BABCOCK INSTITUTE DISCUSSION PAPER NO. 2009-1

U.S. DAIRY TRADE SITUATION AND OUTLOOK: 2009

Edward V. Jesse and William D. Dobson

The Babcock Institute for International Dairy Research and Development
University of Wisconsin-Madison, College of Agricultural and Life Sciences
240 Agriculture Hall, 1450 Linden Drive
Madison, WI 53706-1562 USA

The Babcock Institute offers continuing opportunities for sponsorship of our market and trade analysis, international dairy research, international market development activities and educational materials, including our website. If you are interested in discussing these opportunities, please call Karen Nielsen at 608-265-4169.

The Babcock Institute for International Dairy Research and Development
is a joint program of the
University of Wisconsin-Madison College of Agricultural and Life Sciences
University of Wisconsin-Madison School of Veterinary Medicine
University of Wisconsin Extension Cooperative Extension Division

Funding for this study was provided by CSREES USDA Special Grant 05-34266-16416

ISBN 978-1-59215-106-X

The Babcock Institute
College of Agricultural and Life Sciences
240 Agriculture Hall, 1450 Linden Drive
Madison, WI 53706-1562

Phone: 608-265-4169; Fax: 608-262-8852
Email: babcock@cals.wisc.edu
Internet: http://babcock.cals.wisc.edu

CONTENTS

FIGURES

TABLES

U.S. DAIRY TRADE SITUATION AND OUTLOOK: 2009

Edward V. Jesse and William D. Dobson[1]

EXECUTIVE SUMMARY

U.S. dairy exports set another new record in 2008, reaching $3.8 billion. Almost 11 percent of the U.S. milk supply was sold overseas. U.S. dairy imports also reached a new high of $3.2 billion, but the much larger growth in exports resulted in a record dairy trade surplus of $600 million.

Exports of skim milk powder were valued at nearly $1.4 billion, up 61 percent from 2007. Whey export tonnage was down 13 percent and, with much lower world whey prices, the value of whey exports was off 29 percent. Exports of cheese and butter were surprisingly strong, with values up 47 and 143 percent, respectively, from 2007. The U.S. exported dairy products to 167 countries in 2008. Mexico was the largest export market, taking nearly 25 percent of total export value.

As usual, cheese led all import items, accounting for more than a third of import value in 2008. High protein milk powders (casein and milk protein concentrate) represented another third. Following trend, cheese volume was down from 2007, but value was up slightly due to higher prices. New Zealand was the largest supplier of dairy imports, with 22 percent of import value, mostly in the form of MPC and casein. EU countries supplied most of the imported cheese.

The year ended on a decidedly down note for dairy trade, with depressed world demand cutting sales and prices across the globe. On a monthly basis, the U.S. began to show a dairy trade deficit in November that has widened since then. The loss of export sales has meant a disproportionately large cut in U.S. milk production will be necessary to balance markets at reasonable milk prices to dairy farmers. When world dairy markets will recover in light of the current global economic malaise is highly uncertain.

Dairy trade policy and other agricultural trade issues sat on the "back burner" in the spring of 2009. Agricultural trade policies probably can run satisfactorily on autopilot for the next year. But complete neglect of agricultural trade policy issues risks fostering widespread agricultural trade protectionism.

Protectionism can arise in the absence of a Doha Round WTO trade agreement partly because of unused entitlements under the WTO. The world dairy industry felt the impact of an unused entitlement when the EU resurrected dairy export subsidies in January 2009. These export subsidies can sharply reduce world dairy product prices.

Over the next year or two, at least, new trade agreements are unlikely to have much impact on the U.S. dairy industry. This is probably not a good development for the efficient and increasingly export-oriented U.S. dairy industry.

[1] The authors are emeritus professors in the Department of Agricultural and Applied Economics, University of Wisconsin-Madison. Jesse is Director of Trade and Policy Studies and Dobson is an Agribusiness Economist with the Babcock Institute.

TRADE UPDATE[2]

In last year's Babcock trade update, we noted that, "U.S. dairy export value (in 2008) should stay within $500 million of 2007. But beating (the 2007) record is probably not in the cards." [14] Well, the cards fell much more favorably than we anticipated—U.S. dairy exports in 2008 were $3.8 billion, $800 million more than 2007. And while dairy imports at $3.2 billion were up $300 million from year-earlier, the much larger growth in exports pushed the U.S. dairy trade balance in 2008 to $600 million. As late as 2005, the U.S. experienced a dairy trade deficit of nearly $1 billion (Figure 1).

Unfortunately, instead of experiencing euphoria from last year's banner exports, the dairy industry is despondent from the steep slide in world dairy prices and exports that occurred during the last quarter of 2008 and that has carried over to 2009. As we elaborate later, the world trade picture has turned from rosy to decidedly gloomy.

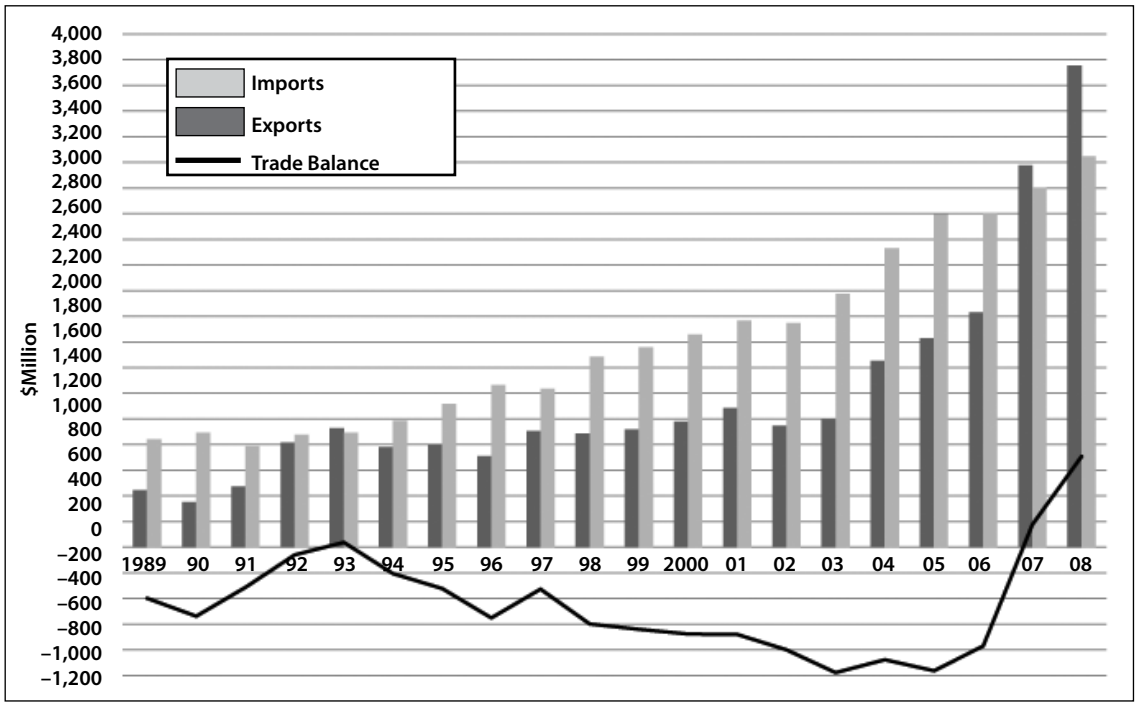
Dairy Exports

U.S. dairy exports in 2008 were led by skim milk powder (SMP), which accounted for 37 percent of total export value (Figure 2). SMP exports were up 52 percent over 2007 on volume and 65 percent on value (Table 1). Dry whey exports in 2008 were down—sharply on value, less on volume—as world whey prices were only about half the levels experienced in 2007.

