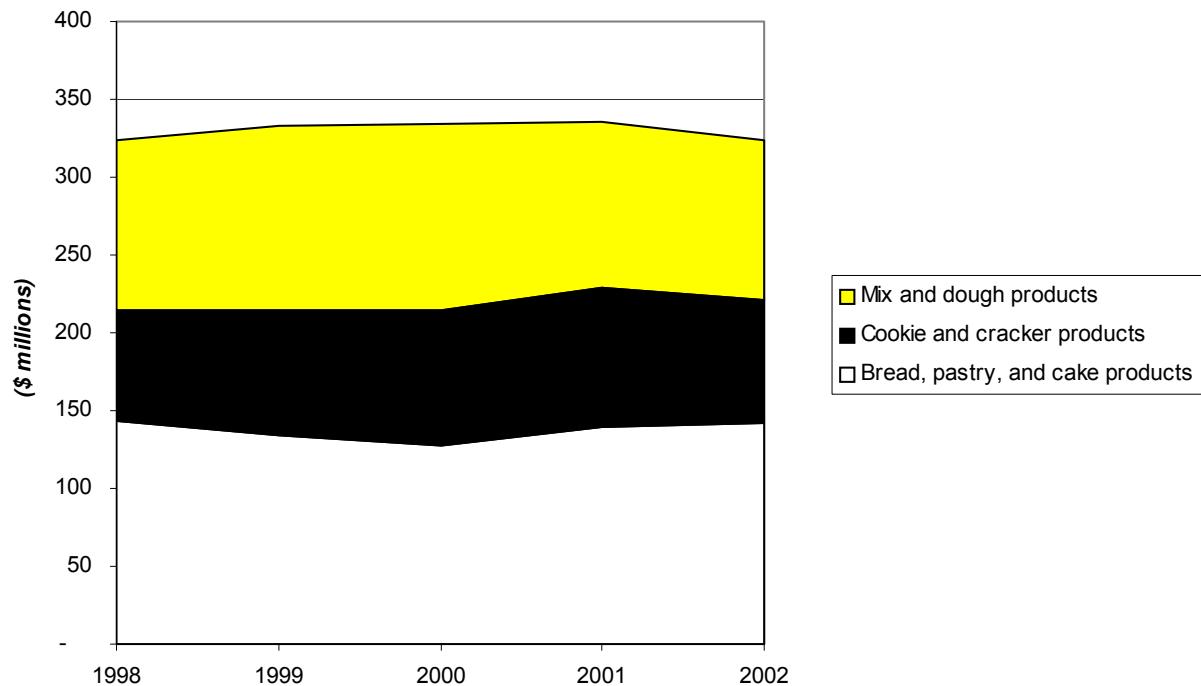
Imports of all bakery products from Canada accounted for 52 percent, by value, of total imports in 2002. Figure 6 presents trends in U.S. imports from Canada by product type. Imports from Canada are distributed nationwide, although they are generally believed to be concentrated in the eastern and upper-midwest regions and the northeast in particular. Additionally, imports of all bakery products from Canada have increased significantly since

**Figure 5**  
**U.S. imports for consumption of cookie and cracker products, by major sources, 1998-2002**



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

**Figure 6**  
**U.S. imports of bakery products from Canada, by selected product types, 1998-2002**



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

1998. Imports from Canada have increased from approximately \$434.2 million in 1998 to approximately \$673.3 million in 2002, or by 55 percent.

At the beginning of the 1998-2002 period, imports of cookie and cracker products from Canada accounted for a larger share of imports from Canada than bread, cake, and pastry products. However, in 2001 and 2002, imports of bread, cake, and pastry products accounted for a larger share of total imports from Canada. In particular, imports classified under HTS subheading 1905.90.10.70, bread, and 1905.90.10.90, which are typically rolls and similar products, increased from \$48.7 million in 1998 to \$77.6 million in 2002, an increase of 59 percent. Imports of frozen bread and roll products increased even more significantly, from \$29.8 million in 1998 to \$88.6 million in 2002, an increase of nearly 2 fold. Bread products produced under store brands or for private label customers are an important segment of U.S. imports from Canada. There are indications that Canadian bakers are providing private label or store brand bakery products to major grocery store chains in the northeastern United States.<sup>88</sup>

Imports of cookie and cracker products from Canada include branded products produced for major U.S. multinational corporations, and private label products that are capturing larger shares of the private label market, particularly along the U.S.-Canadian border. One factor that may be encouraging imports of cookies from Canada is the differing market dynamics for imported sugar in each country. These characteristics are discussed in more detail in the profile of the Canadian industry below.

Imports of mixes and dough products from Canada increased from \$109.5 million in 1998 to \$119.5 million in 2000 before declining in both 2001 and 2002 to \$106.8 million and \$103.2 million, respectively. Canada accounts for virtually all U.S. imports of mixes and dough products. Imports from Canada held an import share of between 95 and 98 percent during the 1998-2002 period (table B-17).

## European Union

The EU is the second largest source of U.S. bakery product imports. Imports from the EU consist of a wide variety of products. Figure 7 presents trends in U.S. imports of bakery products from the EU by selected product types for the period 1998-2002. Certain EU member countries have successful niche products that dominate their exports to the United States. For example, imports from Denmark consist primarily of butter cookies, while a significant share of imports from the United Kingdom consist of biscuits.<sup>89</sup>

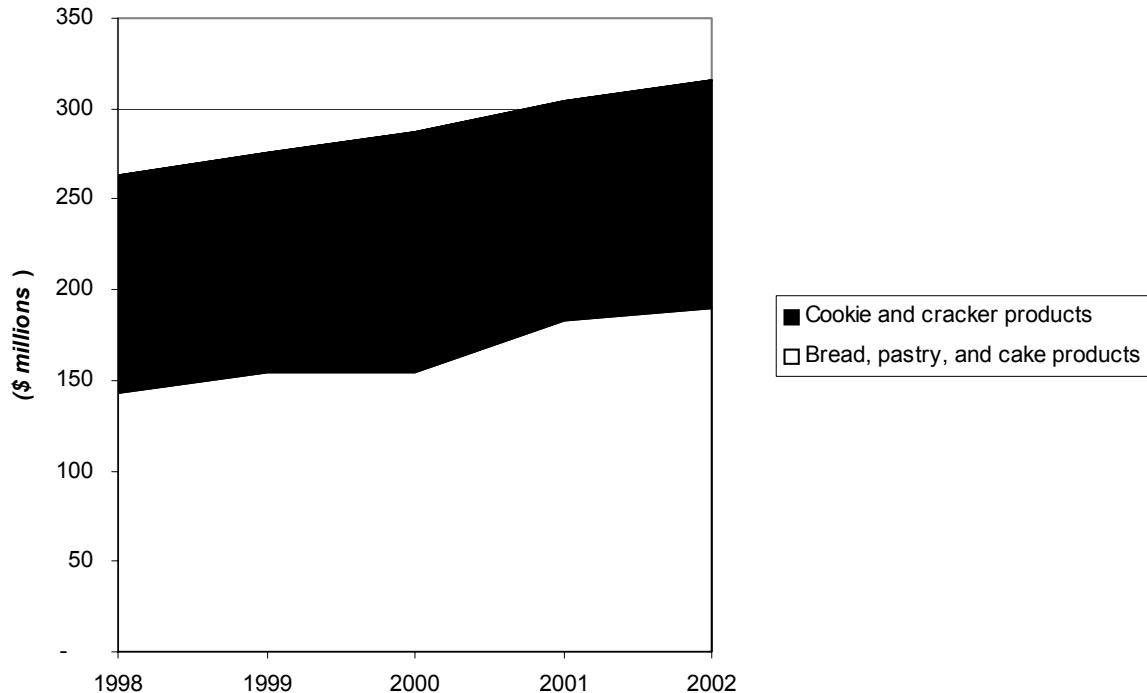
The EU was the second largest source of imports of bread, cake, and pastry products throughout the 1998-2002 period. However, the EU's import share fell during this period, from 37.8 percent in 1998 to 27.7 percent in 2002. The total value of imports from the EU has increased from \$143.1 million in 1998 to \$190.0 million in 2002, a rise of approximately 33 percent. Imports of cookie and cracker products from the EU increased at a more modest pace, from \$120.2 million in 1998 to \$125.5 million, or by approximately 4 percent.

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<sup>88</sup> U.S. industry officials, interview by USITC staff, New York City, July 7-9, 2002.

<sup>89</sup> U.S. industry officials and European industry officials, telephone interviews by USITC staff, United States, June 26 - July 16, 2002.

**Figure 7**  
**U.S. imports of bakery products from the EU, by selected product types, 1998-2002**



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

Imports of mixes and dough products from the EU account for a very small share of total imports. Imports of mixes and dough products from the EU increased slightly during the 1998-2002 period, from approximately \$707,000 in 1998 to \$1.7 million in 2002.

## Mexico

Although Mexico accounts for only a small portion of U.S. imports of bakery products, imports from Mexico have increased substantially. Imports of all bakery products from Mexico increased from \$49.6 million in 1998 to \$104.3 million in 2002. Most of the increase in imports consisted of bread, cake, and pastry products. Imports of these products increased from \$30.7 million in 1998 to \$65.1 million in 2002. Imports of cookie and cracker products from Mexico increased from \$18.0 million in 1998 to \$36.8 million in 2002. Mexico is not a significant source of imports of mixes and dough products.

## ***U.S. Trade Measures***

### **Tariff and nontariff measures**

Many bakery products enter the United States free of duty. However, the U.S. maintains several tariff-rate quotas on mixes and dough products with significant in-quota tariffs. Depending on the sugar and dairy content of the product, the quota levels and tariffs vary. Most mixes and dough products are subject to a tariff-rate quota of 5,398 metric tons with an in-quota tariff rate of 10 percent ad valorem and an over-quota tariff rate of 42.3 cents per kilogram plus 8.5 percent ad valorem. Quota fill is based on a first-come, first-serve basis. Some mixes and dough products containing higher concentrations of dairy products are subject to a tariff-rate quota of 4,105 metric tons with an in-quota tariff rate of 10 percent and an over-quota tariff rate of 42.3 cents per kilogram plus 8.5 percent ad valorem. However, under NAFTA, Canada and Mexico receive duty free access for these products.

