

ECONOMICAL PROSPECTS ON MEDIUM TERM IN THE CONTEXT OF MILK QUOTA ABOLITION

Vasile DREVE¹, Ion CĂLIN¹, Bogdan BAZGĂ²

¹University of Agronomic Sciences and Veterinary Medicine of Bucharest,
59 Marasti Blvd, District 1, Bucharest, Romania

²"Mihai Viteazul" National Intelligence Academy, Bucharest,
20 Odăi Street, District 1, Romania

Corresponding author e-mail: drevevasile@gmail.com

Abstract

The dairy market has a major contribution to the agricultural turnover in the EU as a whole as well as in most of the Member States (MS) of the EU. The milk quota system was introduced in 1984, in order to limit public spending on the sector, to control milk production, and to stabilize milk prices and the agricultural income of milk producers. The abolition of milk quotas was aiming to improve the competitiveness of European dairies, making production more sensible to market variations. The removal of milk quotas at the same time intensifies the economic outlook of certain areas/categories of dairy production with comparative disadvantages. Medium and long term prospects are favorable for the dairy sector in line with population growth and appetite for Western-style diet in emerging economies. This does not prevent, however, short-term market fluctuations. Finally, the current difficulties faced by the milk producers milk in certain areas worst affected by feed price increases cannot hide the overall positive image of the sector.

Key words: dairy, milk quota, price, milk producers, EU.

INTRODUCTION

The Common Agricultural Policy (CAP) is confronted with a set of challenges, some unique in nature, some unforeseen, that invite the EU to make a strategic choice for the long-term future of its agriculture and rural areas. To be effective in addressing these challenges, the CAP needs to operate within the context of sound economic policies and sustainable public finances contributing to the achievement of the EU objectives.

Common Agricultural Policy (CAP) has changed several times throughout its history, as a reaction to the enlargement process and under the pressure of globalization.

EU dairy market is governed by the Common Market Organization (CMO, where the milk quota system was one of the most notable elements. The milk quota system was originally introduced in 1984 to limit public expenditure in the sector, to stabilize milk price and also milk producer's income as well as to limit public sector spendings (Hemme and Otte, 2010)

The Common Market Organization (CMO) for the milk sector suffered successive

reforms in the last decade. Based on Agenda 2000 Reform guidelines, the 2003 Reform started with a relaxation of the milk quotas system. However, it was abolished in 2015. This date was confirmed under the 2008 CAP Reform known as the Health Check of the CAP. The reform established a progressive increase of quotas for each Member State separately. It also led to the suspension of seasonal storage aid for certain cheeses and for butter used in pastries and ice cream.

A key element of this document was the proposal to abolish milk quotas starting with 2015, as this instrument has been known as obsolete in the current market developments and the new CAP philosophy. The reform proposed the abolition of this instrument to take place when the sector would show signs for such a radical measure. Therefore, a gradual increasing of quotas by 1% each year, until 2015, was proposed.

The main concerns were related to the possibility of milk production concentration in areas where this activity involved lower costs and the disappearance of production from certain areas (e.g. mountain areas, vulnerable areas).

For a sector that had been using production limitations for more than 25 years, the end of quotas created new challenges for economic operators and also for the sheep and goat sector. In order to prepare them to the new context, the Commission proposed measures to strengthen the organization of milk producers and their bargaining power, as well as measures to improve cooperation and relations between the various links of the supply chain (Ernst & Young, 2013).

MATERIALS AND METHODS

The study intends to analyze the evolution of the milk sector on medium term (2016-2025) after the milk quota abolition with special reference to milk production, number of producers, livestock, products evolution and trade balance.

To achieve this goals we analyzed the data of official statistics provided by different institutions (Eurostat, FAOSTAT, Ministry of Agriculture and Rural Development from Romania), after that the forecast were studied in order to interpret the available data and finally to issue several conclusions arising from this study.

RESULTS AND DISCUSSIONS

The milk sector represents 15% of total EU agricultural production, with a production value of nearly 55 billion euros. EU milk production represents approximately 20% of world production and in 2014 about 159 million tonnes were produced at EU level. In the first eleven months of 2015, EU cow's milk production increased by 1.5% (approx. 1.7 million tons), compared to 2014.

Germany and France are the main producers covering around 40% of EU production, followed by UK, Poland, Netherlands and Italy.

The main milk product is represented by cheese products and it uses approximately 50% of EU milk production. Only 8% of total EU cheese production is exported (Agriculture, forestry and fishery statistics, 2014).

Approximately 11% (in milk equivalent) of EU milk production is exported while the rest is consumed domestically.

