

How U.S. dairy processing has evolved and where is it going?

Corey Geiger | CoBank | cgeiger@cobank.com

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U.S. Dairy Production and Processing Continues to Evolve

By Corey Geiger

The author is the Lead Economist for Dairy with CoBank,
a member of the Farm Credit System.

Contact: Corey Geiger

CoBank

Cell Phone: (920) 650-0294

Email: cgeiger@cobank.com

The dairy product category is dynamic and growing with over \$76 billion in annual U.S. sales, making it the largest category in retail, according to recent Circana sales data. However, these dairy product sales look much different than in generations past. U.S. fluid milk sales in 2023 receded to 42.8 billion pounds, levels not seen since 1954 when the U.S. population was less than half it is today. However, that slide did subside in 2024 when fluid sales grew by 0.5% relative to 2023, and this shift marked the first year that the category grew since 2009.

Despite fluid milk sales slippage, the dairy category continues to grow because over 80% of U.S. farmgate milk now goes into manufactured dairy products such as cheese, whey, butter, nonfat dry milk, yogurt, ice cream and other products that depend heavily on milk components, not the fluid portion. These shifting tides mean that milk solids, not milk volume, matter more to dairy processors as consumers are more likely to eat than drink their dairy.

U.S. domestic markets aren't the only category experiencing seismic shifts. These days U.S. dairy product export sales represent a growing category that now accounts for 16% to 18% of the U.S. milk supply on an annual basis. This market was virtually nonexistent prior to 1995. Manufactured dairy products dominate these export opportunities and create more demand for milk components.

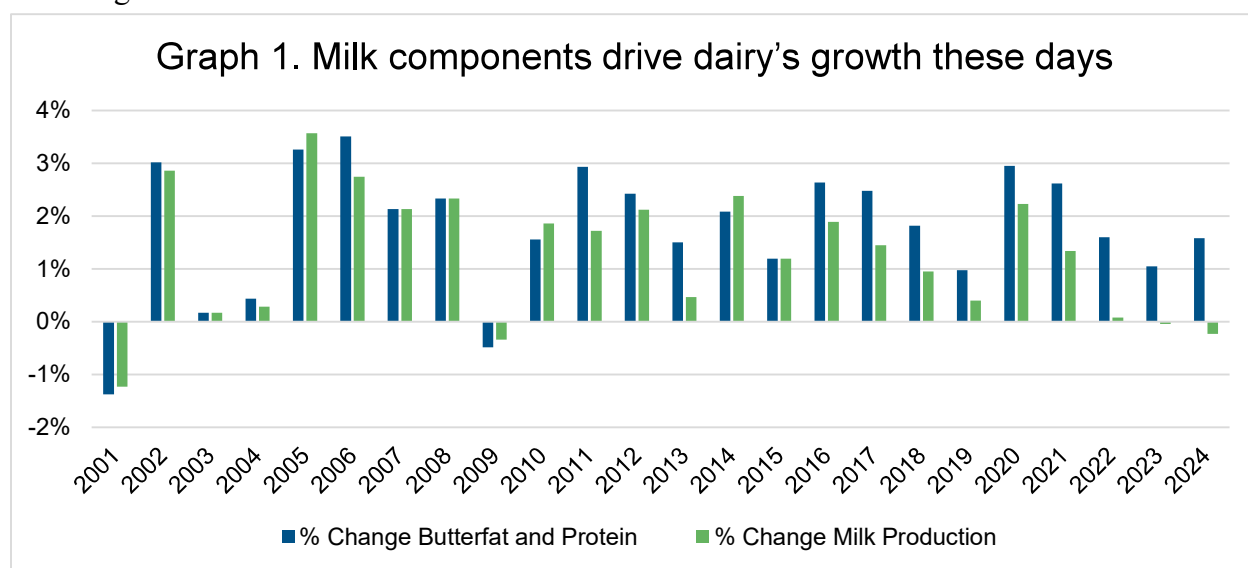
Opportunities for growth both home and abroad are among the reasons domestic and international dairy processors are investing over \$8 billion in new dairy processing assets in the coming years. Nearly all projections had forecasted that the U.S. would have more growth upside when compared to the world's two other major dairy product exporters – New Zealand and the European Union.

While nearly everyone in the industry forecasted that U.S. milk production would keep growing, milk production began stalling in 2022 and has held relatively flat ever since. Yet, the U.S. continues to produce more manufactured dairy products with each passing year to meet consumer demand for products with higher butterfat and protein levels. That's possible because milk from the nation's dairy farms yields more dairy products annually due to higher concentrations of protein and butterfat. Given this trend, the industry needs more reliable data to account for farmgate milk. It's also critically important for processors' planning.

Milk volume and components were once synonymous

USDA released its first Milk Production report in 1924, and it's been a guide for dairy farmers, processors, marketers and retailers alike to track milk supplies and project potential dairy product output and price expectations. As the industry continued to grow, butterfat composition was largely an afterthought. Butterfat levels held extremely consistent from 3.65% to 3.69% from 1966 to 2010. If milk volumes went up, so did butterfat, and that meant growth in milk and butterfat production were synonymous for six-plus decades.