## **U.S. Exports**

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U.S. exports of all bakery products totaled approximately \$515.3 million in 2002. Exports have grown 9.9 percent since 1998 (table B-18). Canada is by far the largest market for U.S. exports, accounting for 58.4 percent of all exports in 2002. Canada is the largest export market for U.S. bakery products for many of the same reasons that the United States is Canada's largest export market, including geographic proximity and preferential tariff treatment. Japan is the second largest market for U.S. exports, slightly ahead of Mexico; the two countries accounted for 10.9 and 10.0 percent of exports, respectively, in 2002. Exports to the EU accounted for 4.4 percent of total bakery product exports.

U.S. exports of bread, cakes, and pastry products accounted for 42.5 percent of total bakery product exports in 2002. Exports of these products fluctuated during the 1998-2002 period. U.S. exports initially fell from \$204.7 million in 1998 to \$185.1 million and \$185.7 million in 1999 and 2000, before increasing in 2001 and 2002 to \$206.5 and \$219.0, respectively (table B-19). As with exports of all bakery products, Canada is the largest export market for these products, accounting for 64.9 percent of exports in 2002.

U.S. exports of cookie and cracker products increased significantly during 1998-2000; however, exports declined in 2001 and 2002 (table B-20). The most significant decline has been in exports to Canada, which declined from \$89.8 million in 2001 to \$78.7 million in 2002. However, Canada remains the largest U.S. export market for these goods, with a 66.8 percent share of total cookie and cracker exports.

U.S. exports of mixes and dough products increased from \$137.4 million in 1998 to \$157.6 million in 2002 (table B-21). Again, Canada is the largest U.S. export market for these products, but unlike cookie and cracker and bread products, exports to Canada do not account for the majority of total exports, accounting for 42.2 percent of exports in 2002. Japan is a significant market for U.S. exports of mixes and dough products, accounting for 22.2 percent of total exports in 2002. Exports to Japan are increasing at a slower rate than exports to Canada, however.

# Foreign Trade Measures<sup>90</sup>

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## *Bakery Products*

The EU utilizes complex tariffs for most bakery products. The range of duties that can be applied is quite variable and depends on whether the duties are applied to an agricultural component, a sugar component, or a flour component. In 2000, the agricultural component (EA) ranged from zero to €275.82 per 100 kg. The sugar component (S/Z) ranged from zero to €38.99 per 100 kg. The flour component ranged from zero to €19.99 per 100 kg. Additionally, sweet biscuits and other bakers' wares are subject to a minimum ad valorem rate (9.0 percent in 2000) in addition to the agricultural component at a higher ad valorem rate (24.2 percent or 20.7 percent), plus additional duties for either the sugar or flour component.

The Mercosur common external tariff is set at 35 percent ad valorem for cookies, crackers, and other bakery products.<sup>91</sup> Other Latin American nations apply a range of tariffs. Venezuela applies tariffs of 40 percent ad valorem on breads and other bakery products. Colombia maintains an ad valorem tariff of 90 percent on breads and other bakery products.

In Asian markets, Japanese tariffs are relatively high, ranging from a low of 9 percent ad valorem for breads to a high of 34 percent ad valorem for other bakery goods. In the case of other bakery products, Japan places its highest tariffs on traditional rice-based products. Korean tariffs are 8 percent ad valorem, while Taiwan applies a range of duties of up to 32.5 percent ad valorem.

## *Mixes and Dough Products*

Tariffs on flour mixes and doughs vary. Japanese tariffs range from 12 percent to 24 percent ad valorem, and EU tariffs are 7.6 percent ad valorem plus the agricultural component to account for the milk, starch, and sugar content of the product. Tariffs in other markets range from 5 percent ad valorem in Australia to 17 percent ad valorem in Brazil. Some flour mixes and doughs, depending upon the amount of sugar or dairy ingredients they contain, are subject to sugar and dairy TRQs. For example, certain flour mixes and doughs entering Japan fall under one of three TRQs covering wheat and wheat products, dairy products, and starches. In Korea, some flour mixes and doughs fall under a TRQ covering rice and rice products. The differences between in-quota duties and over-quota duties are significant. In Japan the in-quota rate ranges between free and 25 percent ad valorem, depending on which of three TRQs the products is classified under, with over-quota tariffs ranging between ¥90/kg to ¥375/kg.

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<sup>90</sup> For further information on tariff and non-tariff barriers see USITC publication *Processed Foods and Beverages: A Description of Tariff and Non-Tariff Barriers for Major Products and Their Impact on Trade*, pub. No. 3455, Investigation No. 332-421, Oct. 2001.

<sup>91</sup> Mercosur countries are Argentina, Brazil, Paraguay, and Uruguay.

## Foreign Investment

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There is some foreign investment in the bakery market both by foreign companies active in the United States and by U.S. companies overseas. Additionally, Sara Lee, through its purchase of the Earthgrains Company, produces private label refrigerated dough products for sale in Mexico and produces some branded refrigerated dough products in Europe, such as CroustiPate branded pizza dough, bread and rolls, and pastry.<sup>92</sup> The Canadian firm, George Weston Bakeries purchased Bestfoods Baking and became a significant producer in the United States. Also, Bimbo Bakeries USA, an affiliate of Grupo Bimbo, Mexico's largest wholesale baking company purchased Mrs. Baird's Bakeries in 1998 and therefore became a major producer in the South and Southwest United States.

## Foreign Market and Industry Profiles

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### *Canada*

Canadian agri-food industries are heavily dependent on the U.S. market. In 2000, 61 percent of all Canadian agri-food exports were to the United States.<sup>93</sup> Canadian exporters of grain-based foods are even more dependent on the U.S. market than Canadian food exporters as a whole. Canada is both the largest source of imports of bakery products and the largest export market for U.S. producers.

Canadian exporters enjoy advantages not available to other exporting nations. Foremost among these are NAFTA preferences and geographic proximity to major U.S. markets. While almost all bakery products became eligible for duty free entry into the United States following the Uruguay Round, NAFTA has provided Canada with zero tariffs on the small number of products not normally conferred duty free status. Canadian exporters have also indicated that the increased efficiency and speed with which imports are processed by the U.S. Customs Service are the real benefits of the NAFTA system.<sup>94</sup> This is particularly important with perishable products like bread and fresh bakery products.

Additionally, Canadian producers enjoy a geographic proximity to major U.S. East Coast markets that most other exporting countries do not have. This is a significant competitive advantage when dealing with perishable food products. The Canadian industry is positioned to take advantage of this proximity. With approximately 60 percent of its population in the Provinces of Quebec and Ontario, the Canadian bakery industry is also heavily concentrated in the eastern portion of the country. Prior Canadian census data report that approximately 78 percent of bakery employment is concentrated in Quebec and Ontario and an additional

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<sup>92</sup> Milling & Baking News, *Refrigerated Dough Showdown*, Apr. 13, 2002.

<sup>93</sup> Agriculture and Agri-Food Canada, *Did you know...? Facts about the Canadian Agri-Food Industry*, 2001.

<sup>94</sup> Based on staff interviews with Canadian producers and U.S. importers.

6 percent in the Atlantic region.<sup>95</sup> This facilitates the export process as the major U.S. East Coast markets are easily served from eastern Canada. This geographic concentration of the Canadian industry can be seen in the pattern of imports from Canada. In 2002, 86.5 percent of imports of bakery products from Canada entered the United States through border crossing in Detroit, MI; Buffalo, NY; Ogdensburg, NY; and Portland, ME (table B-22).

There has been some significant consolidation in the Canadian bakery industry in 2001 and 2002, particularly among producers of bread and roll products. Maple Leaf Foods, a large Canadian agri-food business is the majority owner of Canada Bread Company. At the end of 2002, Maple Leaf Foods and Canada Bread Company instituted a corporate restructuring whereby all of Maple Leaf Foods bakery operations were consolidated into the Canada Bread Company.<sup>96</sup> This consolidation resulted in an expansion of the Canada Bread Company, which now has operations in Canada, the United Kingdom, and the United States. Canada Bread Company's U.S. operations include the Grace Baking Company, which produces fresh and frozen artisan bread products in San Francisco, CA and Maple Leaf Bakery U.S., a producer of frozen par-baked bread, rolls, and bagels.<sup>97</sup> Prior to the consolidation of Maple Leaf Foods bakery operations into the Canada Bread Company, the Canada Bread Company engaged in other merger and acquisition activity. In July 2002, the Canada Bread Company purchased Olafson's Baking Company in British Columbia. Olafson's Baking Company produces a range of bread and sweet good products.<sup>98</sup> In October 2001, the Canada Bread Company obtained 100-percent ownership in Multi-Marques, a Canadian bakery producer with operations in Quebec and Ontario.<sup>99</sup> As part of this acquisition, Canada Bread Company also became the majority owner of Ben's Bakery, a producer of fresh bread and roll products, with operations in Nova Scotia and New Brunswick.

The Canadian commercial bread and bakery industry has developed more centralized, large scale production operations. These operations have pursued cost reductions through the implementation of higher levels of plant mechanization. Improvements in production processes have resulted in a decline in the number of establishments from 555 in 1982 to 471 in 1997.<sup>100</sup> However, the remaining, larger firms have undertaken capacity increases. During the same period, real sales per establishment increased from C\$4.1 million to C\$4.4 million.

The development of larger production facilities is apparent from the distribution of establishments by number of employees over the same period. Small establishments, with less than 20 employees, accounted for less than 10 percent of total shipments. Medium establishments, 20-200 employees, accounted for approximately 50 percent of total shipments, while large establishments, 200 or more employees, accounted for the remaining 40 percent of shipments. Further, there is a high degree of concentration of ownership within the industry. In 2000, the four leading enterprises accounted for about 50 percent of total

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<sup>95</sup> Human Resources Development Canada, *Human Resource Profile, Bakery Products Industry*, 2001.

<sup>96</sup> Canada Bread Company, company press releases, Oct. 10, 2002 and Dec. 11, 2002.

<sup>97</sup> Canada Bread Company, *2002 Annual Report*, 2003.

<sup>98</sup> Canada Bread Company, company press release, July 18, 2002.