Main dairy exported are milk powder, cheese, butter and fresh dairy products. Netherlands, France, Germany, Belgium, Poland and Denmark export individually more than one million tonnes of milk equivalent, which cumulated represents 70% of EU exports.

As mentioned in the document "Evaluation of CAP - measures applied in the dairy sector", the EU has been over the year's one of the major players on the global market, with considerable influence on the price of dairy products. EU share of global exports should increase slightly due to the considerable potential of the sector (unlike New Zealand, EU's main competitor which is more constrained by the availability of natural resources).

The potential for an increased production is mainly a consequence of the milk quota abolition, livestock, production capacity, favorable climatic conditions and processing capacity.

A production increase on medium term is expected due to livestock increase. These changes have occurred after decades of continuous decline. Although, lower than in the last decade, an annual 1% increase is expected for the milk production, reaching in 2025 a production 172 million tonnes. This will take place in the context of a 2% annual increases of global imports and an increase in demand for dairy products on the EU internal market (Figure 1).

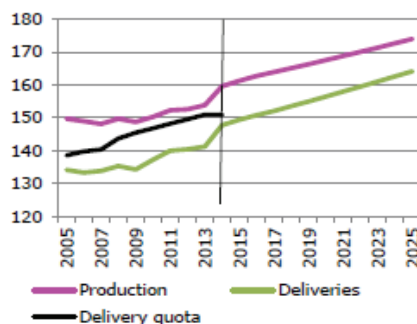


Figure 1. Milk supply and deliveries in the EU (million tonnes)

This represents an increase of about 15 million tonnes over 10 years and from this

quantity less than 3 million tonnes will be produced by the EU-13 (New Member States). Significant increase in deliveries is expected in Ireland, Poland, Denmark, Estonia and Latvia. In Germany, France, Britain and the Netherlands, deliveries should follow the EU average. The aforementioned Members States will generate 74% of EU production in 2025, compared with 72% in 2015. Therefore, the concentration of milk production will be quite limited.

Meanwhile, drop of supplies are expected in countries such as Finland, Sweden, Greece and Romania. In these countries, milk production increased in 2014, based on favourable market context, but it's expected to return to a downward trend if the milk price is going to decrease.

Furthermore, investments in processing capacities and farms could help to reverse, from negative to positive, the trend of production in Member States such as: U.K., Czech Republic, Slovakia and Hungary.

In the new Member States (EU-N13), it is likely that a higher proportion of milk will be delivered factories (80% in 2025 compared to 73% in 2015). In addition, a substantial growth of productivity is expected: milk yield will increase by 2.5% per year and will reach an average production of 6460 kg/cow in 2025. Consequently, a fall by 1.9% per year, in the number of dairy cows is expected, slightly lower than in the last 10 years.

In the old Member States (EU-15), the yield is expected to grow slightly faster compared to the past decade, approx. 8400 kg/cow in 2025, which represents an increase of 1.4% per year. Among the factors that will play a role in the improvement of efficiency, we shall include: genetics, wider use of robots, better pasture management and a higher proportion of concentrates in diets. Taking into account that in the post-quota period herds cannot be taken over if farmers leave the sector, the number of dairy cows could decrease by 0.5% per year (European Commission, 2015).

EU dairy market is currently characterized by an imbalance both in terms of raw material, and milk products.

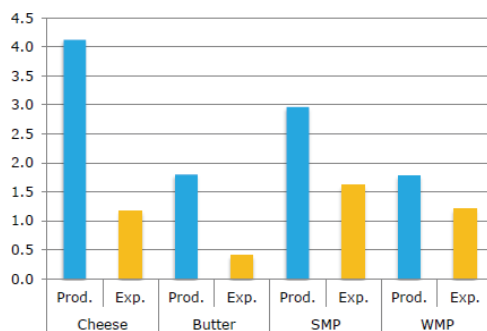
Since 2007, EU prices for raw milk and milk products have fluctuated significantly. Such variations will continue in the following years

as a response to: the impact of weather conditions on production, fluctuating energy prices, exchange rates and animal health issues.

On medium-term, the dairy sector will continue to expand as a response to a steady growth of domestic and world demand, while prices are expected to reach moderate levels in the following years. Import demand from other regions of the world increased significantly and is expected to grow steadily (approx. 2.4% annually), driven mainly by population growth and a change in diet in favour of dairy products. On the demand side, the most remarkable change in 2015 was the increase of imports in countries such as: Mexico, Japan, USA, Philippines and Malaysia (FAO - Global dairy sector. 2013).

In the next decade, about half of the 'EU milk production will be further converted into milk powder (skimmed milk powder mainly) and 30% will be used for cheese. (Figure 2)

While the bigger share of the milk powder surplus will be exported, the main driver for cheese consumption remains the domestic market.