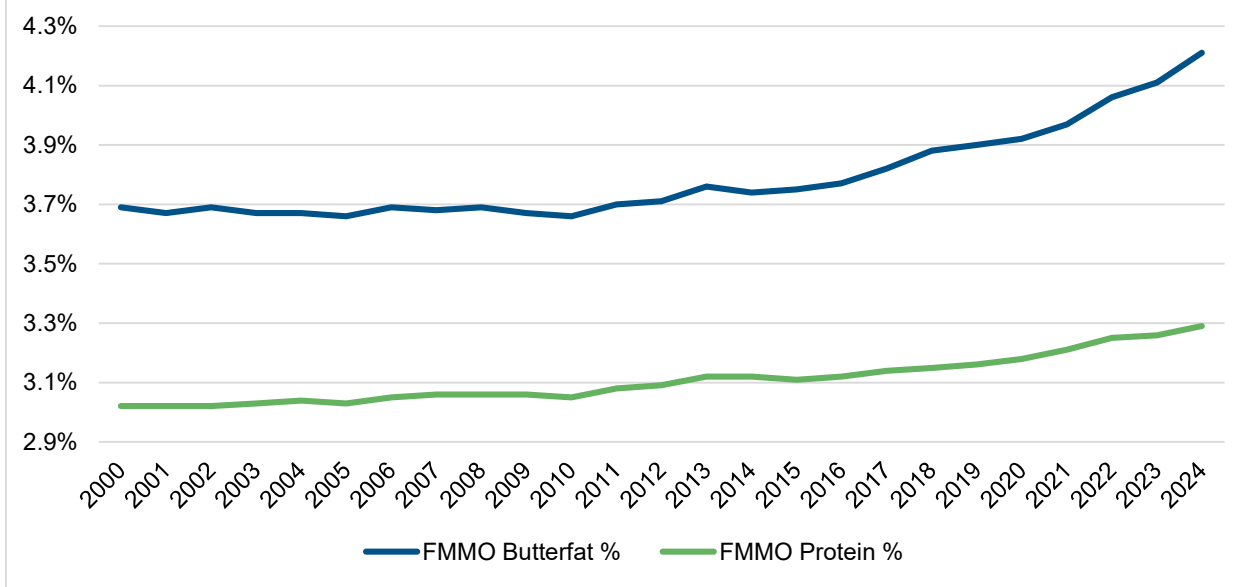
While protein reporting didn't come on the scene until the late 1970s, those levels largely followed butterfat patterns. The nation's collective bulk tank of milk yielded the same dairy product numbers for every hundredweight (cwt.) of milk because solids levels remained steady. The industry's reporting metrics continued to hum along into the new century (Graph 1). Shifts in both milk production and milk solids mirrored one another, with annual percentage changes matching as if identical twins.



However, those “twins” started growing at different rates as the butterfat and protein portion in milk solids production began to outpace milk production in 2011. Since then, milk component production failed to surpass milk production in only two years -- in 2014 and 2015 butterfat and protein percentages were essentially flat.

That's just the beginning of the unfolding story. Butterfat and protein levels in farmgate milk climbed significantly during the ensuing years. Butterfat moved from 3.70% in 2011 to 4.23% by 2024, according to data from USDA's National Agricultural Statistics Service (NASS) (Graph 2). Likewise, protein levels in Federal Milk Marketing Orders (FMMOs) using Multiple Component Pricing (MCP) climbed from 3.08% to 3.29% during the same time span according to USDA's Agricultural Marketing Service (AMS) gathered via the FMMO system.