Cheese and butter exports last year were pleasant surprises. Butter export volume was more than double that of 2007, and the U.S. showed a butter trade surplus for the second consecutive year. At $241 million, the value of butter exports was 16 times the value just two years earlier.

Cheese exports were up a third on volume and nearly 50 percent on value. The value of U.S. cheese sold overseas was more than one-half of the value of U.S. cheese imports last year. This contrasts with 2003,

FIGURE 1. U.S. Dairy Trade Balance



[2] Dairy trade statistics shown in this section are derived exclusively from data drawn from the Foreign Agricultural Service U.S. Trade Internet System [11].

FIGURE 2. Composition of U.S. Dairy Exports, 2008

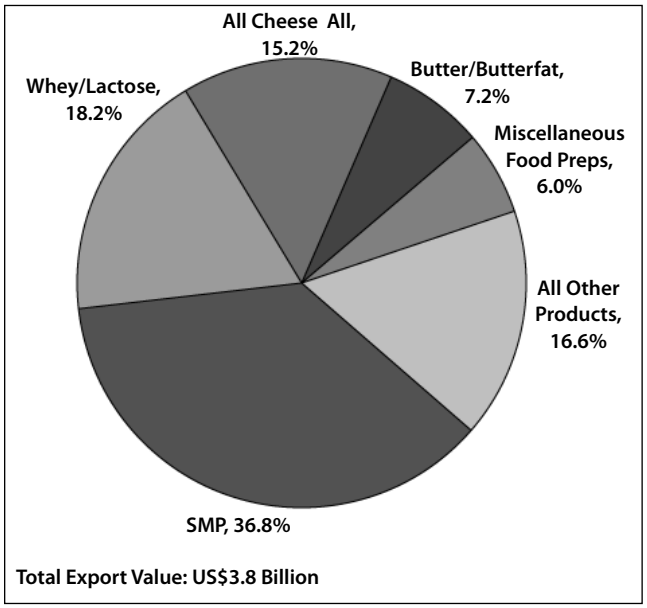


FIGURE 3. Destination for U.S. Dairy Exports, 2008

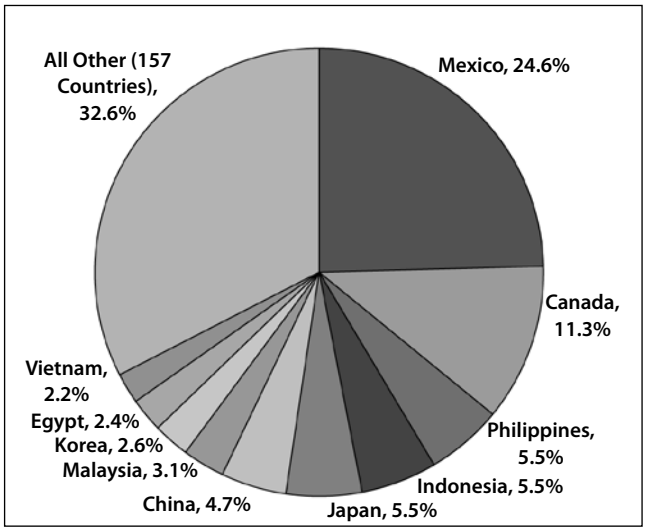


TABLE 1. U.S. Dairy Exports, Selected Items, 2007 and 2008

	2007		2008		% Change	
	MT	$1,000	MT	$1,000	MT	$1,000
SMP	257,893	836,294	391,364	1,380,308	51.8%	65.1%
Whey Products:						
WPC	93,508	234,818	71,658	157,790	–23.4%	–32.8%
Dry Whey	264,302	295,437	201,282	203,886	–23.8%	–31.0%
Lactose	181,445	303,907	185,717	182,822	2.4%	–39.8%
Other	59,886	127,771	61,306	136,205	2.4%	6.6%
Total (Exc. Liquid)	599,141	961,933	519,963	680,703	–13.2%	–29.2%
Butter/Butterfat	40,629	111,633	90,750	271,651	123.4%	143.3%
Cheese:						
Fresh	19,284	69,574	20,549	82,474	6.6%	18.5%
Processed	11,875	43,821	14,388	59,698	21.2%	36.2%
Blue-Veined	84	569	258	1,403	206.1%	146.6%
Cheddar	15,647	60,227	25,196	106,518	61.0%	76.9%
Colby	545	2,804	823	4,440	51.1%	58.3%
Other, Incl. Mixes	52,105	211,033	70,220	315,227	34.8%	49.4%
Total Cheese	99,540	388,028	131,434	569,761	32.0%	46.8%
MPC	21,086	97,256	28,063	110,918	33.1%	14.0%
Infant Formula	27,426	87,568	31,449	122,531	14.7%	39.9%
Casein/Caseinates	4,170	35,368	5,488	54,437	31.6%	53.9%

TABLE 2. Major Importers of U.S. SMP and Whey, 2008

Skim Milk Powder Country	$1,000	% of Total Exports	Whey and Lactose Country	$1,000	% of Total Exports
Mexico	451,723	30.6%	Mexico	123,593	24.0%
Philippines	174,198	11.8%	China	76,846	14.9%
Indonesia	170,872	11.6%	Canada	53,907	10.4%
Malaysia	76,595	5.2%	Japan	48,791	9.5%
Algeria	67,563	4.6%	Morocco	30,039	5.8%
Vietnam	57,943	3.9%	Malaysia	24,527	4.8%
Thailand	56,749	3.8%	Indonesia	17,674	3.4%
Egypt	55,318	3.8%	Korea	15,704	3.0%
China	47,083	3.2%	Thailand	14,382	2.8%
Japan	35,068	2.4%	Vietnam	12,401	2.4%
Total, Top 10	1,193,112	80.9%	Total, Top 10	418,864	81.0%

when the value of U.S. cheese imports was nearly six times the value of exports.

SMP, whey, cheese and butter accounted for three-quarters of U.S. dairy export value in 2008. Remaining exports were in several diverse categories. Two categories of particular note are milk protein concentrate (MPC) and casein/caseinates. Export volume for these products was up about a third from 2007 (Table 1). Since the U.S. imports large volumes of MPC and casein, these exports are probably mostly trans-shipments.

The U.S. exported dairy products to 167 countries in 2008 (Figure 3). Mexico was by far the largest market, accounting for nearly 25 percent of total dairy export value. Canada was in second place at 11.3 percent. After the top two destinations, percentages fall off rapidly—exports are less concentrated geographically than imports. Among the countries occupying positions 3–10 in their percentages of total U.S. dairy exports in 2008, five were in Southeast Asia and two were in East Asia.

