



June 2021

U.S. Dairy Processors Must Be Versatile to Compete in Southeast Asia



Tanner Ehmke

*Lead Economist,
Dairy Production and Processing*



Key Points:

- U.S. milk production continues to expand faster than domestic demand. The answer to abundant milk is export markets, but serving them requires strategic investment.
- With a growing population and rising middle class, Southeast Asia is the biggest growth opportunity for U.S. dairy exporters.
- With a diverse population, Southeast Asian consumers will demand a variety of dairy products, particularly those that use heat-stable ingredients.
- Other major dairy exporters, specifically Oceania and the EU, face production headwinds, potentially enabling the U.S. to capture market share.
- To successfully compete in the vast Southeast Asian market, the U.S. must work to lower trade barriers while U.S. processors must invest in manufacturing technology to adapt to diverse and evolving dairy consumer needs.

Introduction

Over the past decade, U.S. milk production has increased by an average annual growth rate of 1.5% while domestic demand has increased at a slightly slower pace. In recent years, the U.S. has exported about 15% of its production, with Mexico traditionally the main export destination by volume.

This picture is expected to shift dramatically. In 2020, Southeast Asia became the top destination for U.S. dairy exports by volume after years of posting the strongest annual import gains in the world for U.S. dairy products. With Southeast Asia’s population and economy growing steadily, the momentum portends still greater export opportunities ahead for U.S. dairy producers and processors.

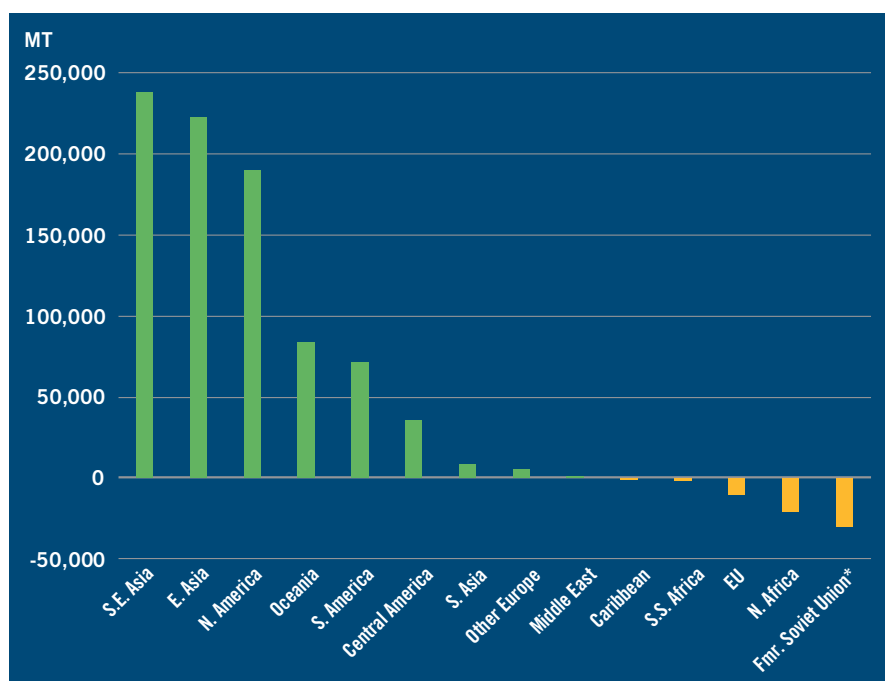
Multiple tailwinds in the future will help the U.S. capture even more market share in the region, as Southeast Asian consumers continually add products with dairy ingredients to their diet. The U.S. also benefits from price competitiveness on a range of dairy products into the region compared to the EU and Oceania, which face long-term dairy production headwinds from environmental and

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EXHIBIT 1: Change in Annual U.S. Dairy Exports

by Volume, 2010-2020



Source: USDA-FAS

*includes 12 former Soviet Union countries per USDA.

carbon emission initiatives and drought risk that are expected to reduce cow numbers. Continually rising milk production in the U.S. may further extend its competitive advantage in the years ahead.

However, matching ample U.S. milk supplies with rising demand in Southeast Asia will require U.S. processors to make strategic investments as an ethnically and economically diverse consumer base demands a range of dairy products and ingredients as the region evolves. And, the U.S. will need trade agreements that lower quotas and tariffs to compete on equal footing in the region.

Southeast Asia

Rapid urbanization across Southeast Asia has raised per capita incomes and with it consumer desire for more Western style cuisine. This has opened new export opportunities for U.S. dairy processors in recent years. With more than twice the population of the U.S., the Southeast Asian countries of Indonesia, Thailand, Philippines, Vietnam, Singapore, Malaysia, Myanmar, Cambodia, Laos, and Brunei – all members

of the Association of Southeast Asian Nations (ASEAN) – expect millions to enter the middle class in the decade ahead.