Graph 2. Growing butterfat and protein percentages are fueling component gains

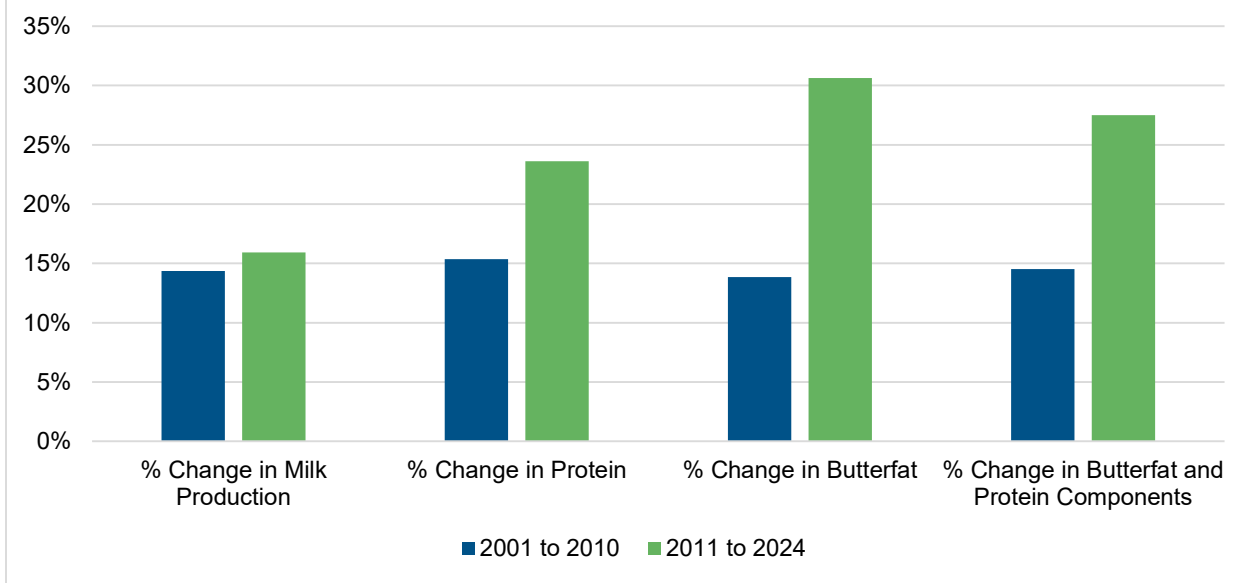


In addition to butterfat and protein, a third category of milk components 6.0 is reported as “other solids” on milk checks, in processing plant data and in FMMO reports. The other solids portion of milk includes lactose and important minerals such as calcium and phosphorus. In current markets, lactose has far lower value than butterfat and protein and accounts for about 5% of milk check revenue. Additionally, the other solids category held in a narrow range, from 5.69% to 5.78% from 2000 to 2024. The other solids category made little impact on the growth in milk solids, according to USDA-AMS data.

Butterfat and protein propel dairy’s growth

Taking a step back from annual comparisons and looking at a wider multi-year observation illustrates just how much has changed since 2010. From 2000 to 2010, productivity gains for milk, butterfat and protein held in a tight window ranging from 13.8% to 15.4% (Graph 3). During the next 14 years, from 2011 to 2024, milk grew just 15.9%. But for components, the story took a dramatic turn: Protein jumped by 23.6% and butter catapulted by 30.6%.

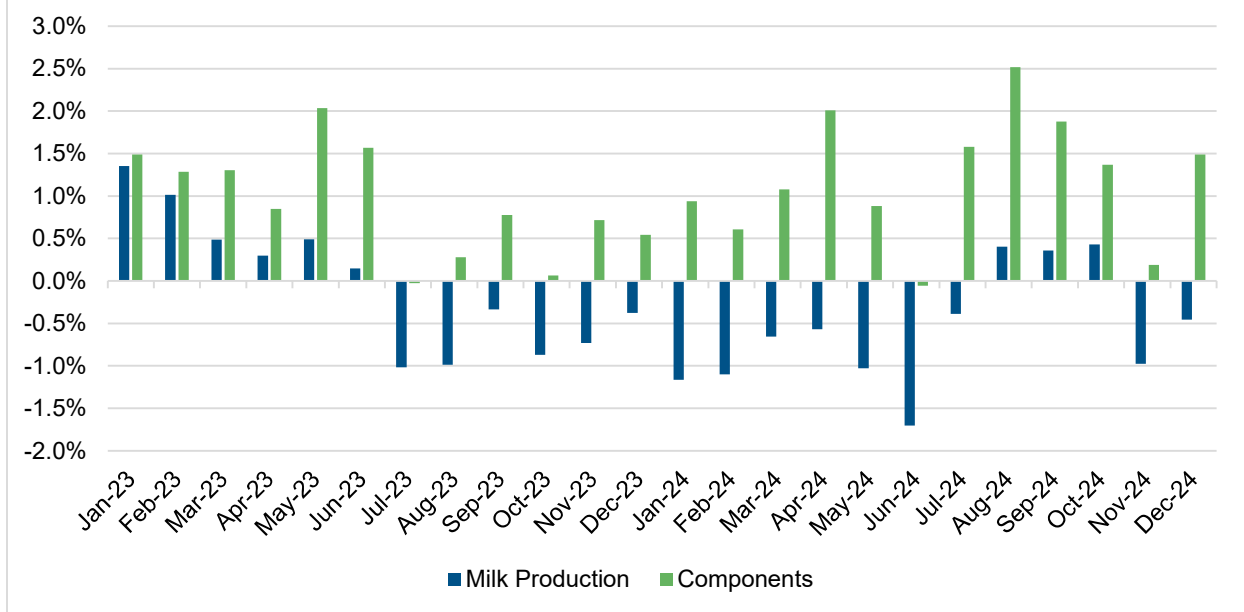
Graph 3. Butterfat and protein are pivotal to dairy's production growth



Like a long train descending a steep mountain pass, these component trends have continued picking up momentum despite stalled farmgate milk production in the past two years. That's important because U.S. milk production finished down two straight years. This made the 2023-to-2024-time span the first time since the late 1960s that U.S. milk output declined for back-to-back years. However, milk moving from farm to processor looks vastly different than those days as it contains far more solids. That's why U.S. dairy product output continues to grow.

The trend is accelerating, as U.S. milk production was down for 13 consecutive months from July 2023 to July 2024 (Graph 4). While that would have been alarming decades ago, milk component production grew in 11 of those 13 months largely due to growing butterfat and protein percentages in the shipped milk, which are multiplied into more pounds of components.