Breaking out destinations by product shows somewhat greater export concentration (Tables 2 and 3). For dry milk products (SMP and whey), Mexico was, again, the most important export market. But Asian countries were, collectively, significantly larger

TABLE 3. Major Importers of U.S. Cheese and Butter, 2008

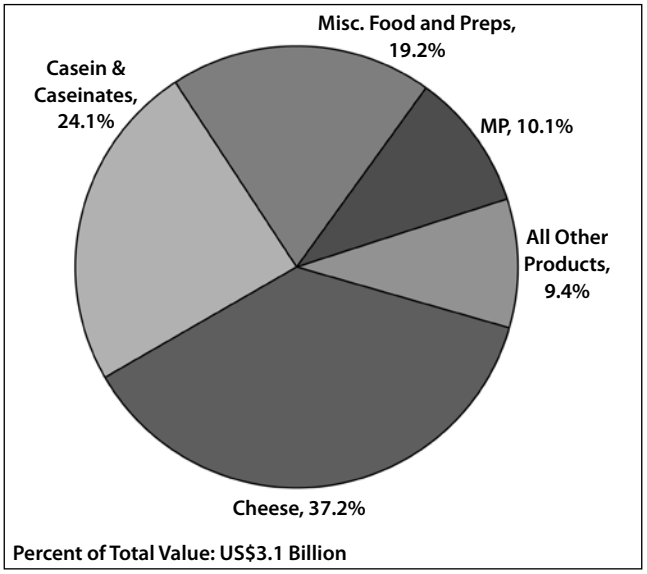
Cheese Country	$1,000	% of Total U.S. Exports	Butter Country	$1,000	% of Total U.S. Exports
Mexico	160,111	28.1%	Russia	47,167	19.6%
Korea	58,881	10.3%	Japan	32,094	13.3%
Canada	51,576	9.1%	Morocco	26,773	11.1%
Japan	45,060	7.9%	Saudi Arabia	26,457	11.0%
Saudi Arabia	27,026	4.7%	Egypt	22,510	9.3%
Aaustralia	16,787	2.9%	Canada	12,691	5.3%
Egypt	13,131	2.3%	Mexico	9,479	3.9%
Panama	12,742	2.2%	Baharain	6,252	2.6%
Netherlands	11,441	2.0%	Turkey	5,319	2.2%
Philippines	10,979	1.9%	Iran	4,612	1.9%
Total, Top 10	407,734	71.6%	Total, Top 10	194,354	80.2%

importers than indicated by the aggregate statistics. Southeast Asia accounted for more than 36 percent of U.S. SMP exports and China and Japan took about one fourth of whey exports.

Cheese and butter exports show a different geographical distribution. Mexico still dominates in cheese sales, but the other major destinations are globally scattered. The presence of Australia and the Netherlands in the list of top ten U.S. cheese export destinations is a bit anomalous, since these countries also export considerable volumes of cheese to the U.S.—cheese sales to the U.S. exceeded cheese purchases from the U.S. for both countries in 2008. Imports from the U.S. were used mostly to supplement short domestic supplies in order to fill export sales orders.

U.S. butter exports were also dispersed, with Russia the largest buyer in 2008. Some other oil-rich countries also appear in the list of top ten U.S. butter markets.

FIGURE 4. Composition of U.S. Dairy Imports, 2008



Dairy Imports

Three product categories—cheese, casein products and MPC—represented more than 70 percent of the value of U.S. dairy imports in 2008 (Figure 4 and Table 4). While this product distribution is very similar to the past, Table 4 indicates some more than subtle differences. Note that the volume of cheese imports was down 14 percent from 2007 even though the value of cheese imports was up due to substantially higher prices. This continues a trend of declining cheese import tonnage dating to 2002. In large part, this trend is a product of import substitution—U.S. cheesemakers are producing more of the varieties that were once available only from overseas sources.

Casein import volume about matched 2007, but value was up due to higher prices. Imports of caseinates doubled in volume in 2008 but were up only 40 percent in value. For reasons that are not clear, the value of caseinates fell from about $7,000/MT in 2007 to $5,000/MT in 2008.

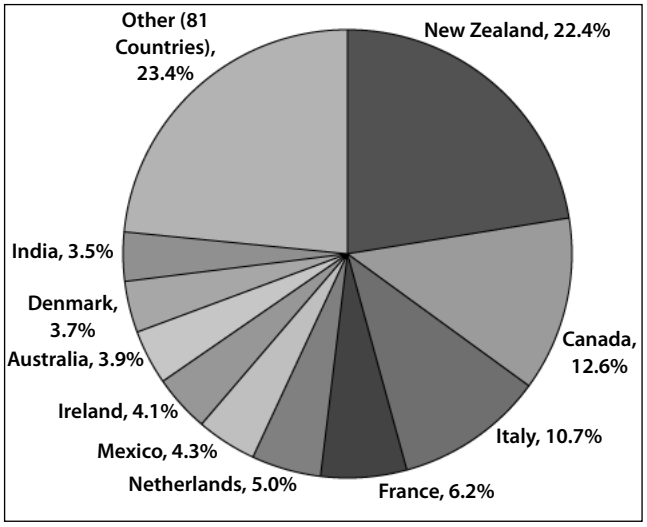
MPC imports were up marginally on volume in 2008, but the value of MPC imports was 31 percent higher. Butter imports dropped sharply from year-earlier levels.

Across all U.S. dairy imports in 2008, New Zealand was the largest supplier measured by value, accounting for nearly one-fourth of total import value (Figure 5). Canada was in second place, and the remaining top ten suppliers were five European Union (EU) member countries, Mexico, Australia, and India. Import concentration in 2008 was greater than export concentration, with the top ten sources supplying 76.6 percent of U.S. dairy imports compared to the top ten markets receiving 67.4 percent of total U.S. dairy exports. The

TABLE 4. U.S. Dairy Imports, Selected Items, 2007 and 2008

	2007		2008		Change	
Product	**MT**	**$1,000**	**MT**	**$1,000**	**Volume**	**Value**
Cheese, All	197,532	1,107,273	170,320	1,168,113	–13.8%	5.5%
Casein	59,896	365,035	58,353	465,650	–2.6%	27.6%
Caseinates	30,233	209,526	60,380	290,428	99.7%	38.6%
Milk Protein Concentrate	61,147	241,231	62,678	316,042	2.5%	31.0%
Butter/Butterfat	29,275	64,764	15,861	49,653	–45.8%	–23.3%

FIGURE 5. Sources of U.S. Dairy Imports, 2008



U.S. imported dairy products from 91 countries in 2008 compared to exports to 167 countries.

Among major dairy products, the EU dominated U.S. cheese imports, supplying about 70 percent of total import value (Table 5). The top 20 countries accounted for 96 percent of total U.S. cheese imports.

Note from Table 5 that there are major differences among countries in the per unit value of cheese shipped to the U.S. In a relative sense, most European cheese shipments are of higher-valued varieties, especially those from Italy (implied value of $4.41 per pound), Spain ($5.05 per pound), the UK ($4.39 per pound) and Switzerland ($4.34 per pound). In contrast, the implied value of shipments from South America and Oceania is typically less than $2.50 per pound, reflecting more generic varieties likely for institutional uses.

TABLE 5. Major Sources of U.S. Cheese Imports

Country	2008 Volume MT	2008 Value $1,000	% of Volume	% of Value	% Change in Volume 2007 vs 2008	% Change in Volume 2003 vs 2008
Italy	33,464	325,676	20.8%	29.1%	–8.5%	4.5%
France	18,196	154,132	11.3%	13.8%	–14.7%	–2.2%
Netherlands	10,574	71,833	6.6%	6.4%	–10.4%	–13.2%
Denmark	9,159	67,747	5.7%	6.0%	–21.6%	–39.0%
Switzerland	5,967	57,208	3.7%	5.1%	–10.1%	–13.6%
Argentina	11,783	54,246	7.3%	4.8%	73.7%	46.6%
New Zealand	17,686	48,757	11.0%	4.4%	–36.6%	–53.3%
Finland	8,816	45,312	5.5%	4.0%	–14.8%	10.3%
UK	4,472	43,329	2.8%	3.9%	–19.0%	–27.3%
Spain	3,819	42,520	2.4%	3.8%	10.1%	101.2%
Norway	7,744	40,593	4.8%	3.6%	–0.9%	10.1%
Ireland	4,846	29,508	3.0%	2.6%	–17.3%	–5.0%
Canada	4,100	27,638	2.5%	2.5%	0.0%	–18.3%
Australia	5,245	23,075	3.3%	2.1%	–56.9%	–51.1%
Greece	2,199	18,588	1.4%	1.7%	–21.1%	–1.6%
Mexico	3,345	17,284	2.1%	1.5%	13.2%	505.4%
Germany	2,339	16,300	1.5%	1.5%	–45.3%	–68.1%
Bulgaria	3,449	16,285	2.1%	1.5%	17.5%	14.7%
Poland	2,097	11,133	1.3%	1.0%	1.0%	–57.2%
Uruguay	1,851	9,569	1.1%	0.9%	0.0%	–52.0%
All Other	9,170	47,382	5.7%	4.2%	5.5%	–50.3%
Total	161,150	1,120,733	100.0%	100.0%	–14.7%	–18.0%