The rise of the middle class across the region portends greater per capita protein consumption as more disposable income drives consumers to healthier food and beverage products. On the horizon is greater demand for high-protein products for physical fitness among the vast population of younger consumers, and products for healthy eating among aging adults, according to U.S. processors and exporters. Higher birth rates relative to other markets like China also point to continued strong demand for infant and toddler milk formulas.

However, the tropical region lacks ability to produce its own milk supply in sufficient quantities to meet regional demand, pushing dairy imports to rise substantially from the U.S., Oceania, and the EU. Southeast Asia was the fastest-growing dairy export market for the U.S. from 2010 to 2020 (*Exhibit 1*). From 2006 to 2018, the rapid growth pace moved the U.S. from the fourth to the third-largest dairy product supplier to the region, behind New Zealand and the EU (*Exhibit 2*). In 2020, the U.S. reached parity with Oceania and the EU on a milk solids equivalent of dairy exports to Southeast Asia.

While the EU's market share in Southeast Asia has grown the most (from 19% in 2006 to 25% in 2018 following the abolition of the quota system in 2015), the U.S. market share in Southeast Asia has also grown, albeit at a slower pace from 11% in 2006 to 12% in 2018. The EU's growth spurt, though, appears to be waning. In the decade ahead, the European Commission (EC) forecasts EU milk production growth to slow to 0.6%/year, while the U.S. forecast is at 0.8%/year, and New Zealand is at 0.4%/year. That compares to 1.6%, 1.5%, and 2.5%, respectively, between 2010 and 2020.

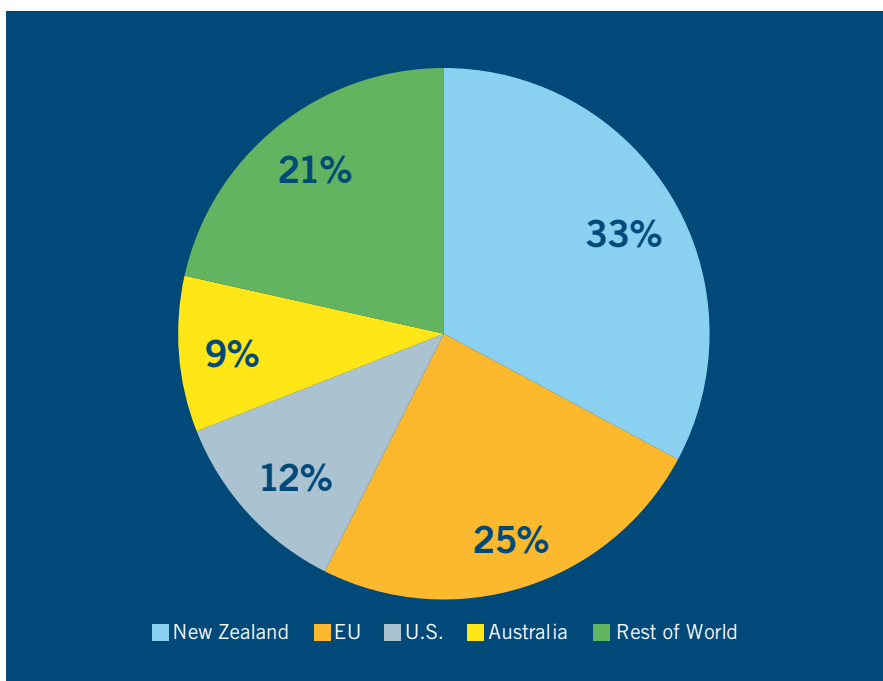
EXHIBIT 2: Dairy Export Market Share in Southeast Asia by Value, 2018

As the EU imposes climate initiatives, any future milk production constraints on the dairy sector may create opportunities for U.S. exporters in the future, particularly for ingredients like skim milk powder (SMP) and whey where the U.S. is already a dominant player (*Exhibit 3*). Whole milk powder (WMP) exports from New Zealand may also be slowed by sustainability initiatives and freshwater regulations, which are expected to reduce cow numbers.