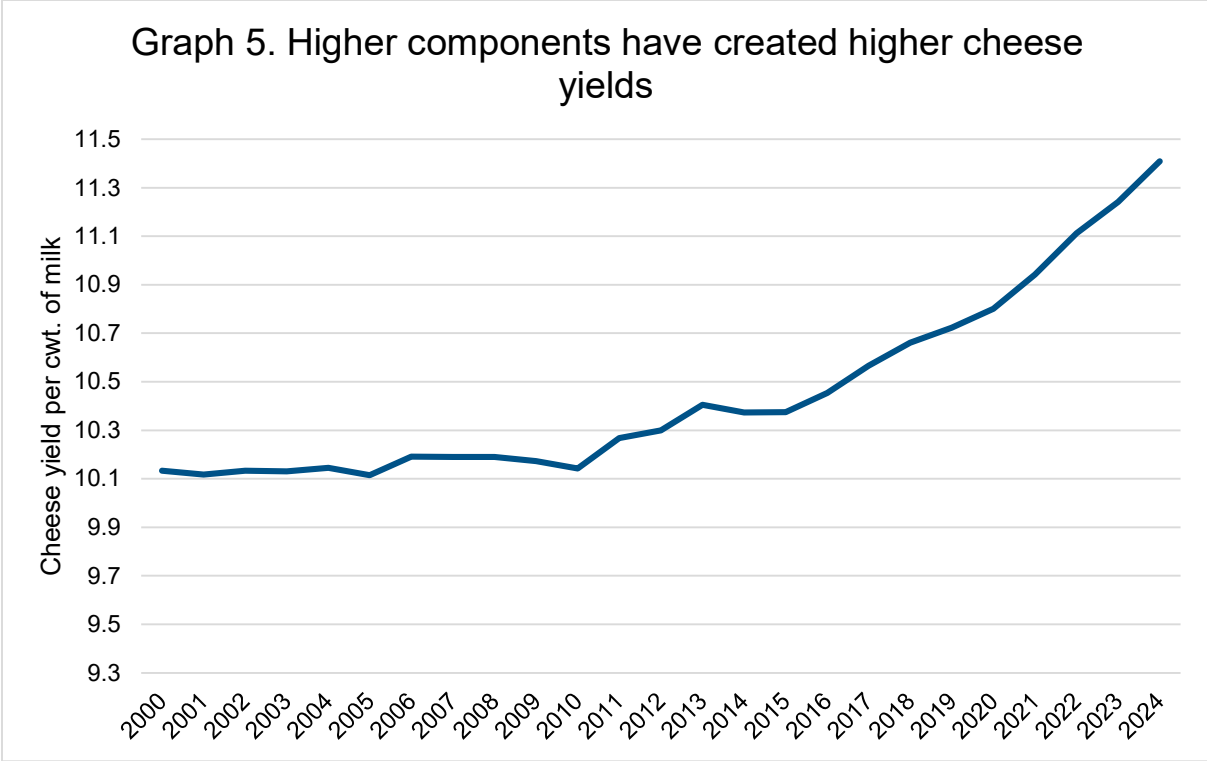
Graph 4. Percent change in component and milk production compared to same month prior year, 2023-2024



The growth in milk components has multiple drivers. Chief among them are MCP provisions that establish values for 92% of the nation’s milk. While California imposed a milkfat and solids nonfat pricing system in the 1960s, protein pricing first appeared in the Great Basin (Utah) FMMO in 1988, and others followed. Then, the major milk pricing reforms in 2000 that introduced end-product pricing formulas accelerated MCP payments throughout most of the country. Since 2021, butterfat payouts have ranged from 32% to 63% of the total minimum producer price required under Federal Orders and protein accounted for the vast majority of the remaining component payments from processors to producers.

Another point that accelerated higher component density in milk was when many processors established base excess plans that either limited the amount of milk volume that a farm could ship or created economic deterrents that ultimately curbed shipments. While milk pounds shipped as measured by hundredweights were curtailed in recent years to some processing plants, no thresholds were placed on milk components in most areas (although a few cheese plants did limit solids production). So, dairy producers began shifting strategies to ship more milk components to improve milk checks.

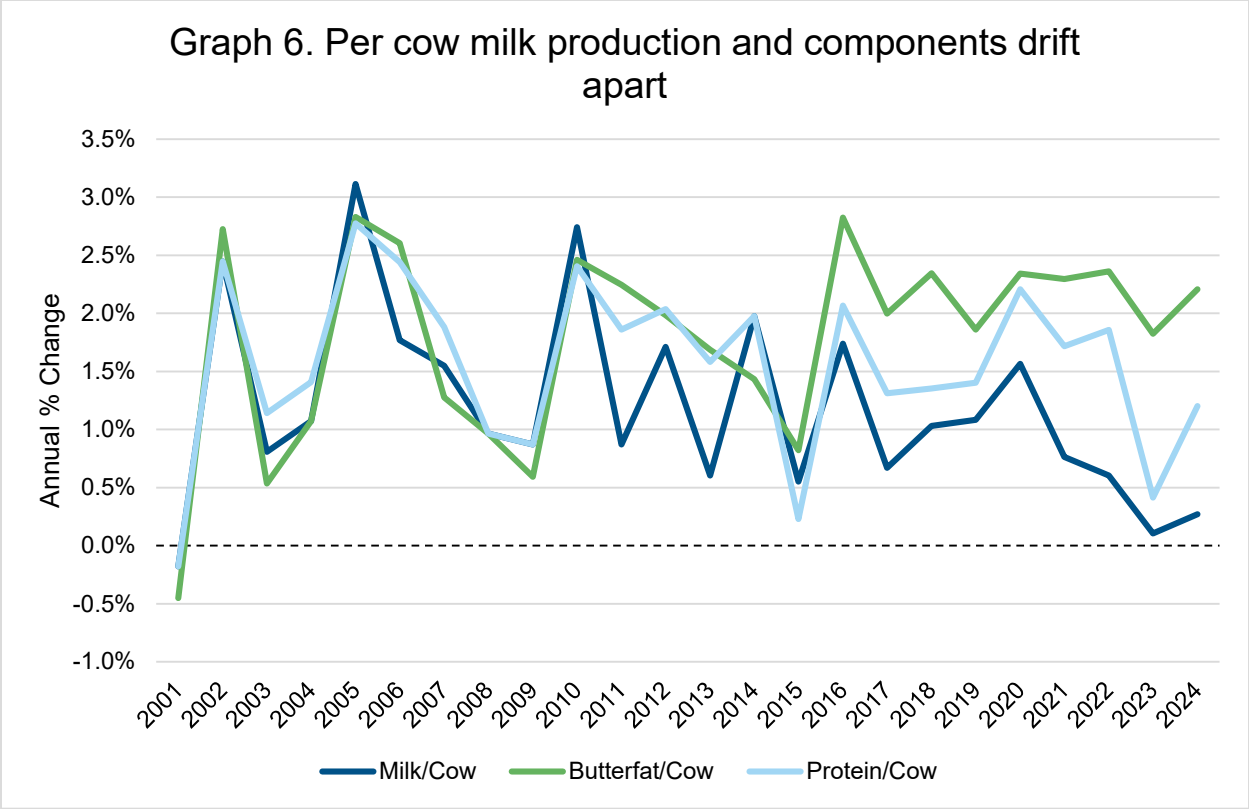
Then, there’s the most important driver: consumer demand. Cheese now accounts for nearly 43% of the U.S. milk supply on a milk solids basis, up from 37.7% in 2000. Farmgate milk has yielded more cheese from every hundredweight of milk as cheese yield grew from 10.14 pounds in 2010 to 11.41 pounds in 2024 (Graph 5). That’s a remarkable 12.5% improvement from a hundredweight of milk. In the future, higher protein content will further drive cheese yields.



