

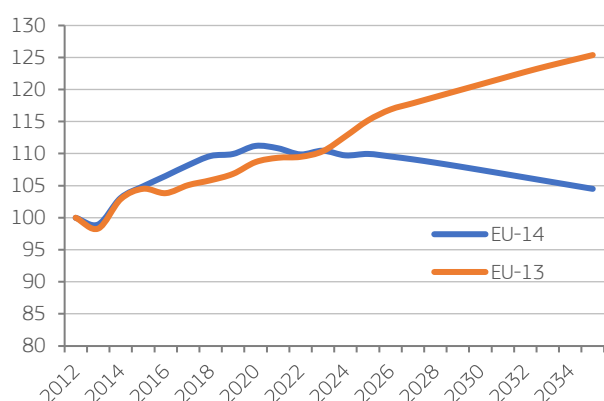
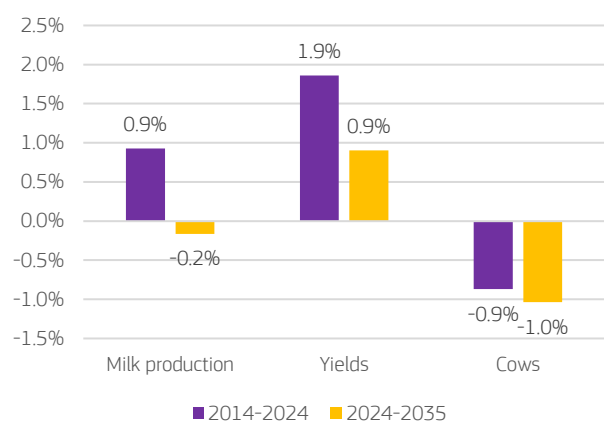
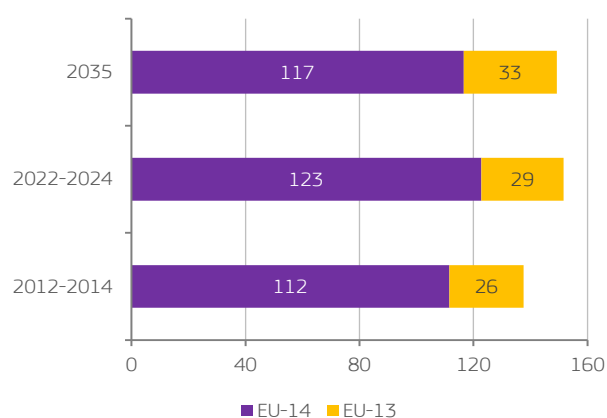
# MILK AND DAIRY PRODUCTS

## /3

*This chapter presents projections for EU raw milk and dairy commodity markets and reviews the relevant drivers. The outlook takes into account the path to a more sustainable dairy sector and to more segmented dairy markets, both of which could increase the value added in domestic and global sales of EU dairy commodities.*

*The outlook also reflects on the possible challenges farmers can face from increasing contributions of the dairy sector to more ambitious national and EU environmental policies and sustainability goals, which could contribute to a limited milk solids availability in the medium term. To cope with these challenges, a continued gradual shift is projected towards higher value-added dairy products in the EU export portfolio, while the raw milk price in the EU is likely to remain relatively high, supported by strong domestic and global demand for milk fats.*

## MILK

**GRAPH 3.1** Evolution of EU cow's milk production (index 100 = average 2012-14)**GRAPH 3.2** Developments in EU milk production, yield and dairy cows' numbers (%)**GRAPH 3.3** Milk production in EU-14 and EU-13 countries, in selected years (million t)**EU milk pool limited by decreasing cow herd**

EU milk deliveries have steadily increased in the last decade (+0.9% per year) due to increasing productivity of the sector. This provided a stable milk pool for the EU dairy industry, which preserved its leading position on global dairy markets. Although EU milk yields are to further increase, the EU milk production is about to reach a turning point in the coming years, where the continuous decline in the dairy cow herd is not anymore counterbalanced with increasing milk yields, leading to a prospect of decrease in the milk pool (-0.2% per year) and the milk solids availability.