TABLE 6. Major Sources of U.S. Casein and MPC Imports

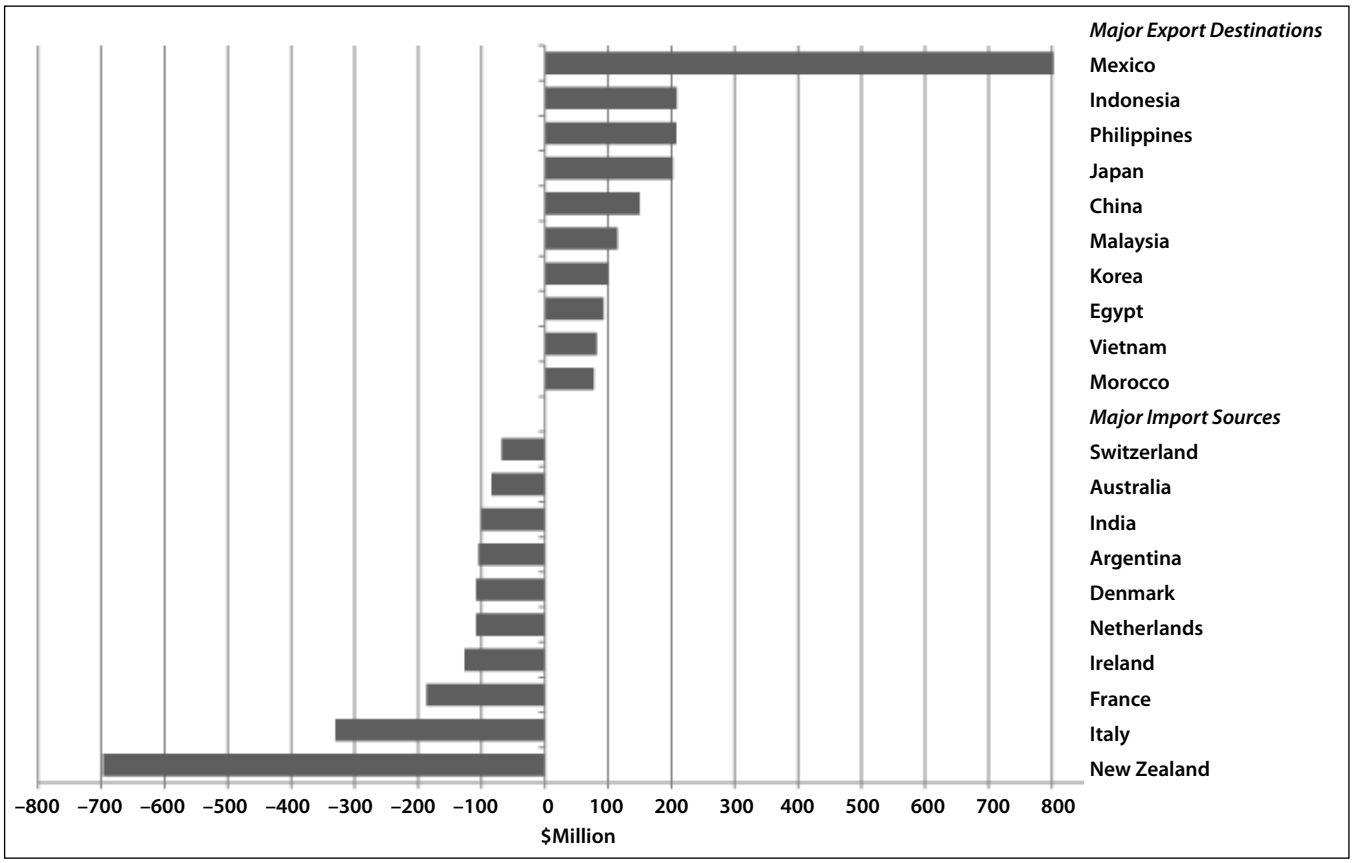
Country	2008 Imports		% of	% of	2008 v 2007	
	MT	$1,000	Volume	Value	% Chg in Volume	% Chg in Value
Casein/Caseinates:						
New Zealand	36,146	297,344	30.4%	39.3%	-18.2%	7.6%
India	12,212	106,695	10.3%	14.1%	-1.0%	26.4%
Ireland	8,787	80,653	7.4%	10.7%	15.5%	68.8%
Australia	4,292	32,072	3.6%	4.2%	26.5%	31.0%
Netherlands	16,675	66,670	14.0%	8.8%	219.3%	71.4%
Argentina	11,586	48,741	9.8%	6.4%	219.5%	76.2%
Poland	12,342	42,998	10.4%	5.7%	240.1%	91.7%
France	6,289	30,247	5.3%	4.0%	73.0%	108.9%
Germany	1,661	16,817	1.4%	2.2%	–5.2%	19.2%
China	1,340	9,117	1.1%	1.2%	–41.4%	–18.9%
All Other	7,404	24,718	6.2%	3.3%	201.2%	90.8%
Total	118,732	756,072	100.0%	100.0%	31.7%	31.6%
MPC:						
New Zealand	51,483	251,491	82.1%	79.6%	0.7%	36.9%
Australia	7,465	43,291	11.9%	13.7%	1.6%	10.7%
Ireland	1,136	12,897	1.8%	4.1%	–9.8%	17.3%
Canada	253	1,928	0.4%	0.6%	–28.4%	–18.8%
Netherlands	647	1,673	1.0%	0.5%	90.6%	244.2%
Singapore	224	1,504	0.4%	0.5%	4.7%	–8.1%
Argentina	426	898	0.7%	0.3%	—	—
India	494	711	0.8%	0.2%	1167.2%	264.6%
China	73	693	0.1%	0.2%	—	—
Germany	243	454	0.4%	0.1%	145.5%	121.5%
All Other	233	503	0.4%	0.1%	70.1%	–49.4%
Total	62,678	316,043	100.0%	100.0%	2.9%	31.9%

The last column of Table 5 shows longer-term trends in shipments by country. Total U.S. cheese imports in 2008 were down about 15 percent from 2007 and 18 percent from 2003. Cheese imports from Europe and Oceania have generally fallen proportionately more than the total decrease in tonnage. Imports from Mexico, while still small compared to U.S. cheese exports to Mexico, have increased 500 percent over the last five years. This reflects the growing Hispanic population in the U.S.

New Zealand dominates in U.S. imports of dry milk proteins, supplying 30 percent of the value of casein and caseinate imports and 82 percent of the value of MPC imports. India is the second leading supplier of imported casein/caseinates. Rounding out the top-ten supplier list are five EU countries (31 percent of total imports), Australia, Argentina and China.

MPC imports are much more concentrated than casein/caseinates. Only 6 percent of U.S. MPC imports came from countries other than New Zealand and Aus-

FIGURE 6. Major Export Destinations and Major Import Sources for U.S. Dairy Products, 2008



tralia in 2008. Both countries showed small gains in volume and large gains in value compared to 2007.