Like cheese, yields for butter containing 80% butterfat grew from 4.39 to 5.08 pounds for every hundredweight from 2010 to 2024. That’s a 15.6% improvement in butter yield from every hundredweight produced by U.S dairy farms. With rising protein levels in milk, nonfat dry milk (NFDM) yields moved from 8.80 to 9.17 pounds per hundredweight from farmgate milk during the same time for nearly a 4% improvement.

Drilling deeper into cow productivity

It’s just as important to not miss the forest for the trees, as it is to view only milk production as the baseline for cow productivity. As a herd, U.S. dairy cows have done well. But, on an individual basis, efficiency in producing more solids per pound of milk given per cow matters more than milk volume. Percent change in milk, butterfat, and protein production per cow from 2001 to 2010 was nearly identical. Their annual growth rate hovered between 1.4% to 1.6% for each of those factors (Graph 6).



However, in 2011 total milk per cow decoupled from components and showed slower growth. In fact, 2015 was the last time the three metrics – milk, butterfat and protein – yielded a similar annual growth. Since then, they’ve been shifting further apart. From 2016 to 2024, milk production netted a 0.9% average annual growth rate, while protein measured 1.5%, and butterfat at 2.2%. Certainly, component pricing factors and milk check incentives led the change.

Farmers have improved cow productivity by refining rations, enhancing ration ingredients, improving genetic selection and genomics, stepping up forage quality and providing better cow comfort. Also, genetic improvement within breed – not changing breed composition – has had a greater impact on components. According to sales data from the National Association of Animal Breeders (NAAB), from 2000 to 2024 Holstein semen sales dropped from 97% to 83% of all semen sales and Jersey semen sales grew from 5.8% to 14%.

In 2024, dairy cow productivity, as measured by butterfat and protein, did slow somewhat. The lack of heifer replacements has stunted dairy cow productivity as culling has been down all but one week from September 2023 through mid-February 2025. This has left lower-tier cows in some herds, which can bring down strong production averages. Additionally, as replacement prices gain upward momentum in markets with \$3,000 per head values at multiple auctions across the country, this trend isn’t likely to slow down anytime soon. New replacement heifers bring in the next generation of improved genetics, which can further capitalize on milk component production.

Current data limitations

USDA's Milk Production report, typically released the third week of the month, continues to provide outstanding perspective on milk volume. However, it would be far more robust with milk component production data. Butterfat percentages for the top 24 states come out one week later in USDA's Agricultural Prices report. Pairing that information would be a strong start to publishing more robust metrics.

Obtaining protein data gets a bit trickier as USDA's Supply and Utilization report tracks skim solids but not protein. For this report, we used FMMO data published by USDA-AMS. From 2000 to 2023, that data tracked between 60% to 73% of the U.S. milk supply. However, data collection varies from month-to-month and year-to-year. In California, for example, milk that is depooled from federal orders does not get reported in the protein data. Also, Idaho, the nation's fourth largest dairy state, is not in the FMMO system.

To be fair, however, all USDA data is an estimate to some degree and developed from multiple data sources. In the same vein, while FMMO data is solid accounting data, its problem is that the data is incomplete and does not reliably draw from the same set of farmers every month. With that in mind, the best plan would be for USDA-NASS to obtain protein data at the same time it collects milkfat data for its Agricultural Prices report. Taking it one step further, the butterfat, protein and nonfat solids component data could then be reported in its monthly Milk Production report.

A look to the future

Higher milk solids production likely represents a permanent paradigm shift given consumer demand for manufactured dairy products. If that shift happens, the dairy industry must account for further considerations. Hundredweights drive capital retains, equity retains, and 13th milk checks for cash dividends and patronage for cooperatives. Those same hundredweights fund the dairy checkoff and some other industry organizations. By improving market information, more accurate and timely reports on milk component data may be important for risk management strategies for producers, processors, and retailers alike.