Diverse Consumer Products

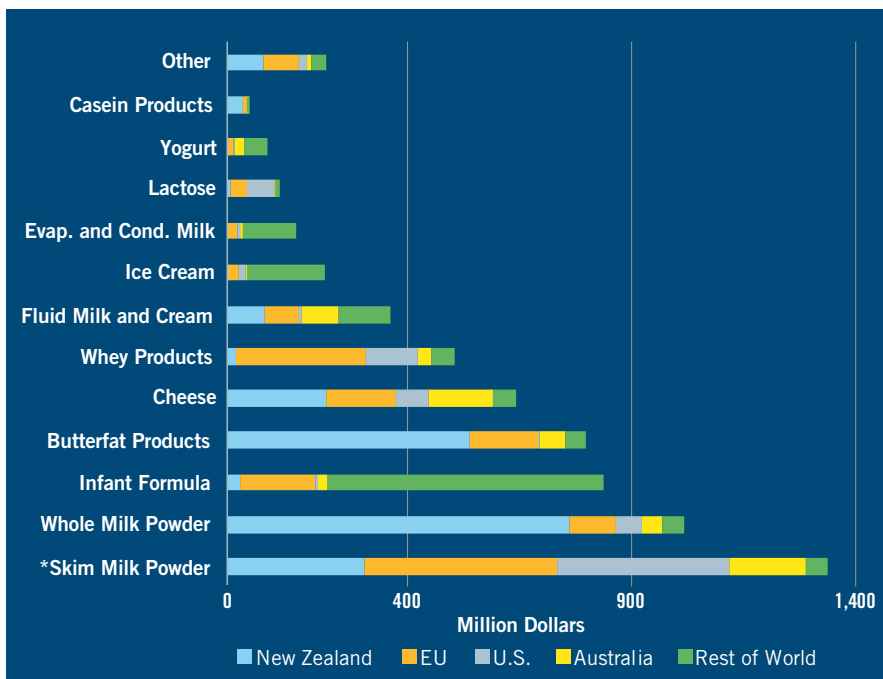
While cheese imports into Southeast Asia over the last decade rose from all regions, including the U.S., imports of U.S. cheese lag imports from New Zealand, the EU, and Australia since per capita cheese consumption in the U.S. continues rising. More than 90% of all cheese produced in the U.S. goes to the ever-growing domestic market. The U.S. has instead seen stronger export growth in ingredients as consumers gravitate to high-protein foods and beverages, which contain dairy ingredients like SMP and whey powders. Lactose, of which the U.S. is the main supplier in Southeast Asia, has also seen increased export demand as an ingredient in infant formula alongside baking and confectionary products.

The cultural and economic diversity throughout Southeast Asian means processors must offer a diverse product mix to compete. In the important SMP market that comprises the bulk of dairy imports into Southeast Asia, dairy processors



Source: USDA-FAS

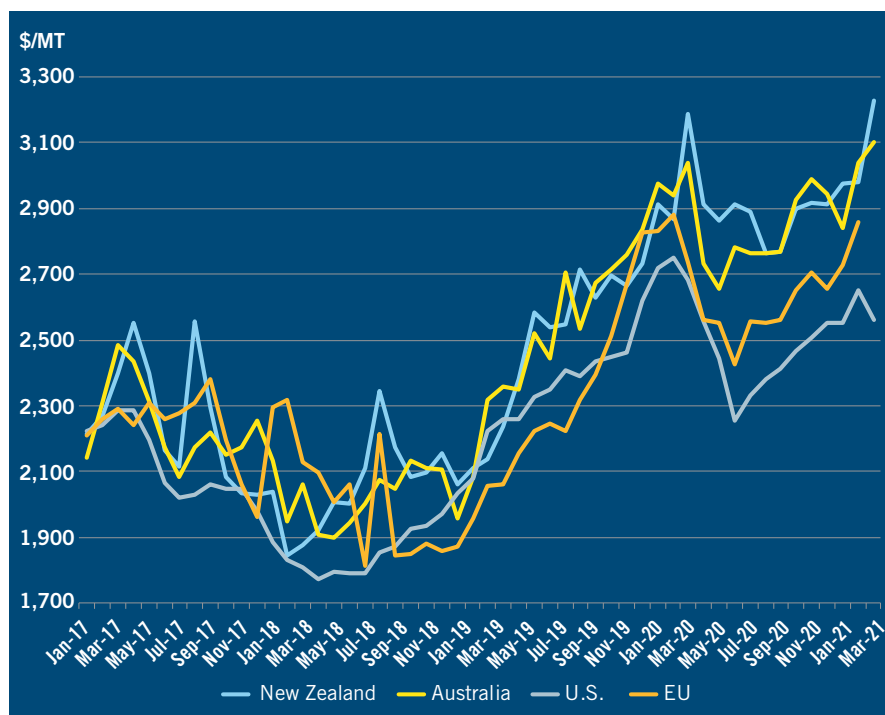
EXHIBIT 3: Southeast Asia Dairy Product Import Values by Trading Partner and Product, 2018



Source: USDA-ERS

*Includes Nonfat Dry Milk

EXHIBIT 4: ASEAN Prices of SMP/NDM* by Country of Origin



Source: Highground Dairy

*Skim Milk Powder/Nonfat Dry Milk

must offer low-heat SMP at a lower price point for the millions of consumers in the lower income earning bracket, while also offering medium- and high-heat SMP for higher income consumers desiring products with higher digestibility and solubility.

