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Filling the Hole in the Dutch Cheese Market

Regaining Healthier Margins

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Summary

Dutch cheese production has recorded exceptional growth since 2012, outpacing the limited consumption growth in northwestern Europe. This has diluted margins and weakened the position of cheese producers in the value chain. Northwestern Europe (the Netherlands, Germany, and Belgium) is the main consumer market for Dutch (semi-)hard cheeses such as Gouda. However, Dutch cheese production is still forecast to increase to nearly 930,000 metric tons by 2022, based on increased liquid milk imports and investments in additional processing capacity.

Although the Dutch cheese industry is currently based on trade rather than on domestic consumption, nearly 50% of the additional cheese production since 2012 was absorbed by exports to Germany and Belgium. About 75% of Dutch cheese is consumed within 500km of the Dutch border, indicating the importance of margin growth in (northwestern) Europe.

Consumer preferences are changing, and we see increasing demand for convenience and personalized nutrition, including online sales, local products, and specialties. Focusing on the added value along the value chain, along with these new preferences, still provides opportunities for cheese producers to secure healthier margins.

Outside of the EU, expanded trade agreements such as the Economic Partnership Agreement, implemented on February 1, 2019 with Japan – the largest export destination for Dutch cheese outside of Europe – are expected to improve the export position in many regions.

Developing markets provide better opportunities for volume growth, while the premiumization of (specialty) hard cheese segments in developed regions provides opportunities for value growth. However, opportunities in overseas markets and distribution channels are not limitless, and they often require a customized marketing approach.

Regaining Margin Growth

From 2012, margins on cheese have structurally declined for most cheese producers in the Netherlands (see Figure 1). Nonetheless, cheese production – predominantly (semi-)hard cheeses such as Gouda – increased in most years, to 879,000 metric tons (+14,9%) in 2018. This outpaced the limited consumption growth in northwestern Europe (the Netherlands, Germany, and Belgium) – one of the largest markets for (semi-)hard cheeses and the main consumer market for Dutch cheese – resulting in diminishing margins (see Figure 2).

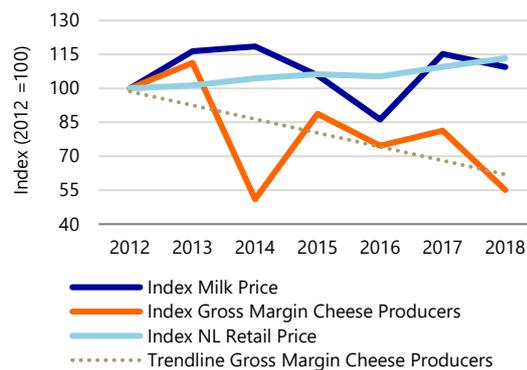
The growth in cheese production was predominantly driven by increased milk supply, and higher returns from cheese and whey rather than from butter and milk powders.

Although the current Dutch cheese industry is largely based on export, the exceptional growth in cheese production has also made cheese manufacturers increasingly dependent on exports, weakening their position in the northwestern European cheese market. About 75% of Dutch cheese is still consumed in northwestern Europe (nearly 63%) or in European countries less than 500km from the Dutch border.

In order to secure healthier margins, cheese producers have several options.

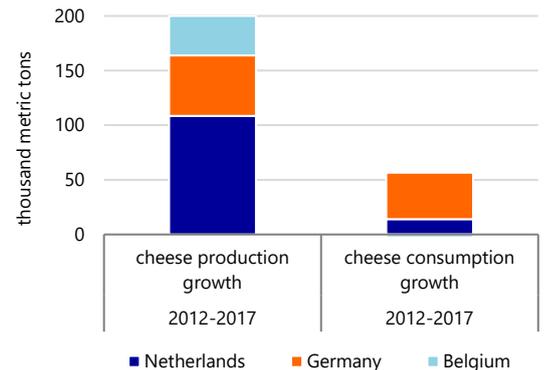
- focus on value-added products and consumer trends in (northwestern) Europe
- expand overseas export markets

Figure 1: Margins for Cheese Producers Have Declined, 2012-2018



Source: Rabobank 2019

Figure 2: Production Growth Outpaced Demand Growth, 2012-2017



Source: IDF, AMI, ZuivelNL, Rabobank 2018

Production Is (Largely) Driven by Milk Supply, and Combined Value of Cheese and Whey