For dairy processing, fluid milk continues to lose market share and the water portion of farmgate milk is a growing expense category due to transportation costs and dispelling of the water. On the flip side, valuable milk solids needed for dairy product manufacturing grows each year. With multiple component pricing, markets have the tools to send signals to buyers and sellers about components' worth. But good pricing also requires good market information.

Long-term, the collective U.S. dairy industry would benefit from more component data collection and timely reports of that data. That's important to the dairy industry because consumers both at home and abroad continue to eat more milk solids found in manufactured dairy products and drink less fluid milk with each passing year. Ultimately, if U.S. dairy farmers are tracking their individual component levels and similar data is available from processing plants, the U.S. dairy industry should be able to track those solids on a national level, too. Getting market signals right helps us focus on what is needed and making the most of what the market wants.

U.S. dairy processing has gone global

Three decades ago, America's top 10 dairy processors were entirely U.S.-based organizations. Now, it's a 60-40 split topped towards foreign entities.

When it comes to dairy processing, America's dairy plants have evolved considerably over the past three decades. Since the sector's inception with a tremendous influx of immigrants during the late 1800s, dairy manufacturing has been largely an American proposition. That trend continued well into the next century.

However, the ownership structure started to evolve in the late 1990s as Canadian companies began establishing processing footholds in the American countryside. As that development ensued, European manufacturers joined in newfound opportunities, focusing the most energy on buying dairy processing assets previously held by U.S.-based companies and cooperatives. From that moment in time, the influx of foreign capital grew substantially.

When taking a 30,000-foot view of the global dairy sector, there is good reason for this evolution. That's because dairy products have become a globally traded commodity. And when looking at the world's leading exporters, New Zealand and the collective countries in the European Union, their ability to expand milk production will be limited in the long term.

For the Kiwis, it's a limited land base, while the Europeans also have land constraints along with significant regulatory burden. On top of that, New Zealand's and the European Union's commitment to carbon sequestration and reducing greenhouse gases also has limited growth opportunities as of late. Then there's the matter involving Canadian processors that really cannot grow at home due to the constraints of supply management that place a muffler on milk production.

Those and many other factors have turned dairy executives' eyes toward the U.S. mainland in order to grow their dairy portfolios. The U.S. has a steady stream of milk, and more recently milk components, that keeps growing. In addition, the cost of stainless steel and modern processing costs are sky high, so it's more cost-effective to buy existing assets and market share than it is to build a new plant.

America stood on its own in the 1990s

When winding the clock back to 1994, the top 10 dairy processors were exclusively American-based entities with sales ranging from \$1 to \$3 billion annually.

Of the top 10 (there was a tie for tenth place), seven entities were companies, and four businesses were farmer-owned cooperatives. Kraft topped the list with \$3.3 billion in dairy sales. Overall, Kraft had combined worldwide sales of \$17 billion in 1994, so 80% of its portfolio was international sales.

Next came three cooperatives: No. 2 AMPI at \$2.6 billion in sales; No. 3 Mid-America at \$2.5 billion; and Land O'Lakes at \$1.5 billion. Note, that Dairy Farmers of America has not been formed yet. That would officially take place on January 1, 1998.

After this group of cooperatives, came the following companies: No. 5 Dean Foods with \$1.4 billion in sales; No. 6, Borden, \$1.3 billion; No. 7, Schreiber Foods, \$1.3 billion; No.8, The Kroger Company, \$1.2 billion; No. 9, ConAgra, \$1.1 billion; and No. 10, Leprino, \$1.1 billion. Prairie Farms, a cooperative, rounded out the group in a three-way tie for 9th through 11th with \$1.1 billion in sales. One would have to go all the way down to No. 17, Haagen-Dazs, to find a foreign company on the list.

North America's Top Dairy Processors for 1994

Rank	Name	Country Headquarters	1994 Sales Volume
1	Kraft Foods	USA	\$3.3 billion
2	AMPI	USA	\$2.6 billion
3	Mid-America	USA	\$2.5 billion
4	Land O'Lakes	USA	\$1.5 billion
5	Dean Foods	USA	\$1.4 billion
6	Borden, Inc.	USA	\$1.3 billion
7	Schreiber Foods	USA	\$1.3 billion
8	The Kroger Company	USA	\$1.2 billion
9	ConAgra, Inc.	USA	\$1.10 billion
10	Leprino Foods	USA	\$1.10 billion
11	Prairie Farms Dairy	USA	\$1.10 billion

Source: Dairy Fields Magazine, published in 1995 (2nd year of annual list).

Status quo in the beginning of the new century

As the American dairy industry moved forward, dairy processing assets remained under U.S. ownership with sales among the top ten ranging from \$1 to \$8 billion. Dean Foods leapfrogged from the 1994 rank of No. 5 to the pole position with \$8.3 billion in sales in 2003. That caused Kraft Foods to slide to No. 2 with \$4.3 billion in sales ... having grown by \$1 billion from 1994 to 2003. At No. 3, the highest-ranking cooperative, Land O'Lakes, doubled its sales over the time span by growing to \$3.0 billion.