<sup>99</sup> Ibid., Oct. 12, 2001.

<sup>100</sup> The Food Bureau, Agriculture and Agri-Food Canada, *The Canadian Bread and Bakery Industry Sub-Sector Profile*, July 2000.

industry shipments. This measure likely understates the level of concentration, as several of the largest firms own minority shares in other wholesale bakery firms.<sup>101</sup>

The Canadian bread and bakery industry had shipments valued at C\$2.8 billion in 1997, up 28 percent from 1988 levels.<sup>102</sup> More recent data on retail sales of bakery products indicates continued growth in the Canadian market. Retail sales of bread, pastry, and cake products increased from US\$1.7 billion in 1996 to US\$2.1 billion in 2000.<sup>103</sup> Coincident with the increase in shipments and sales has been the increasing importance of export sales to Canadian bakers. Exports rose from 5 percent of shipments in 1988 to more than 14 percent of shipments in 1997.<sup>104</sup> The United States is by far Canada's most important export market. In 1999, more than 96 percent of all bakery exports were to the United States.

The Canadian cookie and cracker industry consisted of 32 manufacturing establishments in 1997, more than 85 percent of which were located in Ontario and Quebec.<sup>105</sup> These establishments had shipments valued at C\$804.5 million, C\$206.1 million of which were exported. Of those exports, C\$199 million were to the United States. The retail market for cookie and cracker products in Canada is estimated at US\$665.2 million in 2000, up from US\$583.7 million in 1996.<sup>106</sup> The Canadian market for cookie and cracker products has not grown as rapidly as the bread, pastry, and cake market. Canada's trade surplus in cookie and cracker products with the United States is relatively new. As recently as 1996, Canada had a trade deficit with the United States in these products.

Imports from Canada can serve a complimentary role in the U.S. market. In several cases imports of bread products from Canada consist of products that will be used in further processing, such as bread crumbs, or to round out U.S. producers' product offerings.<sup>107</sup> However, in other cases increases in imports may have come at the expense of U.S. production. For example, there are some indications that imports of bread products from Canada have had an impact in northeastern U.S. markets.<sup>108</sup> Individual Canadian producers are marketing fresh bread and roll products produced using ESL technology resulting in up to a 21-day shelf life. Canadian producers are marketing these products in major U.S. East Coast markets such as New York City. These Canadian producers are also reportedly selling at very low prices.<sup>109</sup> Given the significant merger and acquisition activity within the Canadian industry, there is potential for dissemination of this ESL technology throughout large segments of the Canadian industry. The dissemination of this technology could increase competition in U.S. markets from imports from Canada.

The presence of state trading entities (STE) in the Canadian wheat market may have important ramifications for the Canadian baking industry. The Canadian Wheat Board, a Federal Government agency, maintains monopolistic control over the market for hard wheat

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<sup>101</sup> Ibid.

<sup>102</sup> Ibid.

<sup>103</sup> World Baking Guide, 2002.

<sup>104</sup> The Food Bureau, Agriculture and Agri-Food Canada, *The Canadian Bread and Bakery Industry Sub-Sector Profile*, July 2000.

<sup>105</sup> Agriculture and Agri-Food Canada, *Canada's Grain-Based Products Industry*, 2001.

<sup>106</sup> World Baking Guide, 2002.

<sup>107</sup> U.S. and Canadian industry officials, telephone interviews by USITC staff, June 26-July 17, 2002.

<sup>108</sup> Ibid.

<sup>109</sup> U.S. industry officials, interviews by USITC staff, Sep. 4, 2002 and Apr. 11, 2003.

in Canada, an important ingredient in bread flour.<sup>110</sup> There are concerns within the U.S. industry that the Canadian Wheat Board's domestic pricing policies ensure lower-cost wheat to Canadian millers, which in turn, could result in lower-cost bakery flour for Canadian bakers. Additionally, the Ontario Wheat Producers' Marketing Board, a Provincial STE, maintains a similar form of control over the production and distribution of soft wheat in Ontario, the major soft wheat producing region in Canada.<sup>111</sup> The Ontario milling and baking industry has had a government-imposed, preferential purchasing relationship with the Ontario Wheat Producers' Marketing Board. The Ontario milling and baking industry contracts with the Ontario Wheat Producers' Marketing Board for milling wheat every 24 months. As a result, the contracted price is set for 24 months. This ensures stable, and depending on market fluctuations over the next 24 months, possibly favorable bakery flour prices.

Canadian producers of bakery products, especially sweet goods producers, may benefit from variations in the sugar markets in the United States and Canada. As a result of significant U.S. trade barriers on imports of sugar, sugar prices in the United States are considerably higher than world prices. These higher prices result in increased production costs for U.S. bakers. Canadian bakers have access to sugar at world prices through a variety of programs, including preferential tariff programs for Caribbean and developing countries. These programs provide Canadian bakers with sugar at prices below those available to U.S. bakers. Most bakery products imported into the United States are not subject to the tariff-rate quotas on sugar and sugar-containing products. There are indications that U.S. producers have and are continuing to move production to Canada to take advantage of cheaper sugar prices.<sup>112</sup>

## ***Europe Union***

The bakery market in the EU is mature with thousands of bakery operations. The retail market for bakery products was estimated to be approximately €65.5 billion in 2000.<sup>113</sup> Market growth has varied among EU countries. For example, the retail market for bakery products in Italy and Sweden grew by 12 percent and 17 percent from 1998 to 2000, respectively. However, in larger markets such as France and Germany, the markets grew by approximately 4 percent and 3 percent, respectively.<sup>114</sup> Per capita consumption of bakery products in the EU varies across countries but is generally high, with per capita consumption of bread at 85 kg in Germany, 53.5 kg in France, 80 kg in Italy, and 77 kg in the Netherlands in 2000.<sup>115</sup>

Retail bakeries continue to play a very important role in the bakery market in the EU. Of the estimated 25 million metric tons of bread production in Europe, approximately 17 million metric tons is produced by retail, "craft" bakers.<sup>116</sup> Germany and France are generally the largest bakery producers in the EU, accounting for 6.5 million metric tons and 3.6 million

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<sup>110</sup> USITC, *Wheat Trading Practices: Competitive Conditions Between U.S. and Canadian Wheat*, Pub. 3465, Dec. 2001.

<sup>111</sup> Ontario Wheat Producers' Marketing Board, The Farm Products Marketing Act, Regulation No. 1-02.

<sup>112</sup> U.S. industry officials, telephone interviews by USITC staff, United States, Aug. 13, 2002.

<sup>113</sup> Euromonitor, *Packaged Food Country Reports*, for EU member countries, Nov. 2001.

<sup>114</sup> Ibid.

<sup>115</sup> World Baking Guide, 2002.

<sup>116</sup> Ibid.

metric tons, respectively, of production in 2000.<sup>117</sup> The EU market has seen much slower growth in large supermarkets or hypermarkets than in the United States. This has maintained the importance of retail bakeries in the EU market. However, large supermarket chains are making important and significant inroads in the EU market and are exerting significant downward price pressure on the bakery products market.

Extra-EU imports face significant difficulties in penetrating the EU bakery products market. Tariffs on imports into the EU provide competitive advantages to intra-EU trade, which does not face any tariffs. As noted earlier, EU tariffs on bakery products can be quite significant. Additionally, geographic proximity is an important advantage. Numerous U.S. producers have indicated that, due to the lengthy shipment times to Europe, it is extremely difficult to meet shelf life requirements.<sup>118</sup>

## ***Mexico***

In 2000 Mexico's retail bakery market was estimated at pesos 84.6 billion, or approximately, U.S. \$8.9 billion.<sup>119</sup> Mexico's bakery market is growing rapidly; retail sales grew 38.8 percent from 1998 to 2000.<sup>120</sup> In 2000, bread, pastry, and cake products accounted for approximately 81 percent of the retail market, while cookie and cracker products accounted for approximately 10 percent.<sup>121</sup> Per capita bread consumption in Mexico is relatively low at 15 kg; however, bread consumption is increasing, generally at the expense of tortilla consumption. The Mexican market is similar to the EU market in that small, craft bakeries dominate the market. These small retail bakeries accounted for approximately 73 percent of retail sales in 2000.<sup>122</sup> The largest commercial baker in Mexico is Grupo Bimbo. U.S. industry officials are projecting that the Mexican industry will become more significantly involved in the U.S. bakery products market. U.S. industry officials believe that U.S. companies may shift some production to Mexico to take advantage of low sugar prices in Mexico.<sup>123</sup>

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<sup>117</sup> Ibid.

<sup>118</sup> U.S. industry officials, interviews with USITC staff, New York City, July 7-9, 2002.

<sup>119</sup> Euromonitor, *Packaged Food in Mexico*, Nov. 2001.

<sup>120</sup> Ibid.

<sup>121</sup> Ibid.

<sup>122</sup> Ibid.

<sup>123</sup> U.S. industry official, telephone interview by USITC staff, United States, Aug. 13, 2002.



**APPENDIX A**  
**EXPLANATION OF TARIFF AND TRADE**  
**AGREEMENT TERMS**

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# TARIFF AND TRADE AGREEMENT TERMS

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In the *Harmonized Tariff Schedule of the United States* (HTS), chapters 1 through 97 cover all goods in trade and incorporate the internationally adopted Harmonized Commodity Description and Coding System through the 6-digit level of product description. Subordinate U.S. 8-digit rate lines, either enacted by Congress or proclaimed by the President, allow more narrowly applicable duty rates; nonlegal 10-digit statistical reporting numbers provide data of national interest. Chapters 98 and 99 contain special U.S. classifications and temporary rate provisions, respectively. The HTS replaced the *Tariff Schedules of the United States* (TSUS) effective Jan. 1, 1989. The HTS is updated by published supplements and by electronic revisions at <http://www.usitc.gov/taffairs.htm#HTS>; see preface pages and change records in each document.