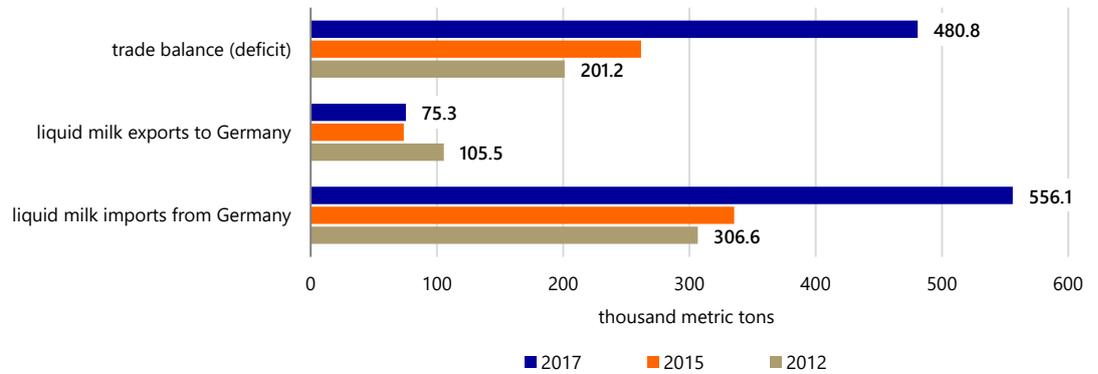
Milk Supply Is Not Limited by Dutch Borders, Due to Consolidation of Supply Fields

Since 2012, Dutch milk production has increased by 2.7m metric tons, to a peak of 14.3m metric tons in 2016 and 2017. After this exceptional growth, Dutch milk production declined to 13.9m metric tons in 2018. Due to environmental compliance requirements, Dutch milk production is expected to be capped near 14m metric tons.

However, there are still opportunities for Dutch dairy companies to increase their milk supply. The EU allows free trade of milk and dairy products between member states, enhancing cross-border trade. Moreover, from a cost (logistics and farmgate prices) and milk quality perspective, the milk supply field doesn't stop at the border for a large proportion of Dutch cheese processors. Including German and Belgian regions close to the Dutch border could potentially add 8m to 12m metric tons to the supply field for Dutch dairies. Consequently, the increased trade in liquid milk

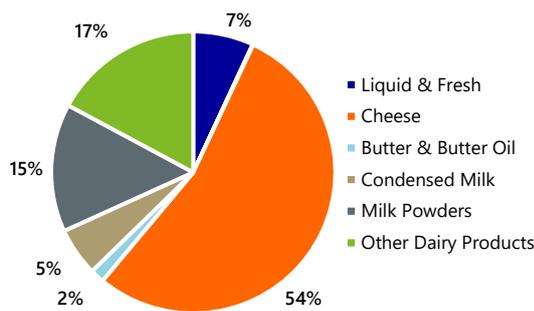
between the Netherlands and Germany is an indication of the consolidation of supply fields in northwestern Europe. Increased amounts of German milk are likely to flow into Dutch dairy plants due to recent announcements regarding the restructuring and closure of some German dairy processing plants along the Dutch border and because there have been investments in Dutch cheese manufacturing capacity (see Figure 3).

Figure 3: Liquid Milk Trade (Fat Content Above 1% to 6%)



Source: Eurostat 2019

Figure 4: Dutch Milk Allocation by Volume, 2017



Source: ZuivelNL 2018

Demand for Whey Proteins Has Enhanced Returns

Over 50% of the Dutch milk supply is utilized in cheese production annually (see Figure 4). Milk is typically allocated to dairy products with the highest returns. In recent years, growing consumer demand for whey proteins has enhanced the combined value of cheese and whey compared to other combinations of dairy products (see Figure 7). This has resulted in investments in additional cheese processing

capacity and growing volumes of milk used to produce cheese and whey-derived products. As a result, Dutch cheese production has increased by nearly 115,000 metric tons since 2012, to 879,000 metric tons (+14,9%) in 2018 (see Figure 5).

Cheese Production: It's a Hard Business

The vast majority (over 95%) of this milk pool is used for the production of (semi-)hard cheeses such as Gouda, Edam, or Emmental (see Figure 6). Publically announced investments in processing capacity indicate that Dutch cheese production is likely to increase to nearly 930,000 metric tons by 2022 (see Figure 5 and Table 1).