Note: Milk equivalent total solids coefficients used: 3.6 for cheese, 6.57 for butter, 7.6 for SMP, 7.56 for WMP.

Figure 2. Increase in production and exports of dairy commodities in the next 10 years (2025 vs. 2015, million t of milk equivalent)

Almost half of EU production of skimmed milk powder (SMP) is exported and the rest is used for domestic consumption (e.g. for processing of fresh milk, chocolate, biscuits, etc.) or stored. After several years of decline the use of SMP for household purposes began to rise again in 2009 and it is expected to increase by more than 200 thousand tons in

the next 10 years. The EU SMP production will stabilize around 1 million tons.

Skimmed milk powder is also the basis for the whole milk powder production, which is exported mainly to countries with low-income from Africa.

The low SMP price and a competitive euro have allowed other countries from the Middle East and Southeast Asia to purchase larger quantities. EU skimmed milk powder exports continued to rise so far, despite of a drop in sales in the case of Algeria, China and Indonesia. Currently, there are some concerns regarding Algeria, which has purchased smaller quantities in the context of reduced oil prices, but this is not expected to be maintained throughout the period analyzed. Demand is expected to increase in Asia (including China) and Africa. With 900 thousand tons exported in 2025, the EU could maintain a market share of 32% on the world market (Agricultural Outlook 2015-2024, 2015).

As regards whole milk powder (WMP), from 2013 the production began to rise after a fairly long period of decline, mainly based on the increase of domestic consumption.

Regarding export, the main EU clients are represented by Oman, Algeria, Nigeria, China and Hong Kong. Medium-term outlook, estimates an increase of exports with 150 thousand tons generated by a strong increase in imports to African countries and Asia.

China will remain the main buyer and will absorb almost 30% of world trade. However, its imports of WMP will increase much less between 2015 and 2025 than in the previous decade (with less than 200 thousand tons). (Milk and Milk Products Price and Trade Update, 2015)

Cheese production is expected to increase by 1.15 million tons in the next decade, reaching a total of 11.2 million tonnes in 2025. If the proportion intended for exports increases, in the following period, it will still be less than 10% of the production obtained in 2025, emphasizing the importance of the domestic market. Consumption per capita is rising, determined by a favorable economic situation and also by consumer preferences. The increase rate will be higher in the new

Member States (EU-N13) than in the old Member States (EU-15). (Figure 3)

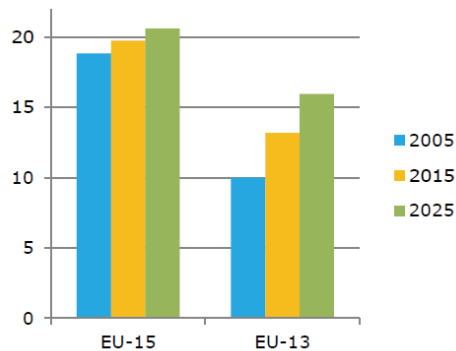


Figure 3. Consumption of Cheese (kg per capita)

On short term, cheese exports were affected clearly by the introduction of the Russian embargo. Russia was EU's main customer for this category, accounting for over 30% of its exports. However, EU traders have been successful in directing a significant proportion of their exports to other destinations, such as US, Japan and South Korea (USDA Outlook, 2015).

By 2025, it is expected that the EU will export around 1 million tonnes of cheese that is with 230 thousand tons more than 2013 exports (before the Russian embargo). The average export price for EU cheeses, in 2014, was 5 euro/kg compared to US and New Zealand export cheese price 3.5 euro/kg (the EU's main competitors). The EU cheese high prices reflect the diversity of varieties that are exported. The EU is the largest exporter of cheese in the world and could attain by 2025, a market share of 37% (Medium-term prospects 2015-2025, 2015).

Butter production will be higher as a result of the increased (2.6 million tonnes in 2025, with 12% higher than 2015). While in the past, it burdensome to extract milk fat, market trends have reversed at EU level and worldwide, reaching high prices in 2014 and 2015. Retail sales of butter rose by almost 20% over the past 10 years, while the margarine and vegetable oil seeds fell steadily. (European Milk Market Observatory, 2015)

Industrial use of butter (approx. 40% of the butter consumption) is also increasing. Butter is used extensively for manufacturing biscuits

and pastry, representing 50% of the butter used industrially and is facing a growing demand. Butter is also used in the cheese and chocolate industry.

The EU butter market relies more on domestic consumption. EU exports accounted for 15% of production in 2005 (when export subsidies were granted), and only 6% in 2015 - a proportion which should remain stable in the next decade.