Duty rates in the **general** subcolumn of HTS column 1 are normal trade relations rates; many general rates have been eliminated or are being reduced due to concessions resulting from the Uruguay Round of Multilateral Trade Negotiations. General duty rates apply to all countries except those listed in HTS general note 3(b) (Cuba, Laos, and North Korea) plus Serbia and Montenegro, which are subject to the statutory rates set forth in **column 2**. Specified goods from designated general-rate countries may be eligible for reduced rates of duty or duty-free entry under preferential tariff programs, as set forth in the **special** subcolumn of HTS rate of duty column 1 or in the general notes. If eligibility for special tariff rates is not claimed or established, goods are dutiable at general rates. The HTS does not list countries covered by a total or partial embargo; it likewise does not contain antidumping or countervailing duties (consult the International Trade Administration of the Department of Commerce).

The **Generalized System of Preferences** (GSP) affords nonreciprocal duty-free entry to certain goods of designated beneficiary developing countries. The U.S. GSP, under title V of the Trade Act of 1974, as amended, now applies to merchandise imported on or after Jan. 1, 1976, and before the close of Dec. 31, 2006. Indicated by the symbol "A", "A\*", or "A+" in the special subcolumn, The legal framework of the GSP is set forth in HTS general note 4; eligible articles must be the product of and imported directly from designated beneficiary developing countries. Eligible products of listed sub-Saharan African countries may qualify for duty-free entry under the **African Growth and Opportunity Act** (AGOA) (see HTS gen. note 16) through Sept. 30, 2008, as indicated by the symbol "D" in the special subcolumn; see subchapter XIX of chapter 98.

The **Caribbean Basin Economic Recovery Act** (CBERA) affords nonreciprocal tariff preferences to designated Caribbean Basin developing countries. The CBERA--enacted in title II of Pub. Law 98-67, implemented by Presidential Proclamation 5133 of Nov. 30, 1983, and amended by the Customs and Trade Act of 1990, applies to goods entered, or withdrawn from warehouse for consumption, on or after Jan. 1, 1984. Indicated by the symbol "E" or "E\*" in the special subcolumn, CBERA provides duty-free entry to eligible articles, and reduced-duty treatment to certain other articles, which are the product of and imported directly from designated countries (see HTS gen. note 7). Other eligible products of listed beneficiary countries may qualify for duty-free or reduced-duty entry under the **Caribbean**

**Basin Trade Partnership Act** (CBTPA) (see HTS gen. note 17), through Sept. 30, 2008, as indicated by the symbol "R" in the special subcolumn; see also subchapter XX of chapter 98.

Free rates of duty in the special subcolumn followed by the symbol "IL" are applicable to products of Israel under the **United States-Israel Free Trade Area Implementation Act** of 1985 (IFTA), as provided in general note 8 to the HTS; see also subchapter VIII of chapter 99.

Nonreciprocal duty-free treatment in the special subcolumn followed by the symbol "J" or "J\*" in parentheses is afforded to eligible articles from designated beneficiary countries under the **Andean Trade Preference Act** (ATPA), enacted as title II of Pub. Law 102-182 (effective July 22, 1992; see HTS gen. note 11) and renewed through December 31, 2006, by the **Andean Trade Promotion and Drug Eradication Act** of 2002. Goods eligible for new benefits under the latter act are designated by a "J+" in the special subcolumn; see also subchapter XXI of chapter 98.

Preferential free rates of duty in the special subcolumn followed by the symbol "CA" are applicable to eligible goods of Canada, and rates followed by the symbol "MX" are applicable to eligible goods of Mexico, under the **North American Free Trade Agreement** (NAFTA), as provided in general note 12 to the HTS and implemented effective Jan. 1, 1994, by Presidential Proclamation 6641 of Dec. 15, 1993. Goods must originate in the NAFTA region under rules set forth in general note 12(t) and meet other requirements of the note and applicable regulations.

Preferential rates of duty in the special subcolumn followed by the symbol "JO" are applicable to eligible goods of Jordan under the **United States-Jordan Free Trade Area Implementation Act**, (JFTA) effective as of Dec. 17, 2001; see HTS gen. note 18 and subchapter IX of chapter 99.

Other special tariff treatment applies to particular **products of insular possessions** (gen. note 3(a)(iv)), **products of the West Bank and Gaza Strip** (gen. note 3(a)(v)), goods covered by the **Automotive Products Trade Act** (APTA) (gen. note 5) and the **Agreement on Trade in Civil Aircraft** (ATCA) (gen. note 6), **articles imported from freely associated states** (gen. note 10), **pharmaceutical products** (gen. note 13), and **intermediate chemicals for dyes** (gen. note 14).

The **General Agreement on Tariffs and Trade 1994** (GATT 1994), pursuant to the Agreement Establishing the World Trade Organization and based upon the earlier GATT 1947 (61 Stat. (pt. 5) A58; 8 UST (pt. 2) 1786), is the primary multilateral system of discipline and principles governing international trade. The agreements mandate most-favored-nation treatment, maintenance of scheduled concession rates of duty, and national treatment for imported goods; GATT provides the legal framework for customs valuation standards, "escape clause" (emergency) actions, antidumping and countervailing duties, dispute settlement, and other measures. Results of the Uruguay Round of multilateral tariff negotiations are set forth in separate schedules of concessions for each participating contracting party, with the U.S. schedule designated as Schedule XX. Pursuant to the **Agreement on Textiles and Clothing** (ATC) of the GATT 1994, member countries are phasing out restrictions on imports under the prior "Arrangement Regarding International Trade in Textiles" (known as the **Multifiber Arrangement** (MFA)). Under the MFA, a departure from GATT 1947 provisions, importing and exporting countries negotiated bilateral agreements limiting textile and apparel shipments, and importing countries could

take unilateral action to control shipments. Quantitative limits were established on textiles and apparel of cotton, other vegetable fibers, wool, man-made fibers or silk blends in an effort to prevent or limit market disruption in the importing countries. The ATC establishes notification and safeguard procedures, along with other rules concerning the customs treatment of textile and apparel shipments, and calls for the eventual complete integration of this sector into the GATT 1994 and the phase-out of quotas over a ten-year period, or by Jan. 1, 2005.



## **APPENDIX B**

## **STATISTICAL TABLES**

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**Table B-1****Bakery products industry: Number of establishments, employments, and value of shipments, 1998-2001**

Industry segment	Number of establishments	Employment		Value of shipments (\$1,000)
		All	Production related	
<b>Bakery products manufacturing:</b>				
1998 .....	11,590	323,557	201,211	44,259,284
1999 .....	10,637	310,475	188,328	45,428,028
2000 .....	( <sup>1</sup> )	314,798	194,052	46,803,418
2001 .....	( <sup>1</sup> )	318,680	193,616	47,895,965
<b>Retail bakeries:<sup>2</sup></b>				
1998 .....	7,673	74,653	47,134	3,304,889
1999 .....	6,780	52,919	28,447	2,166,019
2000 .....	( <sup>1</sup> )	52,367	27,937	2,625,161
2001 .....	( <sup>1</sup> )	52,380	27,502	2,501,063
<b>Commercial bakeries :</b>				
1998 .....	2,765	164,686	88,188	21,862,561
1999 .....	2,729	172,514	93,459	23,897,359
2000 .....	( <sup>1</sup> )	175,635	97,395	24,963,795
2001 .....	( <sup>1</sup> )	178,000	95,255	25,710,038
<b>Frozen cakes, pies, &amp; other pastries manufacturing:</b>				
1998 .....	242	15,402	12,554	2,594,896
1999 .....	233	15,047	12,173	2,637,771
2000 .....	( <sup>1</sup> )	16,473	13,546	2,937,090
2001 .....	( <sup>1</sup> )	16,742	13,744	3,008,063
<b>Cookie and cracker manufacturing:</b>				
1998 .....	411	42,189	32,726	10,288,805
1999 .....	401	40,107	30,943	10,281,832
2000 .....	( <sup>1</sup> )	39,655	30,629	10,383,544
2001 .....	( <sup>1</sup> )	39,556	31,129	10,519,185
<b>Flour mixes and dough:</b>				
1998 .....	250	15,232	11,843	5,028,916
1999 .....	247	17,196	13,249	5,288,669
2000 .....	( <sup>1</sup> )	17,874	14,010	4,639,140
2001 .....	( <sup>1</sup> )	19,962	15,914	4,769,750
<b>Tortilla manufacturing:</b>				
1998 .....	249	11,395	8,766	1,179,217
1999 .....	247	12,692	10,057	1,156,378
2000 .....	( <sup>1</sup> )	12,794	10,535	1,254,688
2001 .....	( <sup>1</sup> )	12,040	10,072	1,387,866

<sup>1</sup> Not available.<sup>2</sup> Data for retail bakery operations in 1998 is not directly comparable to prior and subsequent years. The 1998 data suffer from a misclassification error that resulted in additional firms being improperly classified in this category.Source: U.S. Census Bureau, *Annual Survey of Manufacturers*, Feb. 11, 2002, and Dec. 20, 2002, 1997 *Economic Census*, and *Statistics of U.S. Businesses*, 1997-1999.