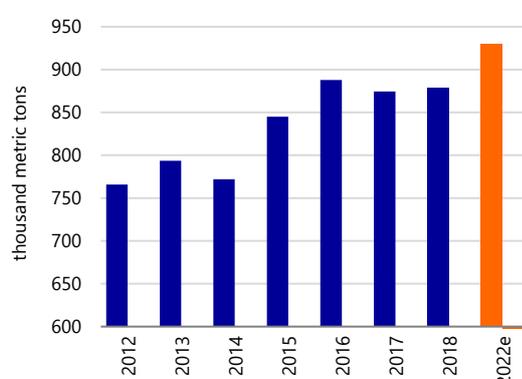
Table 1: Selection of Publicly Announced Investments in Northwestern Europe

Country	Company	Capacity (metric tons)	Types of Cheese	Operational
Netherlands	Royal A-ware	10,000 (estimate)	Hard cheese	Year-end 2018
	Royal A-ware (partnership Fonterra)	45,000	Mozzarella	2020
Belgium	Laiterie des Ardennes	25,000	Mozzarella	2020/21
Germany	Meierei Barmstedt/Uelzena	35,000	Mozzarella and other pizza cheeses	Spring 2019
	DMK Nordhackstedt (partnership Arla)	+35,000	Mozzarella	Year-end 2018
	DMK Georgsmarienhütte (partnership FrieslandCampina)	+15,000	Mozzarella	As of 2019
France	Eurial	+40,000	Mozzarella	Year-end 2019
Ireland	Glanbia/Royal A-ware	45,000-50,000 (estimate)	Hard cheese	2022

Hard Business Is Slowly Softening

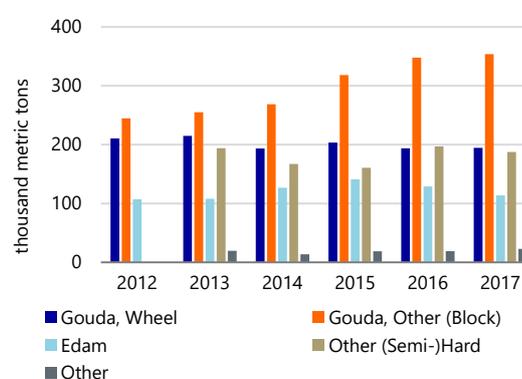
Prior to 2018, most of the volume growth in the Netherlands was recorded in Gouda block cheese (see Figure 6). However, Royal A-ware announced a joint venture with New Zealand dairy cooperative Fonterra in a mozzarella plant, producing 45,000 metric tons annually in Heerenveen. Across northwestern Europe, a significant quantity of additional mozzarella processing capacity is expected to become operational in the next 24 months (see Table 1). The new capacity follows the increased demand for soft cheeses such as mozzarella in developing cheese markets such as China and the ASEAN-5 countries, and the foodservice sector. Despite the investment by Royal A-ware and Fonterra, over 90% of the Dutch cheese portfolio will remain (semi-)hard cheeses.

Figure 5: Dutch Cheese Production, 2012-2022e



Source: ZuivelNL, Rabobank 2018

Figure 6: Dutch Cheese Production by Variety, 2014-2017



Source: ZuivelNL 2018

Combined Value and Allocation of Milk

Theoretically, the optimum product mix for a milk processor depends on market prices, the manufacturing costs, the combination of products which can be made from each unit of milk, and the available processing capacity for each product. Generally, milk volumes are allocated to the product mix with the highest margins.

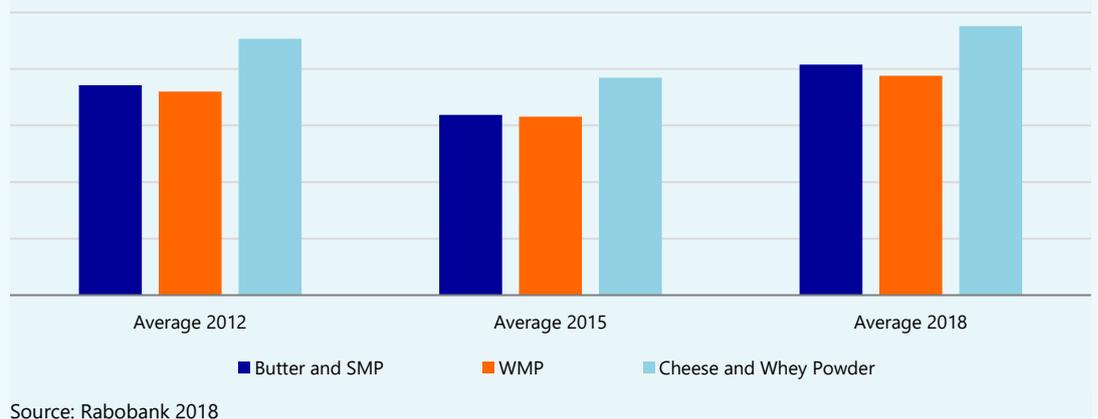
Based on milkfat and protein content, a tanker of milk can be manufactured into several combinations of dairy products:

- butter and skimmed milk powder
- whole milk powder
- cheese and whey powder
- liquid and fresh dairy products

In the Netherlands, less than 10% of milk volume is used to meet the predominantly domestic or regional demand for liquid and fresh dairy products. Therefore, most of the milk volume is used for other dairy products (see *Figure 2*).