Next came a group of companies: No. 4, Kroger, \$2.8 billion in sales; No. 5, HP Hood, \$2.2 billion; No. 6, Scheiber, \$2 billion; No. 7, Dreyer's Ice Cream, \$1.8 billion; and No. 8, Leprino, \$1.5 billion. Two cooperatives made up the final group: No. 9, Prairie Farms, \$1.4 billion; and No. 10, Dairy Farmers of America, \$1.4 billion.

North America's Top Dairy Processors for 2003

Rank	Name	Country Headquarters	2003 Sales Volume
1	Dean Foods	USA	\$8.3 billion
2	Kraft Foods	USA	\$4.3 billion
3	Land O'Lakes	USA	\$3.0 billion
4	The Kroger Company	USA	\$2.8 billion
5	HP Hood	USA	\$2.2 billion
6	Schreiber Foods	USA	\$2.0 billion
7	Dreyer's Ice Cream	USA	\$1.8 billion
8	Leprino Foods	USA	\$1.5 billion
9	Prairie Farms Dairy	USA	\$1.4 billion
10	Dairy Farmers of America	USA	\$1.4 billion

Source: Dairy Fields Magazine, published in 2004 (11th year of annual list).

Canada stakes its foothold

By 2006, a pair of Canadian dairy processors had strong positions on the American dairy scene. Saputo, a publicly traded company, skyrocketed to the No. 3 position in 2006 with its \$3.8 billion in North American sales. According to annual reports, it first entered the U.S. market in 1997. On the 2003 list, Saputo ranked No. 23 at \$818 million in sales.

Its Canadian dairy cousin, the Agropur Cooperative, appeared at No. 9 on the Dairy Foods magazine's top processor list with \$2.13 billion in North American sales in 2002. At that time, the co-op based in Longueuil, Quebec, Canada, had only one U.S. plant that purchased milk from U.S. dairy farmers but offered no membership to those farmers. So, even though it is a cooperative, Agropur operates more as a company in the U.S. than as a cooperative like it does in Canada.

The Europeans grow their presence

The North American dairy-processing arena continued to transform. By 2013, it took \$2.7 billion in sales to crack the top 10 list, nearly double from just a decade earlier. Even with that as the baseline, two European companies joined the top ranks as the top position moved from \$8.3 to \$10 billion based on 2003 to 2013 sales data.

Nestlé USA claimed the top position with \$10 billion in sales after ranking No. 29 in 1994 and No. 37 in 2013, according to Dairy Foods. At No. 6 was French-based Lactalis American Group with \$4 billion in sales. It had ranked No. 21 in 2003 with \$920 million in sales. According to Dairy Foods, it was not on the North American scene in 1994.

The pair of Canadian companies essentially held strong positions by 2013 with Saputo vaulting to No. 2 with \$9.5 billion in sales ... up from \$818 million in U.S. sales in 2003. The Quebec-based company had 52 plants with 26 located in the United States. Meanwhile, Agropur grew to \$3.9 billion in sales with 7 of its 29 plants located in the United States.

As for American based companies, Dean Foods ranked No. 3 with \$9 billion in sales; Schreiber Foods was tied for No. 4 at \$4.5 billion; Kraft Foods slid from No. 2 in 2003 to No. 7 by 2013 as sales fell from \$4.3 billion to \$3.9 billion over the decade.

Just three U.S. dairy cooperatives ranked among the top ten: Land O'Lakes tied at No. 4 with \$4.5 billion; No. 9, DFA, at \$3.2 billion; and No. 10, Prairie Farms, at \$2.7 billion.

North America's Top Dairy Processors for 2013

Rank	Name	Country Headquarters	2013 Sales Volume
1	Nestlé USA	Switzerland	\$10.0 billion
2	Saputo	Canada	\$9.5 billion
3	Dean Foods	USA	\$9.0 billion
4	Land O'Lakes	USA	\$4.5 billion
4	Schreiber Foods	USA	\$4.5 billion
6	Lactalis American Group	France	\$4.0 billion
7	Kraft Foods	USA	\$3.9 billion
8	Agropur	Canada	\$3.9 billion
9	DFA	USA	\$3.2 billion
10	Prairie Farms Dairy	USA	\$2.7 billion

Source: Dairy Foods Magazine, published in 2014 (21st year of annual list).

The top ten tips towards foreign nationals

By 2023, the nation's top processors continued to transition to more international companies with six of the top ten having their company origins outside the United States. Also of importance was the fact that it took \$5.8 billion in sales to crack the top ten list, up 115% over the decade.

One significant transformation took place over the past decade. In November 2019, Dean Foods declared bankruptcy and by the very next year, Dairy Farmers of America had acquired 44 of the 57 plants. Prairie Farms acquired another 8 plants. As a result, Dean Foods, which had ranked No. 3 with \$9 billion in sales in 2013 vanished from the list. On the flip side, DFA moved to No. 1 with \$23 billion in sales. While not appearing in the Top Ten in 2023, Prairie Farms had \$4.7 billion in sales that year and ranked No. 13. The Illinois-based dairy cooperative grew its sales by \$2 billion over the past decade.

These sales totals are worth noting in the discussion of the top ten dairy processors. Even though Land O'Lakes ranks No. 2 on the Dairy Foods list, it's actually in a tie with Prairie Farms based on its dairy portfolio. Overall Land O'Lakes has about \$4.7 billion sales of dairy sales as its dairy enterprise contributes about 28% to the co-ops' overall sales total. Given this analysis, only one U.S. dairy cooperative, DFA, ranked among the top ten for sales volume.