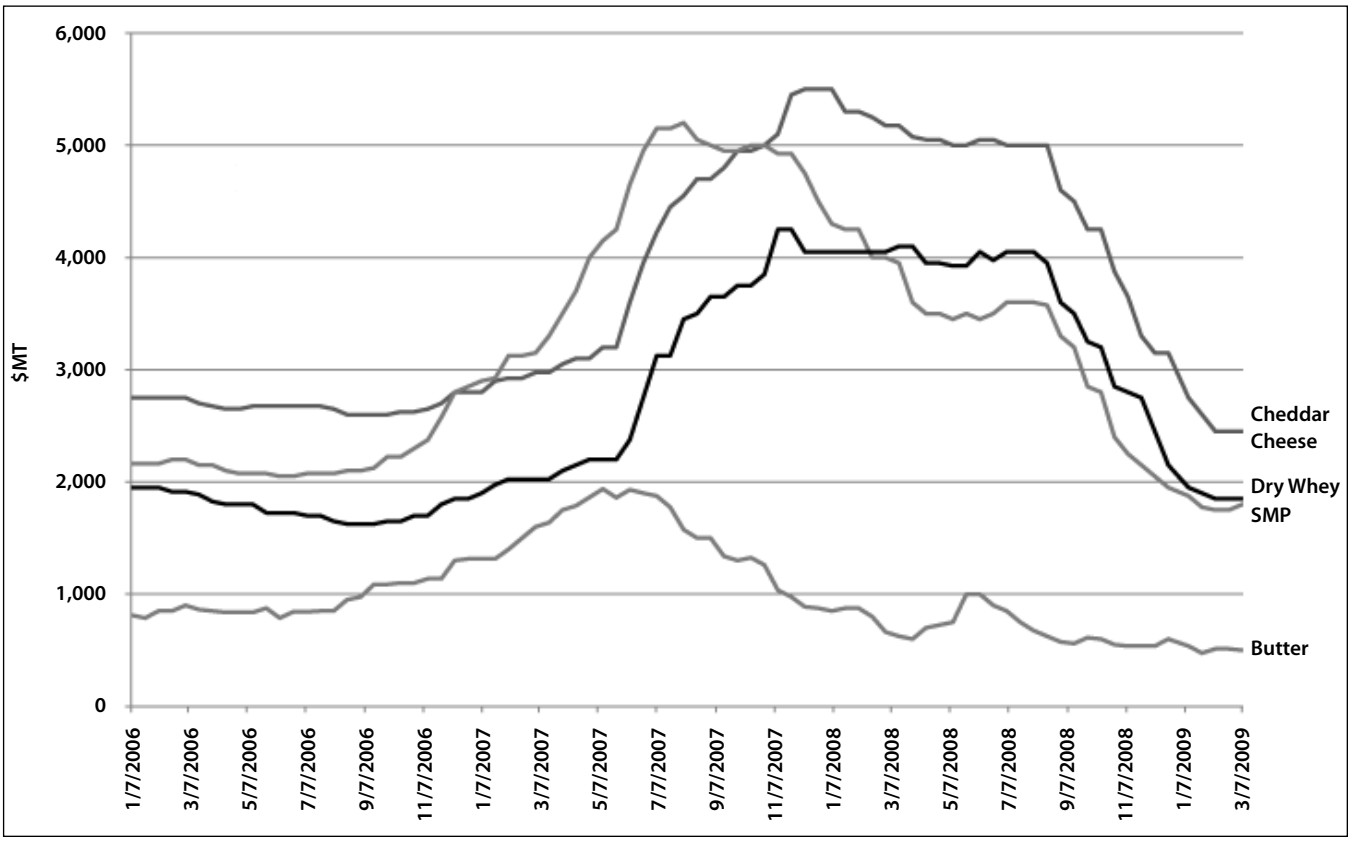
Summing up, U.S trade in dairy products is highly specialized from the standpoint of products and trading partners. With the exception of cheese, the U.S. does not export much of what it imports and vice versa. And, the U.S. does not generally export to the same countries that supply its dairy imports. Country specialization is demonstrated in Figure 6. Among the 10 countries for which the U.S. had the largest trade surplus in 2008, only Mexico and China recorded meaningful exports of dairy products to the U.S. Among the 10 countries for which the U.S. had the largest trade deficit, the U.S. exported dairy products only to Australia and the Netherlands, and these were primarily transshipments.

Recent Developments

As suggested earlier, world dairy markets hit the skids in the last quarter of 2008 (Figure 7). The slide began earliest for SMP, for which prices fell from near $5,000 per ton early in the year to $3,500 by mid year. Prices stabilized at that level briefly, but then began a freefall to under $2000 by the end the year. Cheese and butter prices stayed firm through late summer, but crashed by more than 50 percent by year-end. Whey prices were in the tank the entire year except for a short-lived rally in early summer and ended the year around the $500 mark.

The world dairy market price collapse was the product of sharply reduced demand combined with increased milk supply. The biggest demand-side factor was the world financial crises that began in the third quarter of 2008. Global economic recession and unprecedented stock markets losses cut wealth, incomes, and employment—all leading to diminished demand for dairy products. The wealth effect was most pronounced in oil-producing countries like Russia and Mexico, which had boosted imports of dairy products before oil prices crashed.

FIGURE 7. International Dairy Prices



Note: Oceania for Cheese, SMP and Butter; W. Europe for Dry Whey

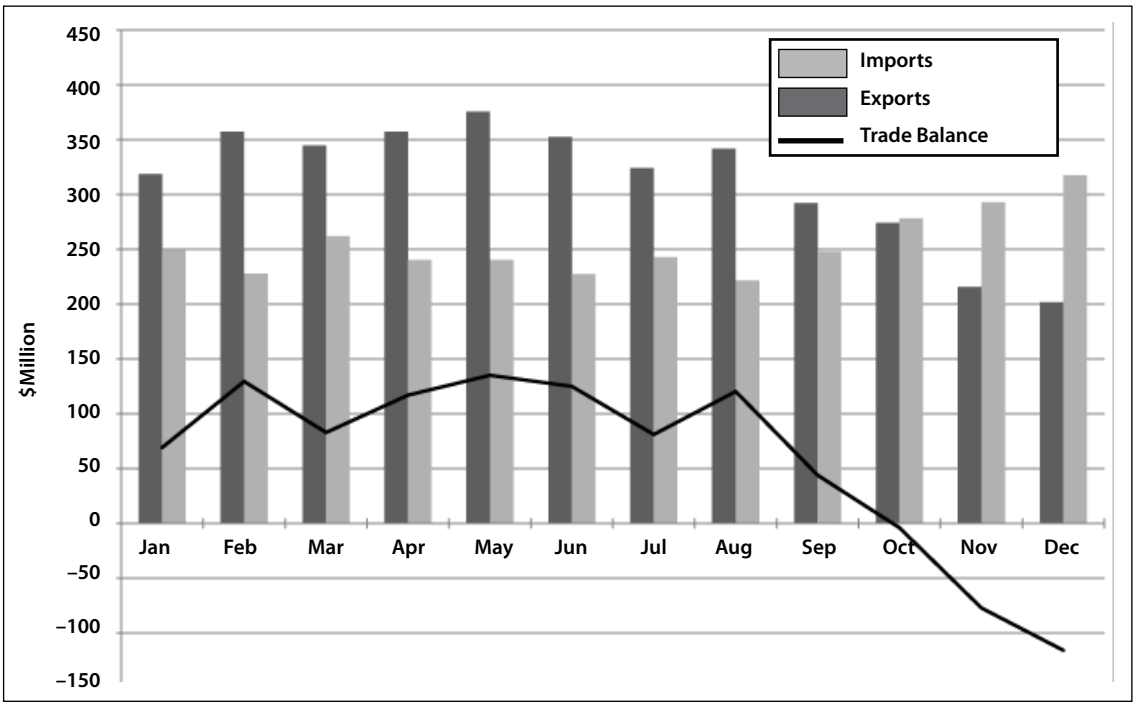
Compounding the negative effects of recession on demand was the melamine contamination debacle in China. Consumers in East and Southeast Asian countries—big markets for U.S. SMP and whey—became wary of dairy products regardless of source.