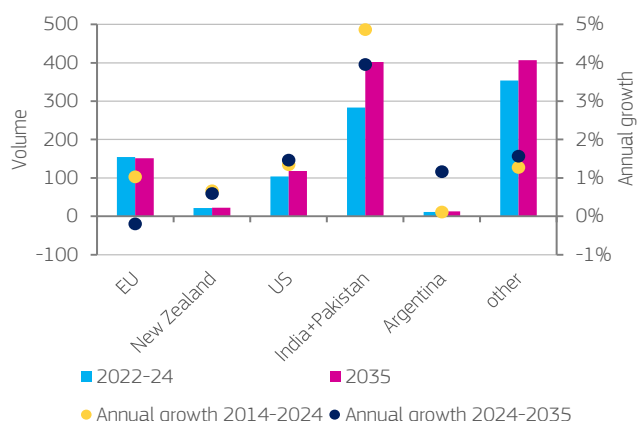
The regional differences in the development of EU milk production are substantial. In some eastern EU countries, there is still a potential to continue the increasing milk production trend of the past years (e.g. Poland). Many other countries that drove the increase in EU milk production in the past are to reach the limits of further rapid gains in productivity, and also face constraints to contribute to more ambitious environmental objectives (for example in the Netherlands, Belgium, and Denmark).

**EU milk production to contribute more to environmental sustainability objectives**

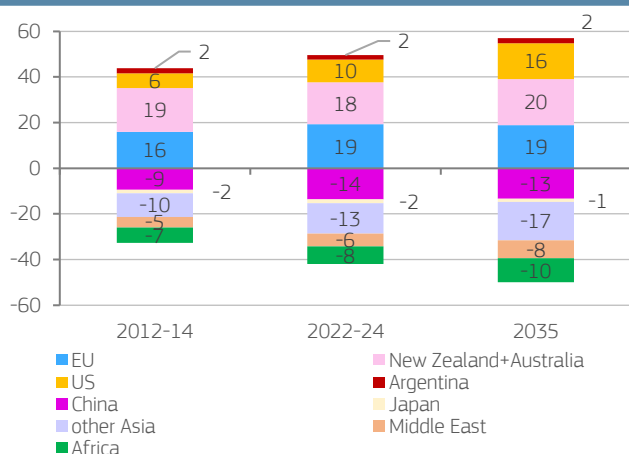
EU milk production will continue to be driven by increasing contributions from the sector towards more environmentally sustainable agricultural and food systems in the coming years. On the one hand, this can generate more added value and stability in the sector through price markups on products under high quality and sustainability standards, and due to diversified production systems (e.g. organic, quality schemes). On the other hand, already announced stricter national environmental policies (e.g. policies aiming to reduce excessive nitrogen emissions) may further accentuate the shrinking of the EU dairy herd (-11% by 2035 compared with the 2022-2024 average). Together with a prospect of a slowdown in the growth of milk yields, the milk pool available for dairy processing remains limited.

Milk yields can increase by 0.9% per year by 2035, slowing down to half of the growth rate seen in the past decade. While social sustainability considerations (increased animal welfare and thus better animal health and well-being), could still contribute to increasing yields, some past drivers of productivity gains (e.g. closing productivity gap due to structural differences between EU countries) are gradually becoming less impactful.

**GRAPH 3.4** Milk production volume (million t) and annual growth rates (%) in given period for selected countries

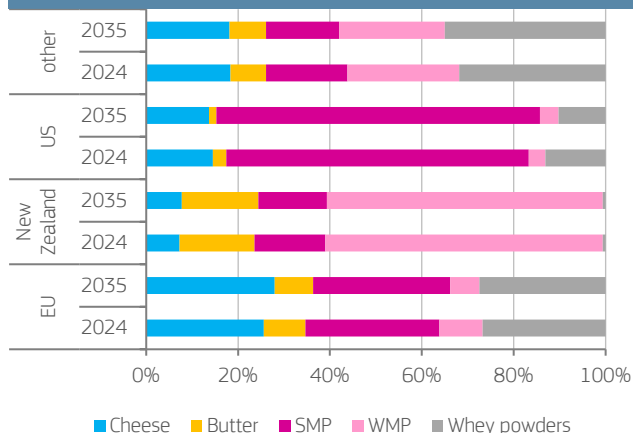


**GRAPH 3.5** Milk surplus and deficit in selected countries and regions (million t of milk equivalent)



Note: surplus and deficit is calculated as domestic consumption minus domestic production

