



Future of the U.S. Dairy Industry Hinges on Exports

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Key Points:

- Milk supply will continue its growth trajectory in the U.S. for the next several years, driven by enhanced efficiency and improved genetics.
- New plants and expansions completed in the next two to three years will relieve some of the processing capacity bottlenecks.
- U.S. dairy producers will need to shift the dairy product mix and continue to innovate to hold on to domestic consumers, in the face of growing competition from abroad.
- With domestic demand for dairy products likely to remain flat for the foreseeable future, exports will provide the biggest opportunity for U.S. dairy producers over the next several years, especially in Asia, Africa and Latin America.
- Trade policy and other international uncertainties will add to volatility in the dairy product markets that are increasingly reliant on exports.
- Dairy producers will need to implement improved risk management tools through the private sector or farm bill programs.

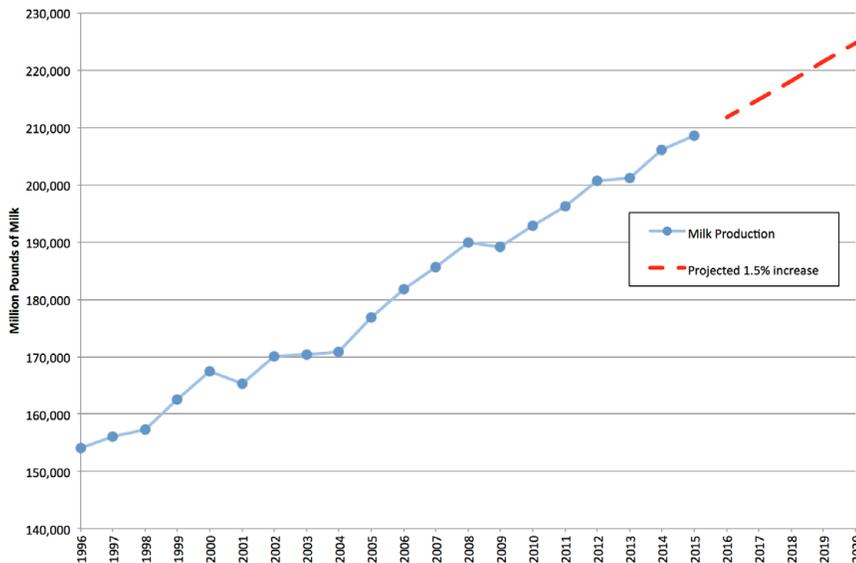
Poised for Modest Improvement

The focus of the U.S. dairy industry of late has been, and will continue to be finding an outlet to process its growing supply of milk. The heavy supplies of milk and lack of exports have led to low milk prices and slim margins, yet we have continued to see herd expansions on many farms. Farm expansions and efficiency improvements would make little sense if producers didn't see any hope of improvement in prices on the horizon. Milk prices will experience moderate improvement in the years ahead, but it will be less dramatic and less cyclical than over the last several years.

Supply Will Continue to Grow

Dairy processors have been hard-pressed in recent years to keep up with the strong growth in milk supply. Production has been strong around the world, but in recent months that growth has slowed across most of the major milk exporting regions of the world. The U.S. has been the exception. The size of the domestic herd has grown, and so has its efficiency in terms of milk per cow.

Figure 1: United States Milk Production



Source: USDA - NASS, CoBank.

With slim margins in recent years, dairy producers have looked for ways to get more milk out of each cow. At the same time, low beef prices have drastically reduced the revenue stream for culled cows and bull calves for many operations. The stakes are higher than ever to maintain an efficient herd, and this has driven an increased focus on genetics which will have a lasting impact and continue to drive efficiency in the coming years. U.S. milk production should continue to grow at a rate of between one and two percent over the next several years. (See Figure 1.)

Dairy farms in the U.S. continue to consolidate, and the average herd size continues to grow. Today, these larger-scale, efficient dairies supply the majority of milk and are much more focused on the long-run prospects of improved demand from abroad. The greater economies of scale of these larger operations make them better positioned to withstand a downturn in milk prices, and their longer planning horizon makes them less responsive to shorter-term fluctuations in milk prices. The risk, however, is that in the event of a shock to the industry, like a substantial and lasting increase in feed prices without a corresponding response in higher milk prices, larger farms halting production could have the effect of a much more substantial contraction in milk supply than in the past.

Can Demand Keep Up?