On the supply side, New Zealand recovered from weather-related milk production shortfalls in the 2007-08 marketing year, showing year-over-year production gains of 8 percent by mid-year. The EU elevated milk production quotas by 2 percent for the marketing year beginning April 1. With attractive milk prices early in the year, some countries took advantage of this opportunity to produce more milk. Similarly, milk production in the U.S. increased in response to historically high milk prices in 2007 and much of 2008.

With more milk being produced and smaller world demand for dairy products, surpluses were inevitable. These showed up as growing stocks of storable dairy products, especially SMP, WMP, cheese and butter. To clear storehouses, suppliers cut prices again and again, but takers were few in light of depressed demand conditions. The U.S. began federal purchases of SMP in the fall, and early in 2009, the EU reinstated export restitutions (subsidies) on milk powders, butter and cheese.

The effect of collapsing world dairy markets on U.S. trade is illustrated in Figure 8. After eight months of dairy trade surpluses in the range of $75–$135 million per month, the surplus fell to $50 million in September and steadily declined to more than a $100 million deficit by year end. Accustomed to selling more than 10 percent of its milk supply overseas, the U.S. saw products that were previously destined for export add to domestic supplies that needed to be sold to a population suffering from severe recession. Not surprisingly, milk prices plummeted as the industry struggled to cut supply not only to accommodate sluggish domestic demand but also a massive loss in export sales.

FIGURE 8. Value of U.S. Dairy Trade by Month, 2008



U.S. Trade Prospects for 2009[3]

The outlook for world dairy trade in 2009 is, in a word, unclear. What happens depends on how rapidly world dairy product demand and world milk supply adjust to achieve a sustainable equilibrium milk price. But while this obvious prognostication can be simply stated, sorting through the complexities that will determine demand and supply adjustments in 2009 is not simple.

The principal factors affecting dairy demand are price and income. Wholesale prices for dairy products have fallen rapidly and deeply, but in many cases, lower wholesale prices have not been fully reflected in correspondingly lower prices to consumers. If and when that happens, lower retail prices will stimulate demand. However, this positive price effect will be countered by a negative income effect that may be larger than the price effect, especially in developing countries where consumers of dairy products view them as luxury goods rather than dietary staples.

The global economic outlook remains volatile and most of the major world economies are in recession. USDA gloomily forecasts that, "for the first time in over 40 years, consumer spending is expected to shrink in all major developed countries in 2009 as the world recession has spread to parts of Asia and most of Latin America." [7, p. 2]. Forecast annual percentage decreases in GDP for major countries include the United States (–2.2 to –2.8), Germany (–3.0), France (–2.5), Korea (-5.0), Japan (–4.5 to –5.0), Argentina and Brazil (–0.5) and Mexico (–2.0 to –2.5). The only major economies expected to show GDP growth are China (+5.0 to +5.5 percent) and India (+3.5 percent). But GDP growth in these countries does not translate into stronger demand for dairy imports. Chinese demand will continue to be negatively affected by the 2008 melamine contamination event and India maintains highly-restrictive import barriers to protect its domestic dairy industry.

Since dairy product export sales are denominated in U.S. dollars, world market prices are affected by U.S.

[3] The observations in this section represent an amalgamation of outlook information from several sources, including [1], [5], [7], [9], [10] and [20]. Specific citations are provided only for direct quotes.

dollar exchange rates. A stronger dollar raises the price of imported dairy products in terms of local currencies regardless of the import source and vice versa. USDA forecasts that the U.S. dollar will weaken against the yen, yuan and euro in 2009 but strengthen by 10 percent against the Canadian dollar and 15 percent against the Mexican peso. Mexico and Canada are the two largest markets for U.S. dairy exports.

Supply decreases or moderated increases are occurring in most major dairy countries. Despite a second year of increased quotas in 2009, the EU will likely show, at most, no change in milk production over 2008. According to the European Dairy Association, ". . . a considerable decline cannot be ruled out." [9, p. 5]. In the U.S., USDA is currently (March 11) forecasting 2009 milk production of 188.5 billion pounds, 1 percent under 2008. [20, p. 33]. USDA's 2009 milk production forecast has declined by 3 billion pounds since November 2008. New Zealand milk production for the marketing year ending May 31, 2009, was earlier expected to be up by 8 percent from 2007–08, but more recent forecasts place the gain closer to 5 percent. Australia is expected to show about a 2 percent gain for its marketing year ending June 30, 2009.

USDA forecasts that China will produce 5.3 percent more milk in 2009 than last year. While a significant increase, this is well below the 10–20 percent annual increases shown earlier in the decade. USDA forecasts India's milk production will grow by a historically modest 2.5 percent. In December 2008, USDA expected Argentina and Brazil to increase milk production by 3 and 5 percent, respectively, this year, but much lower milk prices in these countries since this forecast have undoubtedly diminished growth incentives.

A reasonable forecast is for 0–1 percent growth in world milk production in 2009, with a likely negative aggregate rate of growth across major exporting countries (Oceania, the European Union and the United States). With supply stable, the question becomes one of how much the demand-stimulating effect of current bargain basement dairy product prices will offset the negative income effects on demand.

For the U.S., 2009 dairy trade prospects are pessimistic, at least in comparison to the previous two years. Reported formal and informal estimates of the percentage reduction from 2008 range from 25–50 percent. USDA's "official" forecast is for a 33 percent reduction in FY09. Fiscal year 2009 includes January-September of 2009 and October–December of 2008. Assuming that the fourth quarter of 2009 will show slightly lower exports than the fourth quarter of 2008 suggests a calendar year 2009 reduction of about 35 percent. This would put 2009 dairy exports at about $2.5 billion. While certainly discouraging relative to 2007 and 2008 exports, this would be $700 million more than what the U.S. exported in 2006.

DAIRY TRADE POLICY DEVELOPMENTS

Dairy trade policy and other agricultural trade issues sat idly on the back burner in the spring of 2009. Partly this was the result of yet another collapse in July 2008 of WTO trade negotiations under the Doha Round trade talks which began in 2001. In addition, trade issues were largely dormant because the Obama Administration chose not to add major trade policy issues to its action agenda while considering measures to deal with the global recession, health care reform, energy policy reform, and education reform. Indeed, measures to deal with the recession may crowd out most other issues on the President's agenda for next few months.

Agricultural trade policies can probably run satisfactorily on autopilot for the next year. WTO members will adhere to agreements made under the Uruguay Round and honor commitments reached under the WTO's dispute settlement machinery. But complete neglect of trade policy risks fostering widespread agricultural protectionism. This would harm long-term exporting prospects for the efficient U.S. agricultural sector. Moreover, rising protectionism could be especially damaging to the U.S. dairy industry now that the industry is no longer a bit player in export markets and has established exporting connections needed to become a regular, dependable supplier of dairy products for foreign customers.