Over the analyzed period 2015 -2025, the US is expected to resume exports, while New Zealand will maintain its position as number one exporter, covering 50% of world trade. However, a growth to 210 thousand tons is estimated for EU exports.

In light of the above mentioned, the EU butter consumption is expected to grow by 9% in the medium term reaching 4.6 kg/capita. The growth will be higher in the new Member States, reaching only 3.9 kg/capita by 2025. Nevertheless, a gap of 1 kg/capita remains between new Member States and old Member States (CLAL, 2015).

Fresh products category includes milk (including UHT), fermented milk products and fresh cream. Retail sales for these products increased significantly: 90% for yogurts, almost 80% for drinking milk and 60% for cream. In volume terms, expressed in milk equivalent, drinking milk holds the biggest share of fresh dairy products. For this reason, in the following 10 years, a reduction 2 kg/capita is expected. Taking into account the population growth, this will translate into a stabilization of total volume consumed.

Exports of fresh dairy products (especially UHT milk) increased by nearly 15% every year for the past 10 years: from very small volumes of approx. 200 thousand tons in 2005 to 800 thousand tons in 2015. (European Milk Market Observatory, 2015)

Export of milk does not seem very profitable because of the high water content and low added value, but the market has grown due to the low transport cost towards China.

EU exports will further develop in the next 10 years reaching 1.3 million tonnes. In spite of that, fresh products will remain a minor market (representing less than 3% of EU production).

CONCLUSIONS

In the following period global dairy consumption will grow annually by 1.9%, according to FAO-OECD estimations.

This is slightly lower than in the last decade (2.1%), but in terms of volume represents an additional 16.1 million tonnes of milk produced annually, as compared with 14.5 million t between 2005 and 2014. However, the global market should trade cautiously. By 2025, only 7.5% of world milk production should be marketed in order to maintain under control possible imbalances that may arise on the market.

On medium term, consumption of dairy products will increase, especially for butter (+ 9%, 4.6 kg / capita), cheese (+ 3%, 18.6 kg / capita), cream (+ 9%), but will decrease for milk (-6.2%) and fermented products (-0.8%). Milk price will recover on short term and it's expected to grow on medium term reaching 360 eur/t in 2025 (the European average). By 2020, the average EU milk price is expected to fluctuate between 320 eur/t and 330 euro/t in the context of lower energy and feeding costs. After 2021, the milk price will increase simultaneously with dairy commodity prices, oil prices and feed costs.

In the following 10 years milk fats will be used more intensively, butter and cheese price are expected to rise to 3.800 eur/t in 2025. Skimmed milk powder prices may increase from the level of intervention price, recorded in 2015 (1698 eur/t), to an average price of 2.500 eur/t by the end of the projection period.

Agricultural income per annual working unit (AWU) in the EU-28 is expected to increase substantially by around 16 % in real terms over the 2015-2025 outlook period, as a combined effect of a strong increase in income in the EU-N13 by close to 40 % and a much smaller one in the EU-15 by 2 %. Consequently, EU-15/EU-N13 income gap will continue to narrow, but still remain substantial.

Given the large number of small farms and the age of farmers throughout the EU, structural change should continue over the outlook period, but at a slightly slower pace than in the pre-crisis period. The total EU

agricultural labour force is expected to fall from 9.9 million AWU in 2014 to 7.3 million in 2025.

REFERENCES

- CLAL, 2015 - The Global Dairy Market, (www.clal.it)
- Ernst & Young, 2013. Analysis on future developments in the milk sector. European Commission Publishing House, 25-38
- European Commission, 2015. Medium-term prospects for EU agricultural markets and income 2015-2025, (www.fao.org), 46-62
- European Commission, 2015. European Milk Market Observatory, DG Agriculture and Rural Development, European Commission.
- European Commission, 2015. Short Term Outlook for EU arable crops, dairy and meat markets, (www.ec.europa.eu), 13-18
- Eurostat, 2014. Agriculture, forestry and fishery statistics - 2014 edition, (www.ec.europa.eu/eurostat), 5 - 12
- FAO, 2014. Milk and Milk Products Price and Trade Update, (www.fao.org), 8 - 11
- FAO, 2013. Global dairy sector: Status and trends, (www.fao.org)
- Hemme T., Otte J., 2010. Status and Prospects for Smallholder Milk Production A Global Perspective, FAO Rome, 14 -23
- OECD-FAO, 2015. Agricultural Outlook 2015-2024, 18 - 31
- USDA, 2015. Livestock, Dairy, and Poultry Outlook, 2015 (www.usda.gov), 22-29