The U.S. dairy industry's immediate concern today is that its processing capacity has not kept pace with the strong growth in milk production. New processing plants and plant-expansions over the next couple of years will provide some relief. More important, however, is the need to find or create demand outlets for the greater volume of dairy products exiting the manufacturing plants. Demand from the mature domestic industry will remain relatively flat for the foreseeable future. Most growth opportunities must necessarily be found in export markets, but they will not materialize immediately.

U.S. domestic demand has been very strong recently, and has buoyed prices in

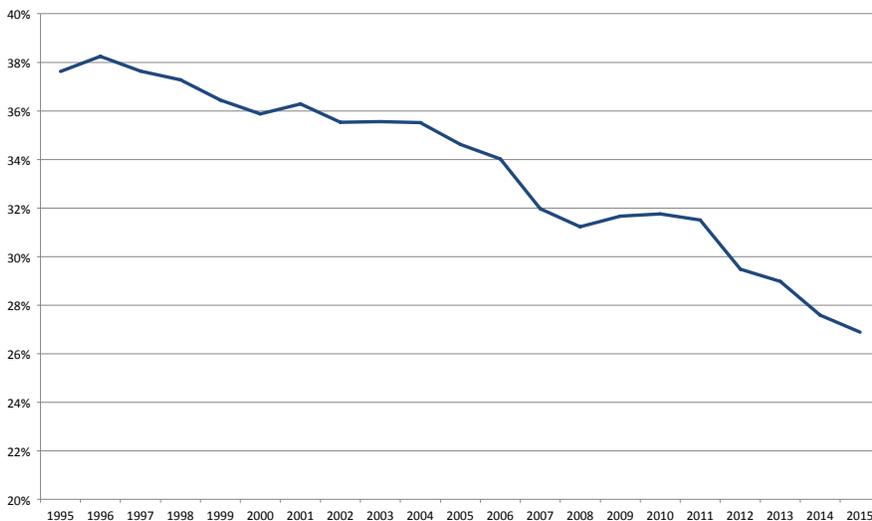
the U.S. above the levels posted in much of the rest of the world. Continued strong demand for the same mix of products in the future is not a given, and the U.S. dairy industry faces three key risks to domestic demand in the next three to five years:

- Consumers are becoming more focused on health and wellness. While this focus doesn't necessarily mean avoiding dairy completely, it may well result in less interest in stuffed crust pizza and milk-shakes.
- Availability of lower-cost, higher-quality items at grocery stores is driving consumers to shift back towards preparing meals at home.
- Fluid milk sales will continue to decline, though there are some opportunities for growth in organic and other niche segments. (See Figure 2.)

In the face of these challenges, it will be critical for the industry to do everything it can to maintain and develop domestic demand and evolve with consumers – in particular, developing innovative products and adapting rather than fighting against changing tastes.

Dairy growth in some segments of the restaurant industry will be limited, but dairy products are well positioned

Figure 2: Beverage Milk Sales as a Percent of Total Milk Production



Source: USDA - ERS, CoBank.

to take advantage of other emerging trends. One such trend is the desire for “clean labels” on products as opposed to lengthy, unfamiliar sounding ingredient lists. For example, including “butter” on an ingredients list is considerably cleaner than the comparatively longer and more complex ingredients contained in margarine. Dairy ingredients are also ideally suited for supplements aimed at infant nutrition and healthful aging which will be critical with growing populations and longer life spans.

Sustained Growth Requires Greater Reliance on Exports

With domestic demand expected to remain flat and production expected to continue to grow, the vast majority of new growth opportunities will come from abroad. Exports will be critical to the continued success of the industry, and the U.S. will need to position itself strategically to be able to compete with other mature dairy producing regions, the EU in particular.

World prices, of course, play an important role in the ability of the U.S. to compete in export markets. If prices in the U.S. are significantly higher than those in other regions of the world, it will be difficult to compete. However, the U.S. does have a strong advantage in its

reputation as a safe and reliable supplier for export products, and companies will need to capitalize on this reputation and maintain it.

Dairy exports used to be little more than an afterthought, and surplus milk powders could either be shipped abroad or sold into government-support programs. Today, much more investment will be needed in establishing relationships within sophisticated global supply chains. On one end of the spectrum, U.S. companies may be able to establish physical manufacturing footprints in other countries. On the other end, companies may benefit by partnering with other companies that specialize

in international marketing. Regardless of the approach, the need for major manufacturers to be actively involved internationally cannot be taken for granted. (See Figure 3.)