Whey prices have increased over time, adding value to the combination of cheese and whey compared to the other product combinations. Since 2012, the combination of cheese and whey powder has offered the highest margins for most of the period (see *Figure 7*).

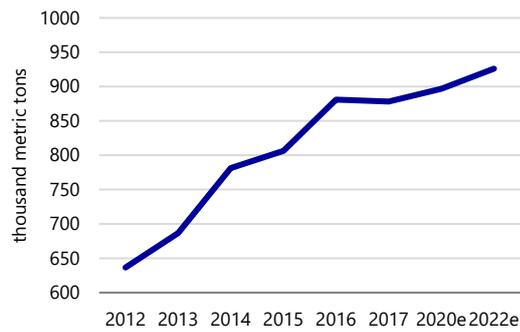
Figure 7: Value out of Milk (Based on EU Commission Prices), 2012 vs. 2015 vs. 2018



Impact of Dutch Cheese Consumption Is Limited

The Dutch cheese market is mature, with a relatively high annual per capita consumption of nearly 22kg – of predominantly (semi-)hard cheeses. Limited Dutch population growth resulted in an annual cheese consumption of approximately 370,000 metric tons in 2017, or about 40% of the annual production volume. Due to marginal consumption growth since 2012, along with increased trade volumes, the importance of domestic consumption for the Dutch cheese industry has decreased over time. During this period, export volumes grew by approximately 190,000 metric tons, to nearly 901,000 metric tons in 2017 – nearly two-and-a-half times the domestic consumption volume and exceeding the production volume (see *Figure 9*). Imports – mainly Gouda-style or other semi-hard cheeses originating from Germany and Belgium – accumulated to nearly 375,000 metric tons in 2017. The majority of imported cheese is eventually used for re-exports (see *Table 2*).

Figure 8: Exportable Surplus, 2014-2022e



Source: Rabobank 2018

Dutch cheese consumption is expected to remain relatively stable, at around 370,000 metric tons to 380,000 metric tons annually, between 2018 and 2022.

The exportable surplus will increase to nearly 925,000 metric tons by 2022, based on additional cheese production and stable cheese imports. This is an increase of approximately 145,000 metric tons, or nearly 18.5% compared to 2014 (see Figure 8). While the Dutch cheese industry is built on its historic domestic roots, its future depends on a growing export market.

Trade: Efficient Supply Chain Supports Export Position

Despite the dependency on exports, increasing trade flows (both imports and exports) also address efficiency, the ability to create added value along the supply chain, and the internationally competitive position of the Dutch cheese industry.

Besides its relatively large processing capacity, the Netherlands has a high concentration of related businesses specialized in ripening, cutting, other types of processing, packaging, distribution, and (international) sales of cheese.

The Netherlands' favorable infrastructure, and geographic position close to ports and large consumer markets provides the ingredients for operating as a trading hub for cheeses produced in (northwestern) Europe – stimulating cross-border trade and re-exports running via the Netherlands, Germany, and Belgium. It also enables the Netherlands to be a competitive player in international cheese trade.

Rabobank acknowledges the consolidation and integration along the value chain, with FrieslandCampina's acquisition of Zijerveld (trade, ripening, cutting, and distribution), the backward integration of Royal A-ware towards cheese production, and the merger of German cooperative DMK with Dutch cooperative DOC as the most significant events since 2012. More recently, FrieslandCampina announced the acquisition of Best Cheese Holland, American-based companies Best Cheese Corporation (import and sales) and Jana Foods (import and distribution), and Spanish cheese packager and distributor Millán Vicente.