**GRAPH 3.6** Trade shares of main dairy exporters in selected dairy products



### Global milk production continues to increase

The global dairy market will continue to expand, with global milk production increasing at a similar rate as in the last decade (+1.8% per year). However, this growth will be driven less by the traditional exporting countries, and more by some larger consumer countries that are set to increase their efforts to become more self-sufficient. India and Pakistan continue to be a powerhouse of global milk supply, while some Asian and north African countries are also expected to increase their production. Nevertheless, the additional production capacities in Africa and Asia will be mostly absorbed by domestic markets, and thus global dairy trade will still play a crucial role to satisfy global demand (around 8% of the milk remains traded). The dynamic increase in Asian dairy consumption in the future will increasingly be driven by South-East Asia, while China's import demand is expected to stop increasing due to increased domestic production, the slowdown of its economic growth and its ageing population.

### EU keeps its position on global export markets

Global dairy imports are to further increase, but the growth rate is expected to slow down somewhat to 1.3% per year between 2024 and 2035 (measured in milk equivalent volumes), compared with 1.7% in the past decade. The EU and New Zealand will remain the world's top two exporters of dairy products, accounting for around 46% of global exports by 2035, and together with the US accounting for around 65%. The EU is expected to orient its portfolio of exported commodities towards higher added value products. With this shift, EU export volumes are unlikely to increase (-0.2% per year until 2035), although an increase in value terms is still possible (+0.4% per year). Further prospects for increasing milk production in New Zealand remain limited, due to constraints to the growth potential in milk yields in grassland-based production systems, and to environmental considerations not favouring an increasing cow herd. US production, facing less strict environmental policy constraints, can increase its share of global exports (20% share of global exports in 2035, compared with 15% in 2022-2024). Argentina will likely strengthen its position as important exporter in South America.

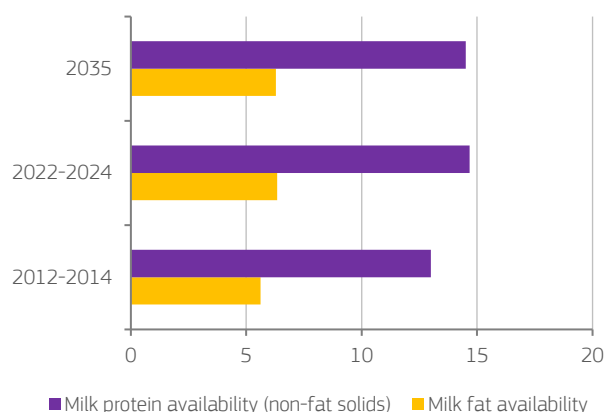
### Differentiation of global imports set to support EU trade

The increasing domestic production capacities in China will likely slow down the strong import growth achieved in the past for skimmed and whole milk powders. The expected strong demand for milk powders in North Africa, the Middle East and South-East Asia will only partly compensate for this decline. Therefore, the slowdown of global import growth of dairy products will mostly impact milk powders. By contrast, exports of cheese, whey and butter could grow at a similar rate as in the last decade (+1.3%, +1.4% and +0.7% annual growth in global exports). The profile of EU dairy exports will likely adapt to these market developments by shifting towards higher value-added goods.



# DAIRY PRODUCTS

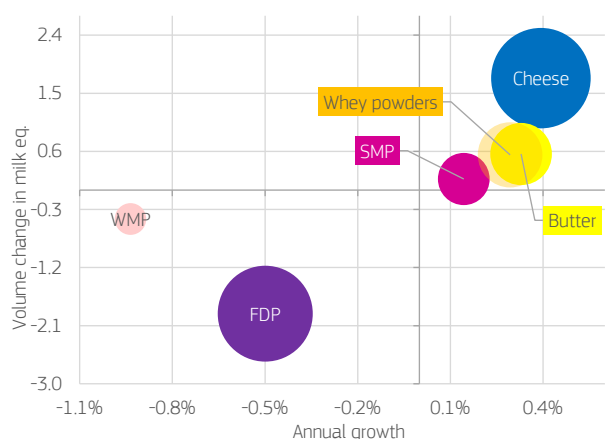
**GRAPH 3.7** Availability of milk fat and milk protein in the EU (million t)



## Limited future milk solids availability

Average milk solids content of EU raw milk production is to still improve by the adoption of better feeding strategies and adjusted herd structure (e.g. more dairy cow breeds offering more butterfat and protein content). However, the growth rate of the past decade is expected to slow down, as a similar increase is no longer possible in the EU countries driving the past development (e.g. Austria, Denmark and Ireland). Climate change can increase the likelihood of adverse weather events in some regions, with a potentially negative impact on grasslands and on animals (e.g. via heat stress). Nevertheless, the impact of climate change on milk yields is ambiguous and hard to quantify, due to its locally different implications. The slower growth in milk solids content, combined with a reduction in EU raw milk deliveries, would lead to a 1% decrease both in milk fat and non-fat solids over the period from 2024 to 2035.