**Table B-2****Bakery products: Selected consumer price index data, January 1998-December 2002**

	January	February	March	April	May	June	July	August	September	October	November	December
<b>Bread<sup>1</sup></b>												
1998	99.4	100.2	99.8	100.0	100.7	101.2	101.8	102.0	102.2	101.5	102.0	102.5
1999	103.4	103.7	103.1	104.1	103.1	104.1	104.1	103.1	103.7	103.9	105.0	104.5
2000	104.5	105.8	105.4	106.4	107.1	107.7	109.4	108.9	107.2	108.3	108.3	109.3
2001	109.6	110.6	111.4	111.2	112.6	112.5	113.6	113.2	113.5	113.3	113.9	115.0
2002	114.3	114.8	113.8	114.8	114.9	115.5	115.2	115.3	115.6	117.3	116.6	116.2
<b>Cookies<sup>2</sup></b>												
1998	182.7	183.5	181.7	182.1	181.2	183.8	183.2	185.5	180.9	182.7	183.9	186.1
1999	187.9	186.9	185.3	185.3	186.6	184.9	187.4	186.5	184.8	189.2	189.7	193.6
2000	188.4	186.4	190.7	187.3	186.5	181.8	187.7	188.5	186.7	189.0	187.6	191.0
2001	188.3	188.7	189.6	189.5	189.2	188.3	188.2	190.5	192.2	193.5	194.4	196.2
2002	196.6	197.8	197.9	195.0	196.0	193.6	193.6	191.3	194.4	195.0	201.1	201.6
<b>Crackers<sup>3</sup></b>												
1998	211.4	207.1	211.4	215.7	216.8	214.2	213.5	212.0	215.8	218.4	220.8	219.5
1999	217.6	215.7	217.4	217.9	220.0	220.2	223.4	212.5	218.7	218.1	217.4	223.8
2000	222.6	224.3	214.9	220.2	223.7	222.1	226.4	228.1	227.2	230.5	229.2	231.2
2001	229.5	231.0	230.2	233.3	229.7	231.0	231.6	234.3	232.6	231.7	234.0	230.5
2002	233.1	234.3	238.3	237.1	236.1	238.5	236.0	235.7	239.1	235.8	235.8	232.8
<b>Frozen and refrigerated bakery products<sup>4</sup></b>												
1998	183.7	183.0	186.3	186.6	183.2	188.1	186.1	188.9	188.3	190.5	191.3	190.0
1999	188.4	188.7	187.5	190.0	188.8	186.9	188.4	188.5	191.5	190.6	190.9	190.1
2000	188.8	188.8	189.6	189.8	191.1	190.4	192.9	193.5	191.6	192.6	194.1	196.9
2001	199.4	199.1	202.0	198.4	200.8	203.2	201.9	203.0	203.5	204.8	201.3	203.7
2002	208.0	206.6	205.7	207.2	209.1	206.9	207.2	209.8	209.6	208.1	209.5	205.6

<sup>1</sup> Bureau of Labor Statistics, consumer price index, current series CUUR0000SEFB01, U.S. city average.<sup>2</sup> Bureau of Labor Statistics, consumer price index, current series CUSR0000SS02042, U.S. city average.<sup>3</sup> Bureau of Labor Statistics, consumer price index, current series CUSR0000SS0206A, U.S. city average.<sup>4</sup> Bureau of Labor Statistics, consumer price index, current series CUSR0000SS0206B, U.S. city average.

Source: U.S. Bureau of Labor Statistics, U.S. Department of Labor.

**Table B-3****White pan bread prices, selected major U.S. cities, 1998-2001**

	1998	1999	2000	2001
Dollars (per kilogram)				
Average price .....	2.94	2.88	2.92	3.04
Highest reported price .....	3.59	3.59	3.87	3.76
Lowest reported price .....	1.57	1.96	1.87	1.87
Second highest reported price .....	3.29	3.27	3.37	3.52
Second lowest reported price .....	2.84	2.86	2.25	2.25

Source: *Economist Intelligence Unit*.**Table B-4****Bakery products: U.S. shipments, U.S. exports of domestic merchandise, U.S. imports for consumption, and merchandise trade balance, 1998-2002**

Year	U.S. shipments	Exports	Imports	Apparent consumption	Trade balance	Ratio of imports to consumption Percentage
				Value (1,000 dollars)		
1998 .....	44,259,284	468,877	863,492	44,653,900	-394,616	1.9
1999 .....	45,428,028	475,014	980,431	45,933,445	-505,417	2.1
2000 .....	46,803,418	489,050	1,074,756	47,389,124	-585,706	2.3
2001 .....	47,895,965	505,575	1,153,341	48,543,730	-647,765	2.4
2002 .....	( <sup>1</sup> )	515,348	1,292,868	( <sup>1</sup> )	-777,520	( <sup>1</sup> )

<sup>1</sup> Not available.Source: U.S. Census Bureau, *Annual Survey of Manufacturers*, Dec. 11, 2002, and data compiled from official statistics of the U.S. Department of Commerce.**Table B-5****Cookie and cracker products: U.S. shipments, U.S. exports of domestic merchandise, U.S. imports for consumption, and merchandise trade balance, 1998-2002**

Year	U.S. shipments	Exports	Imports	Apparent consumption	Trade balance	Ratio of imports to consumption Percentage
				Value (1,000 dollars)		
1998 .....	10,288,805	99,179	345,797	10,535,423	-246,618	3.3
1999 .....	10,281,832	130,040	395,800	10,547,592	-265,760	3.8
2000 .....	10,383,544	133,095	435,843	10,686,292	-302,748	4.1
2001 .....	10,519,185	130,035	427,180	10,816,330	-297,145	4.9
2002 .....	( <sup>1</sup> )	117,832	458,845	( <sup>1</sup> )	-341,012	( <sup>1</sup> )

<sup>1</sup> Not available.Source: U.S. Census Bureau, *Annual Survey of Manufacturers*, Dec. 11, 2002, and data compiled from official statistics of the U.S. Department of Commerce.**Table B-6****Mixes and dough products: U.S. shipments, U.S. exports of domestic merchandise, U.S. imports for consumption, and merchandise trade balance, 1998-2002**

Year	U.S. shipments	Exports	Imports	Apparent consumption	Trade balance	Ratio of imports to consumption Percentage
				Value (1,000 dollars)		
1998 .....	5,028,916	137,440	112,079	5,003,555	25,361	2.2
1999 .....	5,288,669	141,850	120,936	5,267,755	20,914	2.3
2000 .....	4,639,140	153,352	122,645	4,608,432	30,708	2.7
2001 .....	4,769,750	152,153	110,352	4,727,950	41,800	2.3
2002 .....	( <sup>1</sup> )	157,572	107,584	( <sup>1</sup> )	49,988	( <sup>1</sup> )

<sup>1</sup> Not available.Source: U.S. Census Bureau, *Annual Survey of Manufacturers*, Dec. 11, 2002, and data compiled from official statistics of the U.S. Department of Commerce.

Table B-7

Bakery products industry: Cost of materials, value of shipments, and ratio of cost of materials to shipments, 1998-2001

Industry segment and year	Cost of materials	Value of shipments	Ratio of cost of materials to shipments
			\$1,000
<b>Bakery products manufacturing:</b>			
1998 .....	16,529,145	44,259,284	37.3
1999 .....	16,032,531	45,428,028	35.3
2000 .....	16,316,496	46,803,418	34.9
2001 .....	16,566,543	47,895,965	34.6
<b>Retail bakeries:</b> <sup>1</sup>			
1998 .....	1,236,368	3,304,889	37.4
1999 .....	795,825	2,166,019	36.7
2000 .....	898,642	2,625,161	34.2
2001 .....	866,521	2,501,063	34.6
<b>Commercial bakeries :</b>			
1998 .....	7,420,512	21,862,561	33.9
1999 .....	7,597,294	23,897,359	31.8
2000 .....	7,869,365	24,963,795	31.5
2001 .....	8,001,912	25,710,038	31.1
<b>Frozen cakes, pies, &amp; other pastries manufacturing:</b>			
1998 .....	1,185,236	2,594,896	45.7
1999 .....	1,216,350	2,637,771	46.1
2000 .....	1,346,964	2,937,090	45.9
2001 .....	1,438,122	3,008,063	47.8
<b>Cookie and cracker manufacturing:</b>			
1998 .....	3,566,480	10,288,805	34.7
1999 .....	3,286,050	10,281,832	32.0
2000 .....	3,165,933	10,383,544	30.5
2001 .....	3,243,344	10,519,185	30.8
<b>Flour mixes and dough:</b>			
1998 .....	2,626,006	5,028,916	52.2
1999 .....	2,657,342	5,288,669	50.2
2000 .....	2,527,541	4,639,140	54.5
2001 .....	2,478,279	4,769,750	52.0
<b>Tortilla manufacturing:</b>			
1998 .....	494,543	1,179,217	41.9
1999 .....	479,670	1,156,378	41.5
2000 .....	508,051	1,254,688	40.5
2001 .....	538,365	1,387,866	38.8

<sup>1</sup> Data for retail bakery operations in 1998 is not directly comparable to prior and subsequent years. The 1998 data suffer from a misclassification error that resulted in additional firms being improperly classified in this category.

Source: U.S. Census Bureau, *Annual Survey of Manufacturers*, Feb. 11, 2002, and Dec. 20, 2002, 1997 *Economic Census*, and *Statistics of U.S. Businesses*, 1997-1999.

**Table B-8****U.S. wheat: Prices of hard red winter, soft red winter, and hard red spring wheat, in selected U.S. cities, June 1997-Feb. 2003**

Year	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Average
Dollars (per bushel)													
<b>KANSAS CITY, NO. 1 HARD RED WINTER (13 % PROTEIN)</b>													
1997/98 .....	\$4.19	\$3.80	\$4.11	\$4.07	\$4.09	\$4.09	\$4.01	\$3.80	\$3.86	\$3.49	\$3.82	\$3.75	\$3.96
1998/99 .....	3.57	3.57	3.12	3.17	3.67	3.89	3.74	3.61	3.35	3.34	3.34	3.49	3.49
1999/00 .....	3.22	3.39	3.42	3.52	3.40	3.54	3.44	3.46	3.37	3.29	3.30	3.52	3.41
2000/01 .....	3.59	3.25	3.13	3.32	3.59	3.60	3.60	3.64	3.46	3.50	3.49	3.64	3.48
2001/02 .....	3.47	3.35	3.27	3.27	3.33	3.44	3.36	3.41	3.37	3.32	3.31	3.28	3.35
2002/03 .....	3.61	3.91	4.30	5.05	5.10	4.75	4.39	4.05	4.09				
<b>CHICAGO, NO. 2 SOFT RED WINTER</b>													
1997/98 .....	3.38	3.30	3.52	3.49	3.51	3.44	3.31	3.27	3.26	3.25	2.91	2.87	3.29
1998/99 .....	2.72	2.51	2.39	2.32	2.56	2.58	2.49	2.46	2.28	2.63	2.31	2.24	2.46
1999/00 .....	2.20	1.94	2.09	2.12	1.98	1.96	2.12	2.34	2.38	2.34	2.30	2.45	2.19
2000/01 .....	2.41	2.14	2.08	2.13	2.36	2.42	2.47	2.57	2.49	2.56	2.52	2.51	2.39
2001/02 .....	2.40	2.56	2.57	2.57	2.68	2.75	2.83	2.96	2.74	2.76	2.75	2.73	2.69
2002/03 .....	2.81	3.19	3.42	3.92	3.89	3.85	3.53	3.32	3.44				
<b>MINNEAPOLIS, DARK NO. 1 SPRING (13% PROTEIN)</b>													
1997/98 .....	4.31	4.08	4.34	4.33	4.32	4.30	4.18	4.03	4.05	4.19	4.19	4.06	4.20
1998/99 .....	3.91	3.83	3.46	3.39	3.87	3.98	3.86	3.72	3.67	3.75	3.55	3.53	3.71
1999/00 .....	3.65	3.46	3.29	3.32	3.23	3.42	3.38	3.19	3.37	3.44	3.50	3.50	3.40
2000/01 .....	3.50	3.24	2.99	3.10	3.52	3.64	3.60	3.60	3.53	3.45	3.59	3.69	3.45
2001/02 .....	3.63	3.51	3.37	3.47	3.68	3.61	3.54	3.51	3.51	3.46	3.52	3.56	3.53
2002/03 .....	3.55	4.06	4.44	5.20	5.12	5.00	4.50	4.30	4.54				

Source: Economic Research Service, USDA, *Wheat Yearbook Tables*.