The Netherlands Is Among the Largest Cheese Exporters

Figure 9: Dutch Cheese Exports, 2012-2017

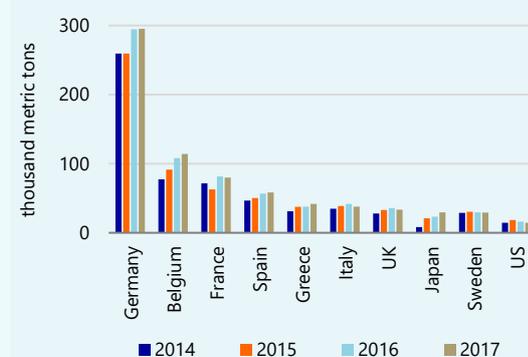


Source: Eurostat 2018

As a result of the Dutch trade position and possible stocks, cheese exports in 2017 exceeded cheese production by approximately 26,000 metric tons. Since 2012, Dutch cheese exports increased by nearly 190,000 metric tons, or 26.7%, to approximately 901,000 metric tons in 2017 (see Figure 9).

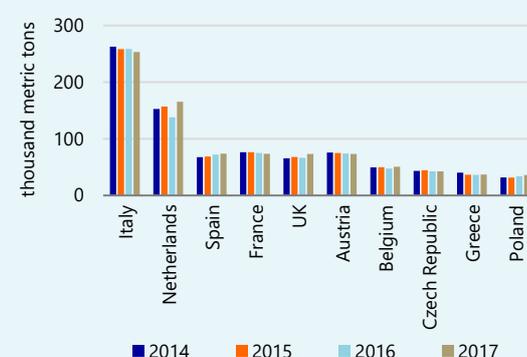
As a result, the Netherlands is ranked as the second-largest exporter of cheese in the world after Germany in terms of volume (see Figures 10 and 11).

Figure 10: Dutch Cheese Export Destinations, 2014-2017



Source: Eurostat 2018

Figure 11: German Cheese Export Destinations, 2014-2017



Source: Eurostat 2018

Northwestern European Cheese Market

Export Growth Absorbed by Northwestern European Consumer Market

Without taking the impact of re-exports and cross-border trade into account, the majority of Dutch export growth occurred close to the Dutch border or in northwestern Europe (see Figures 10 and Figure 12), one of the largest consumer markets for (semi-)hard cheeses such as Gouda. Combined exports to Germany and Belgium already account for about 45%, or more than 410,000 metric tons, of the total export volume. This exceeds domestic Dutch consumption volume and amounts to nearly half of the export growth since 2012. This indicates the consolidation of northwestern European cheese markets (see Figure 12 and Table 2).

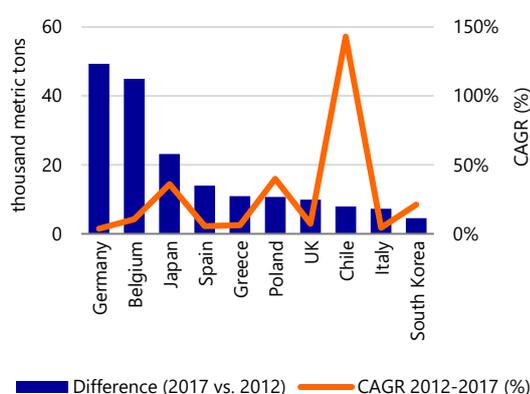
Nearly 60% of the export growth to Germany is supported by 249,500 metric tons of additional 'German' liquid milk flowing into predominantly Dutch cheese factories since 2012 (see Tables 1 and 2).

Table 2: Cheese Trade (thousand metric tons)

		2012	2017	Difference
Germany	Exports to Germany	246.0	295.3	49.3
	Imports From Germany	134.8	165.4	30.6
	Trade Balance	111.2	129.9	18.7
Belgium	Exports to Belgium	69.0	114.0	45.0
	Imports From Belgium	41.7	62.6	20.9
	Trade Balance	27.3	51.4	24.1

Source: Eurostat 2019

Figure 12: Top-Ten Growing Export Markets for Dutch Cheese, 2012-2017



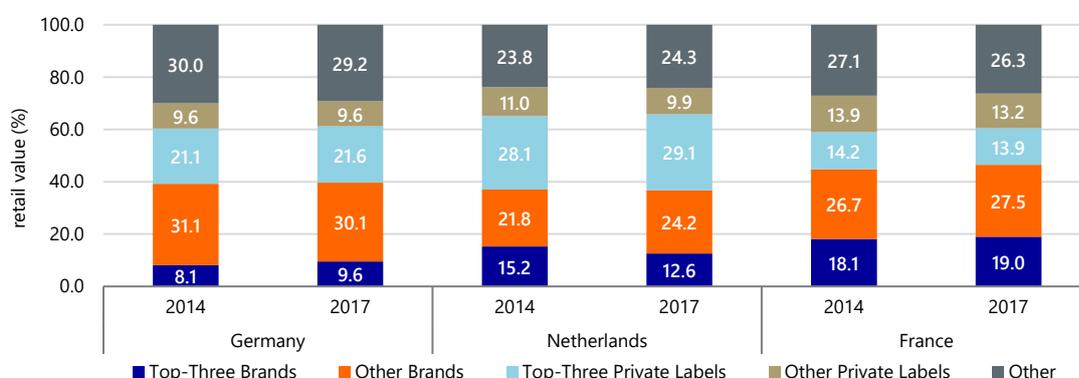
Source: Eurostat 2018

Dominance of Retailers has Weakened Position of Cheese Industry in Northwestern Europe