**GRAPH 3.8** EU production of selected dairy products change (million t of milk equivalent) and annual growth (%) in 2024-2035

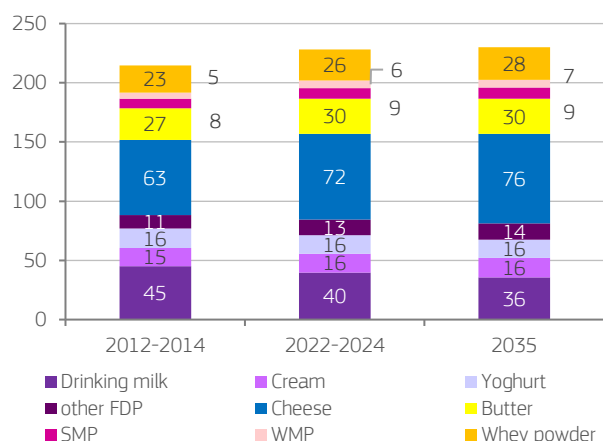


Note: sizes of circles correspond to the volume of milk (in milk equivalent) used for their production in 2022-2024

## Cheese and whey absorb a higher share of the milk solids pool

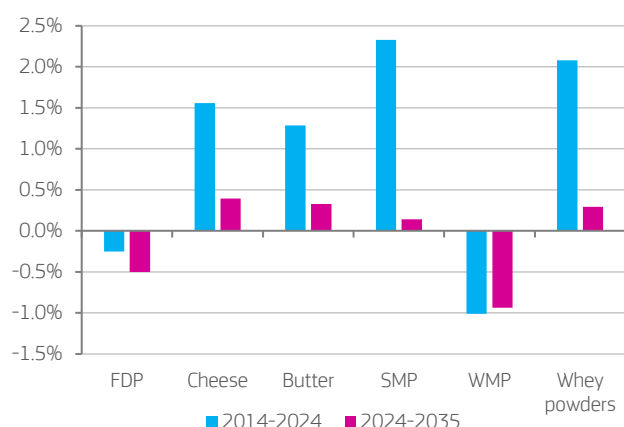
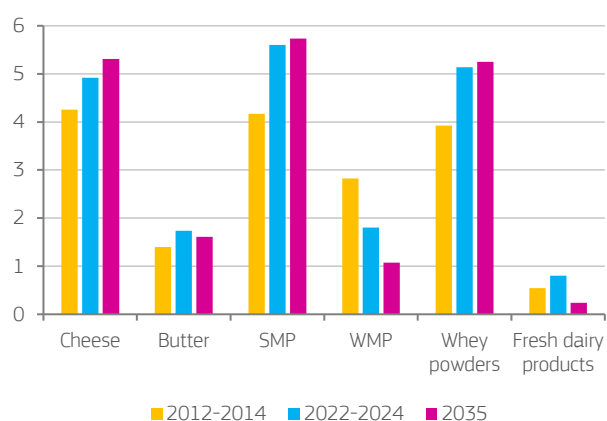
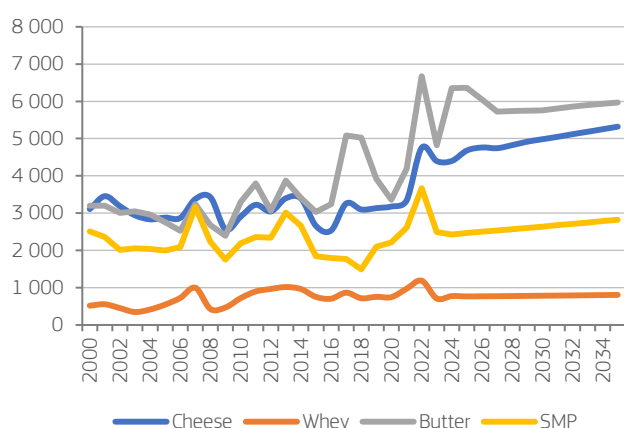
EU dairy processing is expected to adjust to the decreasing milk solids pool, combined with changes in consumer preferences, competition with other global suppliers on export markets, and increasing processing costs, which may make processors to opt for producing more dairy ingredients with higher value added. These drivers combined will likely favour the cheese and whey production stream, which is expected to absorb around 46% of the EU milk pool by 2035, compared to 44% in the period 2022-2024. In parallel, butter production could only achieve a limited growth (+0.3% annual increase), and skimmed milk powder (SMP) production could remain stable. Whole milk powder (WMP) production is expected to decline (-0.9% per year), also due to limited EU competitiveness on global markets. The consumption of drinking milk is likely to continue its long-term declining trend, leading to decreasing production for fresh dairy products (FDP).