**Table B-9**  
**U.S. domestic production of wheat flour, 1997-2002, and bakery flour prices, in selected cities,  
marketing years 1997/98-2001/02**

Year	Domestic flour production <sup>1</sup> 1,000 hundred weights	Market Year	Bakery flour price at Kansas City		at Minneapolis
			—	Dollars (per hundred weight) —	
1997 .....	404,143	1997/98	\$9.98		\$10.62
1998 .....	398,914	1998/99	9.06		9.80
1999 .....	411,968	1999/2000	8.86		9.30
2000 .....	421,270	2000/01	9.36		9.28
2001 .....	404,521	<sup>2</sup> 2001/02	8.99		9.16
2002 .....	400,458				

<sup>1</sup> Commercial production of wheat flour, whole wheat, industrial, and durum flour and farina.

<sup>2</sup> Projected.

Note.—Totals may not reconcile because of rounding.

Source: Wheat Situation and Outlook Yearbook, Economic Research Service, USDA, Mar. 2002. U.S. Bureau of the Census, Flour Milling Products: 2001, Aug. 2002 and Flour Milling Products, Fourth Quarter 2002, Feb. 2003.

**Table B-10**  
**Wheat flour, producer price index, Jan. 1998-Feb. 2003**

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
1998 .....	106.8	108.1	111.5	110.1	109.9	106.4	105.5	101.8	100.9	106.6	107.8	104.8	106.7
1999 .....	104.8	102.7	105	100.5	102.2	102.7	100.7	103.5	101.4	99.8	101.4	96.8	101.8
2000 .....	99.9	99.9	100.2	99.4	100.1	101.7	100.2	100.4	101.2	105.2	103.6	104.4	101.4
2001 .....	104.7	105.1	106.2	105.7	106.9	108.2	107.9	106.8	107.4	110	109.5	108.8	107.3
2002 .....	109.6	109.6	110.6	106.5	108.2	108.8	112.6	115.5	120.9	123	120.3	117.9	114.0
2003 .....	<sup>1</sup> 119.9	<sup>1</sup> 122.2											

<sup>1</sup> Preliminary.

Source: Bureau of Labor Statistics, U.S. Department of Labor, PPI series WPU02120301.

**Table B-11**  
**U.S. raw sugar price, New York, Jan. 1998-Mar. 2003<sup>1</sup>**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
Cents per pound													
1998 .....	21.85	21.79	21.74	22.14	22.31	22.42	22.66	22.19	21.92	21.67	21.83	22.19	22.06
1999 .....	22.41	22.38	22.55	22.57	22.65	22.61	22.61	21.24	20.10	19.50	17.45	17.87	21.16
2000 .....	17.70	17.24	18.46	19.43	19.12	19.31	17.64	18.12	18.97	21.15	21.39	20.56	19.09
2001 .....	20.81	21.18	21.40	21.51	21.19	21.04	20.64	21.10	20.87	20.90	21.19	21.43	21.11
2002 .....	21.03	20.69	19.92	19.73	19.52	19.93	20.86	20.91	21.65	21.94	22.22	22.03	20.87
2003 .....	21.62	21.91	22.14										21.89

<sup>1</sup> Contract No. 14, duty free paid New York.

Source: Economic Research Service, USDA, *Sugar and Sweeteners Yearbook Tables*, Apr. 1, 2003.

**Table B-12**  
**World raw sugar price, Jan. 1998-Mar. 2003<sup>1</sup>**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
Cents per pound													
1998 .....	11.71	11.06	10.66	10.27	10.17	9.33	9.70	9.50	8.21	8.24	8.73	8.59	9.68
1999 .....	8.40	7.05	6.11	5.44	5.83	6.67	6.11	6.39	6.98	6.90	6.54	6.00	6.54
2000 .....	5.64	5.51	5.54	6.48	7.33	8.72	10.18	11.14	10.35	10.96	10.02	10.23	8.51
2001 .....	10.63	10.26	9.64	9.27	9.96	9.80	9.48	8.77	8.60	7.15	7.80	8.02	9.12
2002 .....	7.96	6.81	7.27	7.12	7.33	7.07	8.02	7.86	8.54	8.84	8.87	8.81	7.88
2003 .....	8.56	9.14	8.50										8.73

<sup>1</sup> Contract No. 11-f.o.b. stowed Caribbean port, including Brazil, bulk spot price.

Source: Economic Research Service, USDA, *Sugar and Sweetener Yearbook Tables*, Apr. 1, 2003.

**Table B-13****Bakery products: U.S. domestic exports, U.S. imports for consumption, and merchandise trade balance, 1998-2002**

	1998	1999	2000	2001	2002
Value (1,000 dollars)					
<b>U.S. exports of domestic merchandise:</b>					
Canada . . . . .	278,483	282,465	290,362	304,958	300,713
Japan . . . . .	40,118	42,638	47,617	57,200	56,348
Mexico . . . . .	31,849	35,380	47,229	44,065	51,304
EU . . . . .	36,149	31,713	20,930	24,568	22,811
Singapore . . . . .	2,304	2,994	3,450	3,694	4,714
China . . . . .	808	849	1,135	1,043	4,171
All Others . . . . .	79,167	78,975	78,326	70,049	75,286
Total . . . . .	468,877	475,014	489,050	505,575	515,348
<b>U.S. imports for consumption:</b>					
Canada . . . . .	434,246	499,587	558,224	597,425	673,263
Japan . . . . .	18,915	24,724	24,666	24,526	27,598
Mexico . . . . .	49,642	56,402	70,838	81,141	104,316
EU . . . . .	276,651	293,825	302,935	322,018	333,545
Singapore . . . . .	6,220	6,530	7,195	8,270	9,124
China . . . . .	5,224	8,628	9,335	12,314	15,017
All Others . . . . .	72,595	90,735	101,563	107,646	130,002
Total . . . . .	863,492	980,431	1,074,756	1,153,341	1,292,868
<b>U.S. merchandise trade balance:</b>					
Canada . . . . .	-155,763	-217,123	-267,862	-292,467	-372,550
Japan . . . . .	21,203	17,915	22,952	32,674	28,750
Mexico . . . . .	-17,793	-21,021	-23,609	-37,076	-53,012
EU . . . . .	-240,502	-262,112	-282,006	-297,451	-310,735
Singapore . . . . .	-3,916	-3,536	-3,745	-4,577	-4,410
China . . . . .	-4,417	-7,779	-8,200	-11,271	-10,847
All Others . . . . .	6,572	-11,760	-23,237	-37,597	-54,716
Total . . . . .	-394,616	-505,417	-585,706	-647,765	-777,520

Source: Compiled from official statistics of the U.S. Department of Commerce, based on U.S. HTS subheadings 1901.20 and 1905.

**Table B-14****Bakery products: U.S. imports for consumption, by selected countries, 1998-2002**

Country	1998	1999	2000	2001	2002
Value (1,000 dollars)					
Canada . . . . .	434,246	499,587	558,224	597,425	673,263
EU . . . . .	276,651	293,825	302,935	322,018	333,545
Mexico . . . . .	49,642	56,402	70,838	81,141	104,316
Japan . . . . .	18,915	24,724	24,666	24,526	27,598
China . . . . .	5,224	8,628	9,335	12,314	15,017
Taiwan . . . . .	9,758	10,184	11,387	11,148	11,738
Indonesia . . . . .	1,161	1,861	5,369	7,885	11,709
Israel . . . . .	7,898	8,585	8,725	10,194	9,900
Singapore . . . . .	6,220	6,530	7,195	8,270	9,124
Brazil . . . . .	663	9,258	10,371	6,655	8,353
All others . . . . .	53,116	60,847	65,711	71,763	88,303
Total . . . . .	863,492	980,431	1,074,756	1,153,341	1,292,868
Percent					
Canada . . . . .	50.3	51.0	51.9	51.8	52.1
EU . . . . .	32.0	30.0	28.2	27.9	25.8
Mexico . . . . .	5.7	5.8	6.6	7.0	8.1
Japan . . . . .	2.2	2.5	2.3	2.1	2.1
China . . . . .	0.6	0.9	0.9	1.1	1.2
Taiwan . . . . .	1.1	1.0	1.1	1.0	0.9
Indonesia . . . . .	0.1	0.2	0.5	0.7	0.9
Israel . . . . .	0.9	0.9	0.8	0.9	0.8
Singapore . . . . .	0.7	0.7	0.7	0.7	0.7
Brazil . . . . .	0.1	0.9	1.0	0.6	0.6
All others . . . . .	6.2	6.2	6.1	6.2	6.8
Total . . . . .	100.0	100.0	100.0	100.0	100.0

Source: Compiled from official statistics of the U.S. Department of Commerce, based on US HTS subheading 1901.20, 1905.10.00, 1905.20.00, 1905.31.00, 1905.32.00, 1905.40.00, and 1905.90.10.