Meanwhile, two Canadian companies and four European entities ranked among America's top processors. No. 3 Saputo grew from \$9.5 to \$12.7 billion in sales over the past decade, while No. 4 Nestlé grew from \$10 to \$11 billion in sales. At No. 5, Savencia Fromage & Dairy appeared among the top ten for the first time at \$7.2 billion in sales. The French-based dairy cooperative

processes 8.2 billion pounds of milk from 6,500 farms in France, according to its annual report. Globally, Savencia processes 11.6 billion pounds of milk from 9,000 farms in 14 countries.

Two more French-based companies appeared at No. 7 and No. 8. Danone North America had \$6.9 billion in sales compared its \$2 billion in 2013 that ranked it No. 19. Meanwhile, Lactalis posted \$6.5 billion in sales, up from \$4 billion in 2003 when it ranked No. 6. Canadian-based Agropur slid from No. 8 to No. 9 over the decade even though it grew sales from \$3.9 to \$5.9 billion.

Two U.S. based companies, No. 6 Schreiber Foods and No. 10 Rich Products rounded out the top ten. Schreiber, headquartered in Green Bay, Wis., grew sales from \$4.5 to \$7 billion over the past decade. Rich Products in Buffalo, N.Y., appeared in the top ten for the first time at \$5.8 billion in sales.

North America's Top Dairy Processors for 2023

Rank	Name	Country Headquarters	2023 Sales Volume
1	Dairy Farmers of America	USA	\$23.0 billion
2	Land O'Lakes	USA	\$16.8 billion*
3	Saputo	Canada	\$12.7 billion
4	Nestlé North America	Switzerland	\$11.0 billion
5	Savencia Fromage & Dairy	France	\$7.2 billion
6	Schreiber Foods	USA	\$7.0 billion
7	Danone North America	France	\$6.9 billion
8	Lactalis USA	France	\$6.5 billion
9	Agropur	Canada	\$5.9 billion
10	Rich Products	USA	\$5.8 billion

Source: Dairy Foods Magazine, published in 2024 (31st year of annual list).

While not listed among the top ten dairy processors, two companies with significant footprints in the western U.S. do deserve some mention. In 1994, Colorado-based Leprino ranked No. 10 among all dairy processors at \$1.1 billion in sales. It certainly remains a major player as it had \$3.6 billion in sales, based on the Dairy Foods processing list published in 2024. That ranks the Mozzarella maker as the No. 19 dairy processor and those sales totals are posted to grow with its \$1 billion Lubbock, Texas, plant coming online.

Another major cheese processor, Hilmar, ranked No. 23 on the most recent Dairy Foods list with \$2.8 billion in sales. Back in 2003, the farmer-owned cheese company had \$560 million in sales from its California facility. Like Leprino, Hilmar’s sales will grow in the coming years as its \$600 million plant comes online in Dodge City, Kansas.

A deep look into foreign ownership

In 2013, 10 of the top 50 “U.S. dairy processors” had headquarters outside the country. These “Foreign 10” held 104 processing plants, according to Dairy Foods’ data. That total grew by 53 plants in one decade as the group only had 51 processing assets in 2003.

As plant totals grew, so did sales. In 2003, the “Foreign 10” had sales ranging from \$255 million to \$1.3 billion for a cumulative total of \$6.9 billion. Just 10 years later, sales for the same group ranged from \$1.3 billion to \$10 billion for a group total of \$38.1 billion.

While Dairy Foods magazine no longer tracks the number of plants, the sales volume in this group grew from \$38.1 billion to \$61.5 billion over the course of the past decade ending with the 2023 sales report.

The big picture

While it is tough to place a firm number on market share, foreign-owned interests sales totals are roughly 26.5% of U.S. milk or \$54.6 billion in value, based on this research using the Dairy Foods data set from 2023 Top 100 List. It’s important to note that Dairy Foods reports full North American sales for Saputo and Agropur. In this analysis, Saputo had 45% of its revenue come from the U.S. and Agropur had 64% of its milk volume come from the U.S. according to their respective annual reports. Those ratios were used in determining the overall \$54.6 billion sales figure for foreign nationals.

On the flip side, there were 89 dairy cooperatives in the United States in 2022 according to a Congressional Research Service Report published in November 2024. The value of milk and milk products sold through U.S. dairy cooperatives totaled just over \$63 billion in 2022.

Given the U.S. dairy sales market on the Dairy Foods Top 100 list is just over \$200 billion, much of farmgate milk is moving through dairy co-ops and is sold to other milk processors. In fact, U.S. dairy cooperatives account for 87% of the market share for U.S. farmgate milk collections. That’s the highest of any agricultural commodity.

While one might believe that cooperatives should be investing in more processing assets, there are reasons that isn’t an easy solution. The cost of new dairy plants is very expensive and prices continue to inflate each year. This is why dairy cooperatives market member milk. According to M3 Insurance, which has a large footprint in dairy processing, these costs have increased from 2022 to 2023: wood, up 16%; steel, up 22%; concrete and masonry, up 15%; electrical and conduit, up 12%; and insulation, up 11%. These are all vital components in dairy processing plants.

This situation will keep investment in dairy processing a dynamic enterprise in the years and decades to follow. That being said, the \$8 billion in new dairy processing plants coming online through 2027 indicates that the U.S. is the most dynamic, and growing milk shed in the world.