In the Netherlands and Germany, approximately 85% to 90% of cheese is sold via retail channels, indicating the strong position of a limited amount of large supermarket chains. The market for brands is highly fragmented in the Netherlands and Germany. The market share of the top-three brands accounts for less than half of the market share of the top-three private labels, strengthening the position of large supermarket chains against the cheese industry. In France, on the other hand, the top-three brands account for a relatively large market share (see Figure 13).

Developing new brands could potentially dilute the market position of brands even further. Furthermore, building a strong brand requires time and is often capital-intensive. Consolidation among brands, on the other hand, could strengthen the position of Dutch cheese in northwestern Europe, and even prove to be more time- and cost-efficient.

Figure 13: Division of Market Shares (Retail Value), 2014 vs. 2017



Source: Euromonitor, Rabobank 2018

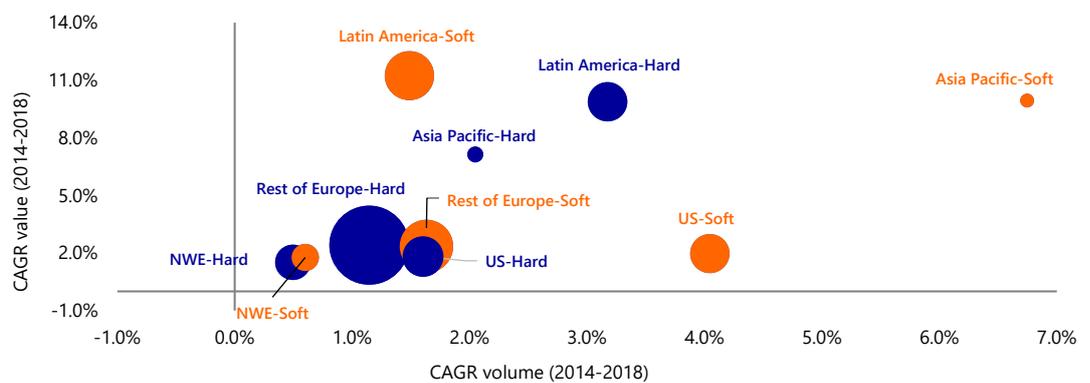
Too Large to Ignore, Despite Limited Volume Growth

Demographic developments such as limited population growth and the high base for cheese consumption mean that the opportunities for volume growth are limited in northwestern Europe.

Despite the support of economic growth, per capita cheese consumption has hardly increased in this region since 2015.

However, Europe is the largest cheese market in the world, with northwestern Europe as an important sub-market for (hard) cheeses. Based on Euromonitor data, Europe accounts for nearly 61% of the global retail volume in the hard cheese varieties. As such, the (northwestern) European cheese market is simply too large, and too important, for the Dutch cheese industry to ignore (see Figure 14).

Figure 14: Retail Volume and Value Growth Across Regions (Bubble Represents Volume of the Market), 2014-2018



Source: Euromonitor, Rabobank 2019

Moving Forward

Milk will continue to flow into cheese vats due to the favorable combined value of cheese and whey, along with the expansion of processing capacity. The forecast cheese production growth in the Netherlands and other countries in northwestern Europe is too large to be absorbed by (northwestern) European consumers. This will increase the region's dependence on exports and contracts with large retailers. Therefore, cheese producers have several options for regaining margin growth and for strengthening their position in the value chain.

- focusing on the added value along the value chain and changing consumer preferences
- expanding overseas export markets

Shifting Demand Fuels Pockets for 'Value' Growth

Demographic changes are increasingly challenging the traditional ways in which cheese is distributed and consumed in northwestern Europe, fueling pockets for value growth. An important change is the shift in demand from younger generations, such as millennials and Generation Z. A growing proportion of the population in (northwestern) Europe, with relatively high disposable incomes, lives in smaller households in urban areas, spending less time preparing and eating food at home. As a result, they demand more convenience and personalized nutrition. Moreover, they have a different perception, or awareness, about food when it comes to health, its nutritious value, and how it is produced.