**Table B-15****Bread, pastries, and cake products: U.S. imports for consumption, by selected countries, 1998-2002**

Country	1998	1999	2000	2001	2002
Value (1,000 dollars)					
Canada . . . . .	126,863	148,376	186,973	241,346	303,266
EU . . . . .	143,094	154,838	154,565	182,985	189,952
Mexico . . . . .	30,656	33,808	43,685	47,797	65,091
Japan . . . . .	17,119	22,102	21,876	22,473	25,655
China . . . . .	4,478	7,343	8,102	11,101	13,893
All others . . . . .	56,387	60,349	65,973	71,300	87,128
Total . . . . .	378,597	426,816	481,175	577,002	684,985
Percent					
Canada . . . . .	33.5	34.8	38.9	41.8	44.3
EU . . . . .	37.8	36.3	32.1	31.7	27.7
Mexico . . . . .	8.1	7.9	9.1	8.3	9.5
Japan . . . . .	4.5	5.2	4.5	3.9	3.7
China . . . . .	1.2	1.7	1.7	1.9	2.0
All others . . . . .	14.9	14.1	13.7	12.4	12.7
Total . . . . .	100.0	100.0	100.0	100.0	100.0

Source: Compiled from official statistics of the U.S. Department of Commerce, based on US HTS subheading 1905.90.10.

**Table B-16****Cookie and cracker products: U.S. imports for consumption, by selected countries, 1998-2002**

Country	1998	1999	2000	2001	2002
Value (1,000 dollars)					
Canada .....	186,824	218,402	237,282	233,757	248,303
EU .....	120,236	120,314	132,115	120,786	125,540
Mexico .....	17,975	21,371	25,500	31,468	36,769
Indonesia .....	708	1,550	5,118	7,806	11,652
Brazil .....	100	8,557	8,884	4,907	4,582
All others .....	19,955	25,606	26,944	28,455	31,999
Total .....	345,797	395,800	435,843	427,180	458,845
Percent					
Canada .....	54.0	55.2	54.4	54.7	54.1
EU .....	34.8	30.4	30.3	28.3	27.4
Mexico .....	5.2	5.4	5.9	7.4	8.0
Indonesia .....	0.2	0.4	1.2	1.8	2.5
Brazil .....	0.0	2.2	2.0	1.1	1.0
All others .....	5.8	6.5	6.2	6.7	7.0
Total .....	100.0	100.0	100.0	100.0	100.0

Source: Compiled from official statistics of the U.S. Department of Commerce, based on U.S. HTS subheading 1905.31.00, and 1905.32.00.

**Table B-17****Mixes and dough products: U.S. imports for consumption, by selected countries, 1998-2002**

Country	1998	1999	2000	2001	2002
Value (1,000 dollars)					
Canada .....	109,513	117,741	119,470	106,817	103,171
EU .....	707	1,240	1,213	1,086	1,684
Israel .....	80	110	151	490	443
Argentina .....	21	70	136	189	386
Taiwan .....	540	474	514	434	351
All others .....	1,218	1,301	1,160	1,336	1,549
Total .....	112,079	120,936	122,645	110,352	107,584
Percent					
Canada .....	97.7	97.4	97.4	96.8	95.9
EU .....	0.6	1.0	1.0	1.0	1.6
Israel .....	0.1	0.1	0.1	0.4	0.4
Argentina .....	0.0	0.1	0.1	0.2	0.4
Taiwan .....	0.5	0.4	0.4	0.4	0.3
All others .....	1.1	1.1	0.9	1.2	1.4
Total .....	100.0	100.0	100.0	100.0	100.0

Source: Compiled from official statistics of the U.S. Department of Commerce, based on U.S. HTS subheading 1901.20.

**Table B-18****Bakery products: U.S. exports of domestic merchandise, by selected countries, 1998-2002**

Country	1998	1999	2000	2001	2002
Value (1,000 dollars)					
Canada .....	278,483	282,465	290,362	304,958	300,713
Japan .....	40,118	42,638	47,617	57,200	56,348
Mexico .....	31,849	35,380	47,229	44,065	51,304
EU .....	36,149	31,713	20,930	24,568	22,811
Hong Kong .....	3,466	3,373	4,211	4,164	6,589
Korea .....	2,249	3,980	5,189	4,606	6,079
Singapore .....	2,304	2,994	3,450	3,694	4,714
China .....	808	849	1,135	1,043	4,171
Dominican Republic .....	3,044	3,217	4,068	3,929	3,993
Philippines .....	1,210	2,529	1,619	2,918	3,300
All others .....	69,198	65,877	63,240	54,431	55,325
Total .....	468,877	475,014	489,050	505,575	515,348
Percent					
Canada .....	59.4	59.5	59.4	60.3	58.4
Japan .....	8.6	9.0	9.7	11.3	10.9
Mexico .....	6.8	7.4	9.7	8.7	10.0
EU .....	7.7	6.7	4.3	4.9	4.4
Hong Kong .....	0.7	0.7	0.9	0.8	1.3
Korea .....	0.5	0.8	1.1	0.9	1.2
Singapore .....	0.5	0.6	0.7	0.7	0.9
China .....	0.2	0.2	0.2	0.2	0.8
Dominican Republic .....	0.6	0.7	0.8	0.8	0.8
Philippines .....	0.3	0.5	0.3	0.6	0.6
All others .....	14.8	13.9	12.9	10.8	10.7
Total .....	100.0	100.0	100.0	100.0	100.0

Source: Compiled from official statistics of the U.S. Department of Commerce, based on U.S. Schedule B numbers 1901.20, 1905.10.00, 1905.20.00, 1905.31.00, 1905.32.00, 1905.40.00, and 1905.90.10.

**Table B-19**

**Bread, pastry, and cake products: U.S. exports of domestic merchandise, by selected countries, 1998-2002**

Country	1998	1999	2000	2001	2002
Value (1,000 dollars)					
Canada . . . . .	142,802	134,604	127,674	139,129	142,208
Japan . . . . .	5,938	5,634	7,054	11,088	17,458
Mexico . . . . .	7,842	7,345	9,225	12,274	16,902
EU . . . . .	15,496	11,437	10,795	15,997	13,889
Korea . . . . .	601	1,467	3,061	2,386	2,882
China . . . . .	439	564	693	404	2,553
Singapore . . . . .	203	696	1,291	1,583	2,037
Taiwan . . . . .	762	1,317	1,100	1,763	1,499
Guatemala . . . . .	356	536	744	872	1,396
Australia . . . . .	2,933	812	2,055	1,576	1,222
All others . . . . .	27,370	20,706	22,043	19,377	16,984
Total . . . . .	204,743	185,117	185,735	206,450	219,031
Percent					
Canada . . . . .	69.7	72.7	68.7	67.4	64.9
Japan . . . . .	2.9	3.0	3.8	5.4	8.0
Mexico . . . . .	3.8	4.0	5.0	5.9	7.7
EU . . . . .	7.6	6.2	5.8	7.7	6.3
Korea . . . . .	0.3	0.8	1.6	1.2	1.3
China . . . . .	0.2	0.3	0.4	0.2	1.2
Singapore . . . . .	0.1	0.4	0.7	0.8	0.9
Taiwan . . . . .	0.4	0.7	0.6	0.9	0.7
Guatemala . . . . .	0.2	0.3	0.4	0.4	0.6
Australia . . . . .	1.4	0.4	1.1	0.8	0.6
All others . . . . .	13.4	11.2	11.9	9.4	7.8
Total . . . . .	100.0	100.0	100.0	100.0	100.0

Source: Compiled from official statistics of the U.S. Department of Commerce, based on U.S. Schedule B number 1905.90.10.

**Table B-20**  
**Cookie and cracker products: U.S. exports of domestic merchandise, by selected countries,  
1998-2002**

Country	1998	1999	2000	2001	2002
Value (1,000 dollars)					
Canada . . . . .	71,552	80,018	87,261	89,812	78,710
Mexico . . . . .	6,450	9,014	14,783	14,141	12,687
Japan . . . . .	3,488	4,892	2,986	8,000	3,616
Philippines . . . . .	494	1,458	654	1,247	1,749
Singapore . . . . .	731	1,369	1,185	1,099	1,741
Venezuela . . . . .	384	242	454	467	1,651
EU . . . . .	2,136	14,448	4,649	2,059	1,314
Korea . . . . .	170	1,324	965	894	1,296
Bahamas . . . . .	456	920	604	898	1,152
Taiwan . . . . .	175	185	365	566	1,050
All others . . . . .	13,144	16,172	19,189	10,851	12,868
Total . . . . .	99,179	130,040	133,095	130,035	117,832
Percent					
Canada . . . . .	72.1	61.5	65.6	69.1	66.8
Mexico . . . . .	6.5	6.9	11.1	10.9	10.8
Japan . . . . .	3.5	3.8	2.2	6.2	3.1
Philippines . . . . .	0.5	1.1	0.5	1.0	1.5
Singapore . . . . .	0.7	1.1	0.9	0.8	1.5
Venezuela . . . . .	0.4	0.2	0.3	0.4	1.4
EU . . . . .	2.2	11.1	3.5	1.6	1.1
Korea . . . . .	0.2	1.0	0.7	0.7	1.1
Bahamas . . . . .	0.5	0.7	0.5	0.7	1.0
Taiwan . . . . .	0.2	0.1	0.3	0.4	0.9
All others . . . . .	13.3	12.4	14.4	8.3	10.9
Total . . . . .	100.0	100.0	100.0	100.0	100.0

Source: Compiled from official statistics of the U.S. Department of Commerce, based on U.S. Schedule B numbers 1905.31.00, and 1905.32.00.