**GRAPH 3.9** EU per capita consumption total and selected dairy products (kg of milk equivalent)



## Strong EU domestic demand for dairy products

Strong domestic consumption will continue to be a stable outlet for the EU dairy industry. Consumption per capita of EU dairy products will likely remain robust, with a yearly increase of 2 kg per capita for those commodities analysed in this report. Changing consumer preferences will continue affecting demand, with more consumers opting for dairy products with lower fat and sugar content or products addressing food intolerances (e.g. lactose intolerance). Lifestyle and health-related choices will likely further increase demand for fortified (with vitamins and minerals) and functional products (geared towards specific nutritional content). While the market segment for plant-based alternatives has steadily grown, its impact on the dairy commodities demand will likely remain limited.

**GRAPH 3.10** Annual change in use of selected dairy products in the EU (%)**GRAPH 3.11** EU exports of selected dairy products (million t of milk equivalent)**GRAPH 3.12** Dairy commodity prices in the EU (EUR/t)

## Cheese market set to continue growing

Strong domestic demand and increasing import demand will support a further increase in EU cheese production. Cheese is to remain the EU's flagship export product of the dairy industry (+0.8% yearly increase in exports until 2035). Although recent food price inflation has somewhat slowed down the increase in EU cheese consumption, it still can increase by 0.4% per year. Within the fresh dairy products (FDP) category, drinking milk consumption is set to continue its declining path also in the coming decade. In parallel, the consumption of yoghurt could remain stable, while cream consumption can even slightly increase. While FDP consumption in the EU is to decline by a similar rate as in the previous decade (-0.5% per year), EU exports will likely decrease at an even higher rate, in part due to decreasing demand in China. EU consumption and exports of butter are expected to remain relatively stable (slightly decreasing only due to exceptionally high exports in 2024).

## More value added from EU whey derivatives

Global demand for whey products is to remain strong, driven by increasing food use and new product lines covering nutritional or health functions. Supported by this export opportunity, EU whey production could increase by 0.3% per year in the next decade, while EU whey exports could increase by 0.2% per year over the same period. EU production and exports of SMP are expected to remain stable (can even increase slightly compared to already strong levels in 2022-24) despite increasing global competition. Domestic use of SMP can still increase but at a slower rate than in the past decade (+0.4% per year, compared with +1.1% per year in the past). WMP production is set to further decline at a similar rate to the past decade (-0.9% per year), due to both reduced global demand and low EU competitiveness. As global import demand for WMP will likely not recover, EU exports are expected to experience an even larger decrease (-5% per year), while EU domestic use could remain stable, supported by food processing. Overall, while the total volume of EU dairy exports is projected to slightly decrease by 0.2% per year, exports are still expected to increase in value (+0.4% per year). This is due to a shift towards more value-added products in the EU export portfolio, and relatively high world market prices.

## EU raw milk price reaching a new, higher, equilibrium

EU raw milk price is expected to remain well above pre-2022 levels in the next decade, but still below the historical high of 2021/22. This development will largely be driven by the inflationary effect, remaining rather flat in real terms. Dairy commodity prices can take different paths of development. EU cheese prices are expected to steadily increase, driven by strong demand for milk fat with tight EU supply. Butter prices are to somewhat decrease after current record high levels (as butter could face greater competition from other fats at relatively high prices), but they are expected to stay at high levels and on an increasing path until 2035. At the same time, SMP prices could only slightly increase, while whey prices will likely remain flat.