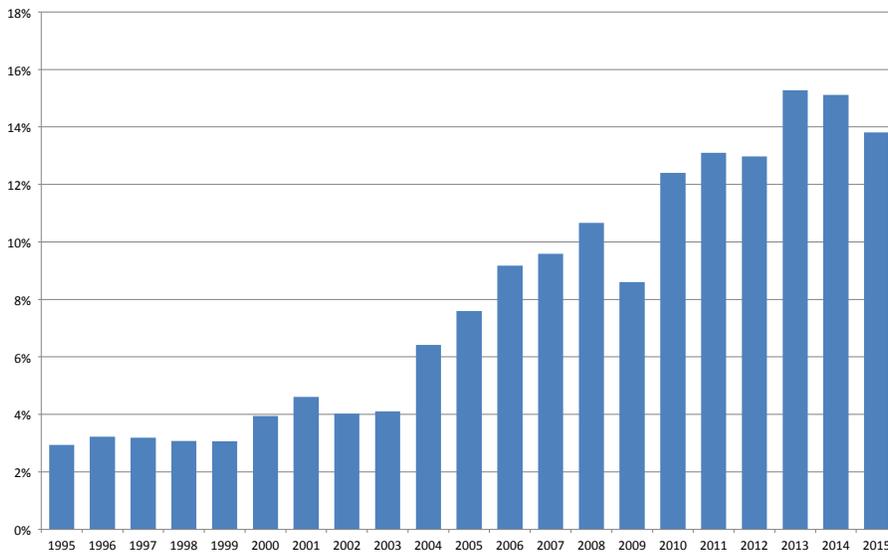
Asia, Africa and Latin America will be the strongest regions for growth opportunities. Geopolitical instability in much of the Middle-East will entail challenges, but the region has demonstrated strong demand for dairy. If trade opens up and relations improve with Iran over the next several years, it too could present new opportunities.

Politics, Policy and Other Uncertainties

A strong U.S. dollar will continue to provide headwinds to U.S. dairy exports. It is far from the only factor in determining competitiveness, but all else equal, a stronger dollar makes U.S. product relatively more expensive to international buyers. Interest rates will likely rise gradually over the course of the next few years, and this will continue to bolster the value of the dollar.

Trade policy is another source of uncertainty. Future trade deals will have a significant impact on U.S. participation in global markets. Other international complications including attempts by Canada to restrict dairy imports from the U.S. and efforts by the EU to restrict the use of certain geographically based cheese

Figure 3: Exports as a Percent of Production
(total milk solids)



Source: USDA - ERS, CoBank.

names will also have the potential to create barriers in certain markets. These impediments, of course, are in addition to more clear-cut trade barriers and embargos in effect in Russia and the sporadic purchasing patterns from China.

All of these uncertainties and an increasing reliance on exports have the potential for translating into heightened price volatility. As such, it will be increasingly important for producers as well as processors to manage their risk. The previous farm bill introduced the Margin Protection Program for Dairy. The program has paid out a total of about \$12 million in indemnity payments during the two years it has been in effect, but farmers have collectively paid nearly \$100 million into the program in the form of insurance premiums and fees. The next farm bill, due in 2018, will require significant changes to the current program to make it palatable to producers.

and waits for demand to catch up. The generally ample supply will keep downward pressure on prices for the next few years and limit the potential for any sudden spikes in price.

The familiar three-year cycle that has been experienced in dairy markets over recent years will be negated by the fact that farms are making long-run investments in the hopes of participating in the global demand growth rather than reacting to monthly or even yearly milk prices. Farms are consolidating and becoming better able to deal with longer periods of low milk prices.

Barring any substantial erosion in margins or other unforeseen shocks, milk prices and demand should improve modestly in the coming years. Markets will be defined by continually increasing milk supply which will need to find ways to meet evolving demand in the U.S. and emerging demand globally. Success will hinge on the ability to balance innovation in domestic products with responsiveness and competitiveness abroad. ■

Conclusion

Amidst all of this uncertainty, the outlook for the next several years is positive, but precarious. Population growth will continue to drive demand growth especially as the middle class grows in developing economies. There will be milk deficiencies in many of these regions that will rely on the exports of mature and efficient dairy producing regions, including the U.S.

The growth in demand, however, will not be immediate. Markets will need to deal with seasonal oversupply situations along the way while supply continues to grow

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