**Table B-21**  
**Mixes and dough products: U.S. exports of domestic merchandise, by selected countries,  
1998-2002**

Country	1998	1999	2000	2001	2002
<i>Value (1,000 dollars)</i>					
Canada .....	53,182	56,116	62,129	63,462	66,466
Japan .....	30,599	31,840	37,414	37,724	34,972
Mexico .....	16,888	18,523	22,559	17,078	19,601
EU .....	4,717	4,848	5,107	6,018	6,388
Hong Kong .....	946	1,033	1,546	2,227	4,941
Dominican Republic .....	385	653	918	2,110	2,413
Korea .....	1,478	1,181	1,163	1,327	1,753
Jamaica .....	437	510	606	1,557	1,638
Panama .....	893	875	699	983	1,316
Kuwait .....	842	1,085	993	783	1,131
All others .....	27,074	25,185	20,219	18,884	16,954
Total .....	137,440	141,850	153,352	152,153	157,572
<i>Percent</i>					
Canada .....	38.7	39.6	40.5	41.7	42.2
Japan .....	22.3	22.4	24.4	24.8	22.2
Mexico .....	12.3	13.1	14.7	11.2	12.4
EU .....	3.4	3.4	3.3	4.0	4.1
Hong Kong .....	0.7	0.7	1.0	1.5	3.1
Dominican Republic .....	0.3	0.5	0.6	1.4	1.5
Korea .....	1.1	0.8	0.8	0.9	1.1
Jamaica .....	0.3	0.4	0.4	1.0	1.0
Panama .....	0.6	0.6	0.5	0.6	0.8
Kuwait .....	0.6	0.8	0.6	0.5	0.7
All others .....	19.7	17.8	13.2	12.4	10.8
Total .....	100.0	100.0	100.0	100.0	100.0

Source: Compiled from official statistics of the U.S. Department of Commerce, based on U.S. Schedule B number 1901.20.

**Table B-22****Bakery products: U.S. imports for consumption from Canada, by Customs District, 1998-2002**

Customs District	1998	1999	2000	2001	2002
	Value (1,000 dollars)				
Detroit, MI . . . . .	187,546	207,518	237,687	268,909	307,275
Buffalo, NY . . . . .	156,597	182,993	188,755	181,291	207,166
Seattle, WA . . . . .	25,357	28,603	34,414	39,888	48,616
Ogdensburg, NY . . . . .	35,212	43,848	47,589	48,632	43,415
Portland, ME . . . . .	8,575	10,715	16,301	14,960	24,208
Great Falls, MT . . . . .	2,573	8,321	11,985	18,553	19,615
Pembina, ND . . . . .	6,078	9,310	9,334	17,070	17,745
St. Albans, VT . . . . .	10,126	6,586	10,546	7,101	4,871
San Juan, PR . . . . .	239	209	176	43	84
New York, NY . . . . .	23	28	3	6	76
Miami, FL . . . . .	3	-	8	22	65
Los Angeles, CA . . . . .	-	27	57	20	51
Duluth, MN . . . . .	916	560	550	392	35
Chicago, IL . . . . .	5	42	57	141	22
Tampa, FL . . . . .	39	2	-	7	8
Philadelphia, PA . . . . .	-	-	-	-	8
Cleveland, OH . . . . .	-	-	-	7	3
Anchorage, AK . . . . .	868	715	698	346	-
Columbia-Snake, OR . . . . .	-	-	8	-	-
Dallas-Fort Worth, TX . . . . .	-	10	-	-	-
Honolulu, HI . . . . .	26	21	20	13	-
Houston-Galveston, TX . . . . .	-	-	-	3	-
Laredo, TX . . . . .	-	11	-	-	-
Minneapolis, MN . . . . .	-	20	-	-	-
New Orleans, LA . . . . .	-	4	-	15	-
Norfolk, VA . . . . .	-	-	6	-	-
San Diego, CA . . . . .	18	-	-	6	-
San Francisco, CA . . . . .	26	-	11	-	-
Savannah, GA . . . . .	15	-	17	-	-
St. Louis, MO . . . . .	-	30	-	-	-
Unknown . . . . .	3	16	-	-	-
<b>Total . . . . .</b>	<b>434,242</b>	<b>499,571</b>	<b>558,224</b>	<b>597,425</b>	<b>673,263</b>

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

Table B-23

Bakery products: Harmonized Tariff Schedule subheading; description; U.S. col 1 rate of duty as of Jan. 1, 2003; bound concession rate of duty; U.S. exports, 2002; and U.S. imports, 2002

HTS subheading	Description	Column 1 rate of duty, as of Jan 1, 2003		Bound duty, Uruguay Round	U.S. exports, 2002	U. S. imports, 2002
		General	Special <sup>1</sup>			
————— 1,000 dollars—————						
	Mixes and doughs for the preparation of bakers' wares of heading 1905:					
	Containing over 25 percent by weight of butterfat, not put up for retail sale: .....					
1901.20.02	Described in general note 15 of the tariff schedule and entered pursuant to its provisions .....	10%		Free (A, CA, E, IL, J, JO, MX)	20%	4
	Other:					
	Dairy products described in additional U.S. note 1 to chapter 4:					
1901.20.05	Described in additional U.S. note 10 to chapter 4 and enter pursuant to its provisions .....	10%		Free (A, CA, E, IL, J, JO)	20%	34,236
1901.20.15	Other .....	42.3¢/kg+8.5%		Free (MX) See 9909.04.05, 9909.04.48 (JO)	49.8¢/kg+10%	48,321
	Other:					
	Articles containing over 65 percent by dry weight of sugar described in additional U.S. note 2 to chapter 17:					
1901.20.20	Described in additional U.S. note 7 to chapter 17 and enter pursuant to its provisions .....	10%		20%		
1901.20.25	Other .....	42.3¢/kg+8.5%		Free (MX) See 9909.17.05, 9909.17.60 (JO)	49.8¢/kg+10%	75,015
	Mixes and doughs described in additional U.S. note 1 to chapter 19:					
1901.20.30	Described in additional U.S. note 3 to this chapter and enter pursuant to its provisions .....	10%		Free (A, CA, E, IL, J, JO)	20%	54
1901.20.35	Other .....	42.3¢/kg+8.5%		Free (MX) See 9909.04.05, 9909.04.48 (JO)	49.8¢/kg+10%	0
1901.20.40	Other .....	8.5%		Free (A, CA, E, IL, J, MX)	20%	872
	Other:			2.1% (JO)		
1901.20.42	Described in general note 15 of the tariff schedule and entered pursuant to its provisions .....	10%		Free (A, CA, E, IL, J, JO, MX)	20%	13

See footnotes at end of table.

Table B-23—Continued

Bakery products: Harmonized Tariff Schedule subheading; description; U.S. col 1 rate of duty as of Jan. 1, 2003; bound concession rate of duty; U.S. exports, 2002; and U.S. imports, 2002

HTS subheading	Description	Column 1 rate of duty, as of Jan 1, 2003		Bound duty, Uruguay Round	U.S. exports, 2002	U. S. imports, 2002				
		General	Special <sup>1</sup>							
—————, 1,000 dollars —————										
Other:										
1901.20.45	Dairy products described in additional U.S. note 1 to chapter 4:									
	Described in additional U.S. note 10 to chapter 4 and enter pursuant to its provisions .....	10%	Free (A, CA, E, IL, J, JO)	20%		3				
1901.20.50	Other .....	42.3¢/kg+8.5%	Free (MX) See 9909.04.05, 9909.04.48 (JO)	49.8¢/kg+10%		58				
1901.20.55	Other:									
	Articles containing over 65 percent by dry weight of sugar described in additional U.S. note 2 to chapter 17:									
1901.20.60	Described in additional U.S. note 7 to chapter 17 and enter pursuant to its provisions .....	10%		20%						
	Other .....	42.3¢/kg+8.5%	Free (MX) See 9909.17.05, 9909.17.60 (JO)	49.8¢/kg+10%		0				
1901.20.65	Mixes and doughs described in additional U.S. note 1 to chapter 19:									
	Described in additional U.S. note 3 to this chapter and enter pursuant to its provisions .....	10%	Free (A, CA, E, IL, J, JO)	20%		4,551				
1901.20.70	Other <sup>1</sup> .....	42.3¢/kg+8.5%	Free (MX) See 9909.04.05, 9909.04.48 (JO)	49.8¢/kg+10%		2,597				
1901.20.80	Other .....	8.5%	Free (A, CA, E, IL, J, MX) 2.1% (JO)	20%		99,432				
Bread, pastry, cakes, biscuits and other bakers' wares, whether or not containing cocoa; communion wafers, empty capsules of a kind suitable for pharmaceutical use, sealing wafers, rice paper and similar products:										
1905.10.00	Crispbread .....	Free		30%	3,839	13,218				
1905.20.00	Gingerbread and the like .....	Free		30%	930	16,215				
1905.31.00	Sweet biscuits .....	Free		30%	82,471	355,501				
1905.31.0021	Frozen:									
	Containing peanuts or peanut products .....									
1905.31.0029	Other .....									

See footnotes at end of table.

Table B-23—Continued

Bakery products: Harmonized Tariff Schedule subheading; description; U.S. col 1 rate of duty as of Jan. 1, 2003; bound concession rate of duty; U.S. exports, 2002; and U.S. imports, 2002

HTS subheading	Description	Column 1 rate of duty, as of Jan 1, 2003		Bound duty, Uruguay Round	U.S. exports, 2002	U. S. imports, 2002
		General	Special <sup>1</sup>			
————— 1,000 dollars—————						
	Other:					
1905.31.0041	Containing peanuts or peanut products .....					
1905.31.0049	Other .....					
1905.32.00	Waffles and wafers frozen .....	Free		30%	35,361	103,344
	Frozen:					
1905.32.0021	Containing peanuts or peanut products .....					
1905.32.0029	Other .....					
	Other:					
1905.32.0041	Containing peanuts or peanut products .....					
1905.32.0049	Other .....					
1905.40.00	Rusks, toasted bread and similar toasted products .....	Free		30%	16,143	12,021
	Other:					
1905.90.10	Bread, pastry, cakes, biscuits and similar baked products, and puddings, whether or not containing chocolate, fruit, nuts or confectionery .....	Free		30%	219,031	684,985
	Frozen:					
1905.90.1041	Pastries, cakes and similar sweet baked products; puddings .....					
1905.90.1049	Other .....					
	Other:					
1905.90.1050	Pastries, cakes and similar sweet baked products; puddings .....					
1905.90.1070	Bread .....					
1905.90.1090	Other .....					

<sup>1</sup> Programs under which special tariff treatment may be provided, and the corresponding symbols for such programs as they are indicated in the "Special subcolumn, are as follows; Generalized System of Preferences (A) or (A+); North America free Trade Agreement (NAFTA), goods of Canada (CA); NAFTA, goods of Mexico (MX); Caribbean Basin Economic Recovery Act (E); United States-Israel Free Trade Agreement (IL); Andean Trade Preference Act (J); and United States-Jordan Free Trade Area Implementation Act (JO).