Convenience

Online: A Potential Game-Changer, but the Largest Opportunity Is Still Offline

Despite strong growth figures in some countries, the base for online cheese sales is still relatively small across northwestern Europe. Nonetheless, online food sales are expected to grow toward a 20% to 25% market share in Europe by 2030, in favor of the traditional retail channels. As a result, 'online' is forecast to result in a zero-sum game in terms of the total cheese consumption volume.

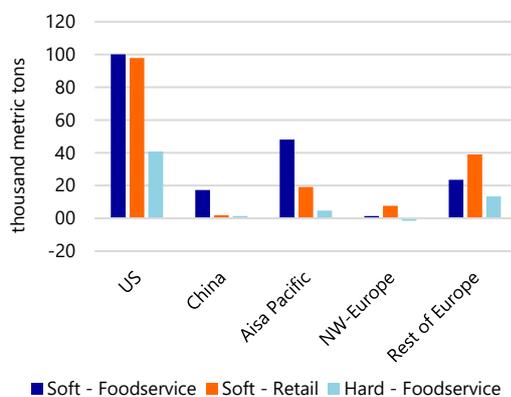
Most importantly, online food sales force traditional retailers to differentiate from competitors in order to maintain healthy margins. As such, the largest opportunity is probably offline.

Also, for fresh products such as cheese, 'online' provides opportunities for shortening distribution channels and reducing costs along the value chain, by making use of centralized storage and distribution hubs, especially close to urban areas.

Foodservice

One of the most visible outcomes of the demand for convenience is the growth of the foodservice sector (away-from-home prepared food), measured in the number of outlets and sales volume. In northwestern Europe, (hard) cheeses are mainly consumed at home as part of traditional meals during breakfast, lunch, or dinner. Compared to the US and Asian markets, Dutch cheese sales via foodservice channels are still relatively immature. Foodservice in those regions embraced cheese as an ingredient or snack, and are they largely built on the demand for pizza cheeses like mozzarella and American cheese on cheeseburgers (see Figure 15).

Figure 15: Foodservice Supports Demand for Soft Cheese (Growth: 2018 vs. 2014)



Source: Euromonitor, Rabobank 2019

On-the-Go

Similarly, 'on-the-go' grocery shopping specifically targets urban areas. These areas often have smaller households and large transport hubs, allowing consumers to save time by purchasing their daily groceries, snacks, or (prepared) meals on their way to or from work. In return, consumers are willing to pay a premium for products which are packed in smaller volumes.

Increased sales value for packaged semi-hard cheeses in the Netherlands and Germany illustrates the growing demand for resealable 'small-volume' packaging.

Awareness

Food manufacturers express claims about health and nutritional values, sustainability, local origin, or the natural aspects of their product in order to elevate consumer awareness of the attributes of their products. This is a form of product differentiation, but at the same time, it also provides convenience because it helps consumers make difficult decisions. In order to stay within 'psychological' price ranges, products are often sold in smaller volumes per unit.

However, awareness can also lead to misperceptions – for example, regarding health issues such as allergies and lactose intolerance, or sustainability aspects. Certain groups of consumers could perceive that dairy-free is better, for example, while there is often no irrefutable evidence.

Product Differentiation

Product differentiation has many different forms. Within the northwestern European cheese landscape, brands, variety, flavor, and local origin are relatively well-established ways of product differentiation or premiumization.

De-Commoditizing Milk Flows

A fast-growing form of differentiation is one based on milk flows, often combined with claims addressing potential health benefits, nutritive value, intolerances and allergies, naturalness, animal

welfare benefits, a wider range of sustainability topics, local origin, or even the impression that dairy-free is better in the case of dairy alternatives.

Until recently, the de-commoditization or labeling of milk flows in the Dutch cheese industry was relatively small in volume, with the exception of meadow milk. Organic and goat milk are established and still-growing segments, but nonetheless relatively small in volume. Moreover, the labeling of milk or alternatives often starts in the liquid milk segment, before moving to other dairy categories such as cheese.

In volume, VLOG (Verband Lebensmittel ohne Gentechnik), or GMO-free, is the rising star. In under two years, most large Dutch cheese producers, including FrieslandCampina and Royal A-ware, started producing cheese based on VLOG milk. Cooperative CONO Kaasmakers (Beemster cheese) announced plans to convert its entire cheese production to VLOG-certified by 2020, while Royal Bel Leerdammer has the ambition to produce all of the branded Leerdammer cheese from VLOG milk by 2021. Both dairies offer a premium of EUR 1.00/100kg of milk to farmers. In Germany, the DMK Group converted 2.3m metric tons, or nearly 28%, of its total milk supply to VLOG-certified milk in a time period of just 18 months. Demand from German retailers is the main reason behind this rapid conversion.