Collapse of the Doha Round Negotiations

What caused the latest collapse in Doha Round WTO negotiations at the Geneva, Switzerland mini-ministerial in July 2008? As usual, a host of complex issues relating to market access and price and income support in agriculture contributed to the collapse. One big issue surfaced. The European Union (EU), Brazil, India, and a number of developing countries exhorted the U.S. to reduce trade-distorting domestic support for farm products and lower border protection. The U.S. agreed to some of those demands. Consequently, optimistic comments emerged from the negotiations about a possible Doha Round agreement on agriculture. It is not clear whether this optimism was warranted. While the U.S. apparently had agreed to a number of demands, the country's negotiators remained unsatisfied with increases in market access that the U.S. would gain in return for the concessions.

Perhaps surprisingly, the negotiations ultimately stalled in late July 2008 mainly over a smaller issue—failure of the U.S., India and China to agree on special safeguard provisions. The special safeguards would allow tariff increases in India, China and other developing countries to protect farmers from impacts of import surges or other developments that push down prices. The U.S. argued that the bar proposed by India and China was set too low and would allow tariff increases after small price reductions such as those that occur when prices fall seasonally by larger than normal amounts.

Few tears were shed in the U.S. agricultural sector over the collapse in negotiations. Jaime Castaneda, Senior Vice President of Government Relations and Trade Policy representing the National Milk Producers Federation and the U.S. Dairy Export Council, expressed comments similar to those heard from others in U.S. agriculture after previous collapses in Doha Round negotiations, namely that ". . . It's better to have no deal than a bad deal [4]." This attitude reflects, in part, dissatisfaction with results of the Uruguay Round of WTO negotiations. Many in the U.S. agricultural sector had counted on gaining substantial additional market access under the Uruguay Round, but found that Brazil made the biggest gains in market share.

After the collapse of negotiations in July 2008, Pascal Lamy, Director General of the WTO, and many WTO members expressed a desire to continue negotiations and preserve the progress made under the Doha Round in agriculture and other areas. Lamy is particularly concerned about a rise in protectionism in the absence of a Doha Round Agreement.

This is not an idle concern. Protectionism is emerging in different forms in a number of countries [8,15]. Vietnam raised import tariffs on dairy products in early March, 2009. In addition, "buy local" measures have emerged in the U.S. (under the $787 billion economic stimulus package), Indonesia, Malaysia, and China. Country and place of origin labeling requirements, which can function as non-tariff barriers, are finding increased use in the U.S. and Europe.

The Impact of Unused Entitlements

Lamy believes that protectionism may rise in the absence of a new WTO agreement in part because of unused entitlements. He expressed these concerns to a Canberra, Australia group as follows [15]:

> *Many countries were contemplating increasing tariffs and subsidies to protect farmers from falling prices stemming from the global economic downturn. Countries could more than double their agricultural tariffs because current WTO rules entitled them to apply higher rates.*

Lamy's comment refers in part to the fact that many countries are currently applying agricultural tariffs that are substantially lower than the bound tariffs WTO members agreed to under the Uruguay Round of WTO negotiations. These countries could raise those tariffs to protect domestic industries during the global recession.

The world dairy industry experienced the impact of implementation of an unused entitlement by the EU in January 2009. Beginning in mid-2007, the operation of the EU farm milk quota system and strong global demand for dairy products had largely eliminated the need for intervention purchases of domestic dairy product prices and use of EU dairy export subsidies. This changed in January 2009 when the European Commission announced that in response to a fall in EU dairy product prices to levels below established

intervention levels, EU dairy price supports and export subsidies would be reactivated for a period of three to six months [17].

EU Agriculture Commissioner, Mariann Fischer Boel, commented on the European Commission's action to resurrect dairy export subsidies, as follows [18]:

> *What we are doing is well within the limits imposed on us by the World Trade Organization . . . These measures are a temporary response to a critical situation on the EU dairy market . . .*

These comments from Fischer Boel undoubtedly were not encouraging to countries that do not subsidize dairy exports. First, WTO limits on EU exports of subsidized dairy exports are large (Table 7). Secondly, there is no end date for the use of export subsidies, only the promise that they will end when no longer needed. Thus, given the depressed state of international dairy markets, they could operate for an extended period and not necessarily for only three to six months.

The EU action underscores the problem with unused entitlements. WTO negotiators agreed during the Hong Kong Ministerial meetings in 2005 to end agricultural export subsidies by 2013 [19]. But since nothing under the Doha Round is final until all issues are settled, the authorized export subsidies remain available for use by WTO members.

The quantities of EU dairy products that will be exported with subsidy as a result of recent EU action are unclear. However, EU export subsidies have long been criticized because they dump problems caused by EU dairy surpluses onto the world market and cause sharp reductions in international dairy product prices. The price reductions traceable to export subsidies can be dramatic. For example, when EU dairy export subsidies were widely used in the early to mid-1990s, world prices for dairy products tended to decline to the EU intervention prices for dairy products minus the EU export subsidy [2].

How much the subsidized exports of EU dairy products will depress prices for dairy products on international dairy markets in the near future is unknown. But it is obvious that the EU is a big player in international dairy markets and could potentially depress international prices for dairy products sharply through use of export subsidies. Among major dairy exporting countries, the EU had 40 percent and 27 percent market shares, respectively, for cheese and whole milk powder in 2008. Moreover, the EU is authorized under the WTO to export with subsidy quantities of dairy products equivalent to all or a large share of EU 2008 dairy exports (Table 8).

The EU's resurrection of dairy export subsidies also invited renewed use of the USDA's Dairy Export Incentive Program (DEIP) subsidies. The activation of the DEIP, which took place in late May 2009, will partially counter effects of the EU dairy export subsidies and help to increase U.S. dairy farmer incomes. The USDA announced that the DEIP exports will be permitted for the full annual amounts authorized by the WTO.

If the Doha Round WTO negotiations are satisfactorily completed (and the provisions agreed to in the 2005 Hong Kong Ministerial meetings are retained), then trade-distorting developments associated with

TABLE 7. Annual Dairy Export Subsidy Limits Authorized Under the WTO

Product	EU-27	U.S	U.S. as
	1,000 MT		% of EU
Skim milk powder	323.4	68.2	21.1%
Whole milk powder	232.3	0.0	0.0
Cheese	331.7	3.0	0.9
Butter	411.6	21.1	5.1

Sources: Berry, Dobson [3,6].

TABLE 8. EU Dairy Exports, Export Market Share, and EU WTO Export Subsidy Limits as Percent of Total EU Dairy Exports, 2008

Product	EU Exports (1000 MT)	EU Exports as % of Total Major Country Exports	EU WTO Limits as % of 2008 Dairy Exports
Skim Milk Powder	180	16.4%	179.7%
Whole Milk Powder	400	27.0	58.1
Cheese	510	40.4	65.0
Butter	125	18.4	329.3

Source: USDA-FAS [10].

dairy export subsidies would eventually end. However, dairy and other export subsidies would not be completely eliminated until 2013. It is uncertain how much completion of the Doha Round would lessen other trade distorting practices, e.g., trade-distorting domestic support and border protection, since many special safeguards and differential tariff arrangements for developed and developing countries likely would be included in the agreement.

While there could be important benefits from completing the Doha Round negotiations, it is uncertain whether the agreement can ever be reached. After all, the Doha Round trade ministerials, mini-ministerials or negotiating sessions held in Cancun, Mexico (2003), Geneva, Switzerland (2004), Paris, France (2005), Hong Kong, China (2005), Geneva, Switzerland (2006), Potsdam, Germany (2007), and Geneva, Switzerland (2008) ended in collapse of negotiations or stalemates [20]. This is not an encouraging record. Irreconcilable differences may exist between the different power blocs, that cannot be resolved. Moreover, big players such as the U.S., EU, India, Brazil, and China seem to be in no hurry to agree to proposals similar to those that have been advanced to date.