Whey products also face the same challenge of meeting diverse consumer needs with varying price points. Whey permeate powder is most commonly used as a feed additive to fortify pig rations, with demand building as the region's hog herd recovers from African Swine Fever (ASF). But as wealthier consumers increasingly desire protein sports drinks and products for babies and toddlers, demand for whey protein concentrate (WPC) will continue to rise. Demand for sweet whey powder that is used mostly for food applications is also expected to continue to strengthen, but poses unique challenges. When stored in hot, humid conditions common across Southeast Asia, sweet whey powder may turn brown in color and produce off-putting odors.

Dairy products, though, not only have to meet a diverse range of consumer needs for functionality and/or price point, but must also contend with the tropical environment. With much of Southeast Asia lacking a refrigerated supply chain and with food and beverage products frequently sold via outdoor vending machines, products containing dairy must be heat stable. Coffee and tea beverages containing dairy, for instance, must be shelf stable for several months, requiring ingredients like ultra-high temperature (UHT) milk, or ultra-pasteurized milk. Powdered ingredients must also be completely soluble so solids don't settle in the container over time. Manufacturers of sweet and condensed milk and evaporated milk, which are frequently used in coffee and tea, also have

a growing demand for heat-stable products with low thermophilic and mesophilic bacteria spore counts.

For some countries with higher birth rates like the Philippines, Laos, Cambodia, Vietnam, Burma, and Indonesia, infant formula and fermented drinkable yogurts for children will continue to be strong markets. Local processors use SMP, WMP and nonfat dry milk (NDM) as ingredients in infant and toddler products. Potential reductions in WMP exports from New Zealand may open export opportunities for the U.S.

The U.S. also has the advantage of price competitiveness into the region for commodity products like SMP and NDM (*Exhibit 4*). As the low-cost supplier into Southeast Asia versus the EU and Oceania, the U.S. can look towards a future of expanded market share as milk production capacity grows. However, the growth in demand for higher-value products with more stringent consumer specifications are opportunities to create more value in addition to expanded market share for commodity products.

Trade Liberalization

While Southeast Asia promises greater export opportunities in the future, the U.S. dairy sector needs trade liberalization in order to take full advantage of the growth. U.S. dairy prices are frequently lower than other exporters into Southeast Asia, partially to overcome tariff barriers with some countries. In markets like Malaysia that have no tariffs, the U.S. has seen significant growth in dairy exports since the U.S. is allowed equal footing with Oceania and the EU.

Thailand has removed import tariffs and quotas on Australian and New Zealand dairy products like WMP, whey, cheese, and anhydrous milk. Import tariffs and quotas for milk, cream, flavored milk, and SMP will be eliminated in 2025. The U.S., though, will not have duty-free access, which will make it challenging for U.S. dairy exporters to compete.

In Taiwan, the 10% tariff on New Zealand milk powder has been eliminated, enabling New Zealand to hold a 98% market share for WMP and 80% market share for NDM, according to USDA. In Vietnam, trade barriers were lowered or eliminated through the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and the EU-Vietnam Trade Agreement, neither of which included the U.S.

Reduced or eliminated trade barriers for competing dairy-exporting countries into Southeast Asia is a trade advantage over the U.S. and will remain a headwind for

U.S. dairy exporters should tariffs and/or quotas remain in place. The lack of bilateral trade agreements in the region and absence of the U.S. from the CPTPP is widely regarded as a serious threat to the U.S. dairy industry with Oceania and the EU gaining advantage.

Conclusion

Southeast Asia's population growth and continued rise of the middle class offers immense export opportunities for U.S. dairy processors and producers. Taking advantage of the growth, though, requires strategic investments that meet the diverse and changing needs of Southeast Asian consumers.

U.S. processors must be versatile and be able to produce a wide range of products, including low-, medium-, and high-heat SMP, and a mix of protein levels for dry whey powder. Shelf-stable UHT fluid milk will be needed to travel through the region's unrefrigerated supply chain. In the absence of progress in lowering trade barriers, dairy and non-dairy blends can be used to skirt restrictions on U.S. dairy imports.

Achieving production versatility may require investing in manufacturing technology to upgrade existing plants or to build new plants. New plants must also have easy access to ports on the U.S. west coast to minimize inflation in transportation costs, and strategically placed near reliable and growing milk supplies in the western U.S. ■

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