In the liquid milk segment, Royal A-ware (2018) – in partnership with retailer Ahold Delhaize (Albert Heijn) – and FrieslandCampina (2019) announced the launch of labels focusing on a wider range of sustainability topics.

In first instance, labeling offers a premium for both the farmer and the processor. However, for the longer term, it also has the risk of becoming mainstream, potentially diminishing margins as the final result.

Overseas Exports: Small in Volume, but Opportunities for Long-Term Growth on the Horizon

Despite the relatively small volume, overseas exports are expected to gain importance when it comes to long-term growth. Globally, trade agreements have improved access to many large export markets in both developed and developing regions, while the nutritious value of cheese is increasingly being recognized.

Trade Agreements

In 2012 and 2013, Russia was the largest cheese export market outside of the EU for the Netherlands, Germany, and many other EU countries. The Russian trade ban in 2014 was a wake-up call for companies to expand trade opportunities outside of the European continent. At the moment, there are no developments that indicate that the current trade restrictions will be removed or changed in order to support cheese exports to Russia. For the long term, the UK market is still surrounded with uncertainties due to Brexit.

Recent EU trade agreements and negotiations with growing export markets for Dutch cheeses – such as Japan, Chile, South Korea, Mexico, Canada, and the Mercosur countries – have already improved, or are likely to improve, the export position of the Dutch and EU cheese industry. This is due to larger export quotas, lower import tariffs, or even complete (future) removal of import tariffs for (hard) cheeses (see Figure 11). Furthermore, trade agreements often result in lower administration and logistics costs.

However, unlike other dairy commodities, most cheese export markets require a customized marketing approach, focusing on local features and consumer preferences.

Categorizing Export Markets

The main Dutch overseas export markets for hard cheese can currently roughly be categorized as follows:

- countries where most cheese imports from Europe are further processed (e.g. Japan).
- countries where most cheese is imported in bulk, and subsequently repacked for retail and catering customers. The value that is created in the cutting and packing for retail requirements is not captured by the exporters (e.g. Mexico).
- countries that import mostly specialty cheeses, which are mostly retail-ready (e.g. the US)

Developing Regions

In most developing regions, cheese is not a part of the traditional diet. Due to population growth, increasing purchasing power, and the current low base for cheese consumption, developing cheese markets provide better potential for long-term volume growth than the saturated European cheese market. Opportunities for increasing domestic cheese production are often limited due to low availability or a complete absence of local milk supply for cheese. Furthermore, the costs associated with the sourcing of raw milk are often high compared to imports. Aside from the growth of the foodservice sector, premiumization also provides opportunities for 'specialty' hard cheeses in some emerging markets.

Emerging Asian Cheese Market

In 2017, both Chinese and ASEAN-5 cheese imports surpassed the 100,000 metric ton mark, resulting in annual growth rates of 20% and 10% between 2012 and 2017, respectively. Nonetheless, in volume, the traditional northern Asian (Japan and South Korea) export markets still account for 60% (+340,000 metric tons) of total Asian cheese trade. Collectively, cheese exports to China, ASEAN-5, Japan, and South Korea exceed 570,000 metric tons annually, representing one of the largest cheese-importing regions.

Rabobank forecasts China's annual cheese import to near 200,000 metric tons by 2023. Combined Chinese, ASEAN-5, Japanese, and South Korean cheese exports are expected to exceed 700,000 metric tons annually by 2023.

Retail foodservice markets are the main growth engine for cheese demand. Quick-service restaurant chains, particularly, are rapidly expanding, underpinning the growing demand for pizza cheeses (mozzarella) and burgers (processed cheese).

However, the (export) growth is not limitless in developing regions. For example, a slowdown in economic growth, government support to improve the competitiveness of domestic cheese production, trade barriers for imported cheese, or a rising popularity of dairy alternatives could reduce the demand for cheese or reduce import requirements. At the same time, competition for (Asian) export market opportunities is increasing among cheese companies in exporting regions.

Premiumization in Developed Markets

In developed countries, the opportunities for volume growth are more restricted due to the often higher base for cheese consumption and lower population growth. For some countries, such as the US, price-competitive domestic production has to be taken into account for certain cheese varieties and distribution channels. However, the demand for hard 'specialty' cheeses via specialized cheese outlets still provides opportunities for value growth in developed markets.

Imprint

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