Many analysts forecast an increase in bilateral and regional trade agreements if the Doha Round negations fail. The number of these agreements in force in the world exceeds 200 and an additional 70 are under negotiation or consideration [12, p. 3]. Critics of bilateral and regional agreements argue that the WTO system is more transparent and more predictable than the "spaghetti bowl" created by the hundreds of overlapping bilateral or regional agreements that generate uncertainty for exporters. While there may be some truth to this claim, it is probably too sweeping. The North American Free Trade Agreement (NAFTA), for example, appears to have created efficiencies and trade expansion while generating little uncertainty for agricultural exporters.

Future Trade Policies under the Obama Administration

A number of factors suggest that the Obama Administration will delay consideration of major trade policy initiatives until 2010 or later. Moreover, since the U.S. is a major player in WTO negotiations, not much of substance is likely to be completed under the Doha Round for a year or more. In part, the delays in the Doha Round negotiations will occur because President Obama lacks Trade Promotion Authority (fast-track negotiating authority). Fast-track negotiating authority requires the U.S. Congress to give an up or down vote on a trade agreement without tinkering with the provisions. And WTO members are reluctant to complete negotiations with the U.S. on a trade agreement if the President lacks this authority. At some point, President Obama plans to meet with Congressional leaders to assess how his Administration might obtain limited fast-track negotiating authority to complete Doha Round negotiations and possibly initiate other trade negotiations.

Three pending bilateral trade agreements negotiated by the Bush Administration—those for Panama, Colombia and South Korea—eventually may be pushed forward for a Congressional vote by the Obama Administration. President Obama has indicated he favors Congressional votes in the near future on the Panama agreement. However, the Colombia and South Korea agreements will require modifications before they would be acceptable to the Obama Administration and the Congress. Labor union support is presently lacking for the Colombia and South Korea agreements. Also, the U.S. auto industry opposes the South Korea agreement. While movement on these agreements might signal willingness on the part of the Obama Administration to push bilateral trade agreements, the three agreements, if approved, would have little effect on U.S. dairy trade.

The Bush Administration was involved in negotiations in 2008 on a Trans-Pacific Free Trade Agreement that initially would have included New Zealand, Singapore, Chile and Brunei and could have been expanded to include additional Pacific countries. The National Milk Producers Federation (NMPF) opposed the agreement mainly because it could have permitted New Zealand, a low-cost producer and the world's largest dairy exporter, to gain substantial additional access to the U.S. dairy market [16]. The NMPF argued that if the Trans-Pacific agreement was pursued, dairy products should be excluded from the agreement. The dairy issues raised by the NMPF appear moot since it is unlikely that the Trans-Pacific Trade Agreement will be pursued by the Obama Administration.

The Obama Administration has issued a trade policy paper. This paper indicates that the Administration will emphasize environmental issues and worker standards in future trade agreements. A related priority identified in the paper calls for the U.S. government to help U.S. workers adjust to changes in the global economy.

In the 2008 Presidential campaign, candidate Obama indicated that he might push for renegotiation of the NAFTA to include additional environmental and labor standard provisions. That initiative, which could have reduced U.S. exports of dairy products and other agricultural products, now appears unlikely to be pursued.

However, controversies involving the U.S. and Mexico relating to the NAFTA arose in the spring of 2009. Mexico increased tariffs on 89 U.S. exports to Mexico by 10 to 45 percent in retaliation for the U.S. shutdown of a pilot program that allowed some Mexican trucks to operate on U.S. highways. Mexico regarded the U.S. action on trucks as a violation of the NAFTA. Few, if any, U.S. dairy products were included among the products for which the higher Mexican tariffs were levied.

The information made available so far gives only limited insights about the Obama Administration's position on the Doha Round Agreement and future bilateral and regional trade agreements. President Obama has appointed former Dallas Mayor, Ron Kirk, as the U.S. Trade Representative. Kirk is a supporter of the NAFTA and has been described by some industry groups as an advocate of U.S. trade expansion. However, whether trade expansion becomes a policy of the Obama Administration is yet to be determined.

In summary, over the next year or two, at least, new trade agreements are unlikely to have much impact on the U.S. dairy industry. This is probably not a good development for the efficient and increasingly export-oriented U.S. dairy industry.

REFERENCES

1. Australian Bureau of Agricultural Economics, *Australian Commodities,* Vol. 16, No. 1, March 2009.
2. Australian Dairy Corporation, *1994 Dairy Compendium,* p. 72.
3. Berry, P., *Australian Commodities, Dairy Outlook to 2013–14*, March 2009 quarter, volume 16, No. 1. http://www.abare.gov.au/interactive/09ac_mar/htm/dairy.htm.
4. Castaneda, J., "While Disappointed in Fate of WTO Talks, NMFP & USDEC Praise U.S. Trade Negotiators' Pursuit of Equity from Trading Partners," Statement Released July 29, 2008. http://www.nmpf.org/node/397/print.
5. Dairy Australia, *Dairy 2009 Situation and Outlook, January 2009 Update,* http://www.dairyaustralia.com.au/~/media/Publications/Situation%20and%20Outlook/2009/January%202009%20Update.ashx.
6. Dobson, W.D., *Doha Round of WTO Negotiations: Framework for Agricultural Modalities Contains Less Than Meets the Eye,* Babcock Institute International Dairy Note, April 2005.
7. Economic Research Service, USDA, *Outlook for U.S. Agricultural Trade, AES-61,* February 2009.
8. The Economist, "Business in Asia, The Next Great Wall," March 14, 2009, pp. 67–68.
9. European Dairy Association, *Major Issues,* No. 18, Second Semester 2008, http://www.euromilk.org/upload/docs/EDA/MI%2018_website.pdf.
10. Foreign Agricultural Service, USDA, *Dairy: World Markets and Trade,* December 2008.
11. Foreign Agricultural Service, USDA, U.S. Trade Internet System http://www.fas.usda.gov/ustrade.
12. Gonzalez, C.C., Discussion Paper Presented at Annual 2008 Session of the Parliamentary Conference on the WTO, Geneva, Switzerland, September 11–12, 2008.
13. International Centre for Trade and Sustainable Development, *Obama Trade Agenda Cites 'Imbalance' in Doha Talks, Urges Focus on Environment, Labour Standards,* Volume 13, No. 8, March 4, 2009. http://ictsd.net/i/news/bridgesweekly/42281.

14. Jesse, E.V. and W.D. Dobson, *U.S. Dairy Trade Situation and Outlook 2008,* Discussion Paper No. 2008-2, Babcock Institute for International Dairy Research and Development, March 2008.
15. McGuirk, R., "WTO Boss Urges U.S. Not to Backpedal on Trade," March 3, 2009. http://www.google.com/hostednews/ap/article/ALeqM5iVb3s3wTUNdlj5wsNL.
16. National Milk Producers Federation, "NMPF to Fight Inclusion of Dairy Products in Proposed Free Trade Agreement with New Zealand," September 22, 2008. http://www.nmpf.org/node/412/print.
17. Reuters, "EU Experts Agree on Dairy Export Subsidies, Set Rates," January 23, 2009.
18. Weekly Times, "Europe Must Come First: Fischer Boel," Interview conducted by Weekly Times staff reported on January 28, 2009. http://www.weeklytimesnow.com.au/article/2009/01/28/46511.
19. Wikipedia, "Doha Development Round," last modified March 3, 2009. http://en.wikipedia.org/wiki/Doha_Round.
20. World Agricultural Outlook Board, USDA, World Agricultural Supply and Demand Estimates, WASDE-468, March 2009.