



EU Dairy Quota Sunset

Part I: EU Quota and Milk Production

By Blimling and Associates

Key Points:

- *On March 31, 2015, the EU's dairy quota system will sunset and its dairy industry will take a giant step toward market liberalization.*
- *The EU's dairy quota system was expanded in 2008 and then relaxed in subsequent years to create a "soft landing" by 2015, so its milk production grew about 1 percent a year during 2008-13.*
- *Though quotas will end on March 31, 2015, the EU dairy sector will still not be totally unfettered. Several pre-existing dairy support mechanisms will remain funded and executable.*
- *With March 31, 2015 fast approaching, many EU dairy farmers are gearing up to produce more milk – especially those in the large-scale production countries situated to the north and west which were the most constrained by the EU quota system.*
- *As promising as a quota-free environment is for some, the harsh reality is that expansion is not a realistic option for the majority of European dairy farmers. Into this category fall many of the dairy farms located in Eastern and Southern Europe.*
- *In contrast, in the high-production countries where the quota has been restrictive – namely, Germany, Denmark, Netherlands and Ireland – farm level expansions are already well underway.*
- *Depending on profitability, the extent of the increase in EU milk output will depend on such factors as higher yields due to nutrition or genetic improvements, increasing on-farm stocking density, converting more land to dairy operations, and expanding facilities to drive economies of scale.*
- *Published studies depict the EU milk supply as positioned to grow 1 percent a year from 2015 onward. But in the first year following quota end, the growth could be much greater as on-farm expansions and lingering support programs prolong the prevailing supply-side momentum, even as milk prices pull back.*

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This is the first of two reports that examine the sunset of the EU dairy quota system. This one focuses on how the EU's dairy industry will be affected – and, in particular, on how much EU dairy output will expand when the quota restraint is lifted. The second report will focus first on how the incremental growth in EU output will be channeled into dairy products such as cheese, milk powders, and butter; and then on how the global dairy product markets will be affected.

Big Changes Brewing

The European dairy industry stands on the precipice of generational change. For over 30 years, EU farmers and processors operated under a tightly regulated system of support measures and production quotas. On March 31, 2015, however, the industry will take a giant step toward liberalization as the quota system sunsets. Effective as quotas may have been in controlling domestic output, ultimately, issues over sector profitability and budgetary support led to market-oriented policy reform. “Quota” (as it is conversationally known) has been fraught with complexity and occasional controversy, but its absence will create new challenges and new opportunities for all EU stakeholders specifically and for the global dairy marketplace generally.

Several member states should enjoy strong milk production seasons in 2015, with output in subsequent years remaining well above historical levels due to farm level investments and expansions. Conversely, small-scale farming operations in less advantaged locales may succumb eventually to economic pressures, with declining milk production the likely result. However, given other market intervention and subsidy tools that will persist even after quota removal, the fate of less competitive operations is not fully known.

Milk processors situated in European expansion centers will benefit from emerging opportunities to serve EU demand as well as burgeoning world export markets. Anticipating milk supply growth in 2015 and beyond, producers and processors alike have already invested in new capacity to simply handle and maximize the value of every drop of new milk entering the system.

While it may be a forgone conclusion that, in a post-quota environment, certain countries will experience a substantial uptick in milk output, the overall impact is still up for debate. Divergent outlooks issued by governmental and industry experts highlight the uncertainty around production growth. Important questions remain:

- How much additional milk can be expected immediately following the abolition of quotas?

- To which products will this incremental milk feed?
- And, perhaps most critical for the U.S., how much excess EU product will spill into the global market, and how might this alter current export market shares?

This is the first of two reports addressing those questions. This report aims to ground the reader on the evolution and rationale of the quota system. Then, within the context of current EU milk production trends, it explains the rationale for its removal and the scenarios by which milk output may expand following quota sunset. The second report builds off the post-quota production estimates, but focuses on the EU processor perspective. Through that lens, we analyze how processing capacity has expanded ahead of the quota sunset scheduled for 2015. Within the framework of this new product capacity, the second report goes on to provide an in-depth product-by-product assessment to calculate potential EU surpluses destined for export and what key markets are likely to be affected. The analysis will be done for the major dairy commodities – cheese, milk powders (SMP and WMP) and butter.

EU Milk Quota Evolution and Expiration

Trying to rise from the wreckage of World War II, European nations implemented a series of policies aimed at improving agricultural productivity and preserving an affordable and available food supply for domestic consumers. These guiding principles and associated policies were formalized in 1962 with the creation of the Common Agricultural Policy (CAP). For the dairy industry, farm subsidies offered by CAP were a means to spur production growth to ensure sustainable milk supplies.

Before long, however, dairy farmers succeeded in expanding output beyond domestic demand, resulting in excess product. Upholding its commitment to the industry under the CAP, the EU bought surpluses so as to preserve farm production. Intervention purchases also served as an effective market support mechanism when product prices fell too low. By cleaning up the surplus and re-introducing the volume back into the market at a later time, the system

Many EU Support Measures Will Live On

Though quotas will disappear on March 31, 2015, the EU dairy sector will still not be totally “free” of government intervention. Indeed, CAP reform stipulated that several existing dairy support mechanisms will remain funded and executable. Quota abolition has engendered dissent in some quarters, particularly among those who lobbied hard to preserve the EU dairy farmer’s “lifestyle” and more importantly, financial security. Critics of quota removal often point to the impact that increased production will have on income levels of smaller dairy farms and those in disadvantaged regions.

The voice of opposition was strong and loud, enough so that as a condition of removing quotas, support programs like direct payments were required to remain in place to ensure a sustainable income for all EU farmers. Thus, EU direct payments to farmers are set to continue, at least until 2020. This mechanism recently underwent its own reform, with payments set to be more fairly disbursed across member states. Changes include linking subsidies to acreage farmed instead of pure output, awarding subsidies to active farmers instead of commercial landowners, and rebalancing payments around a standard EU benchmark payment to ensure that small farmers receive a minimum and large farms are capped. In addition, a portion of the funds will be reserved for farm operations that meet certain environmental sustainability standards.

The continued use of direct farm subsidies is likely to have a material impact on post-quota production levels. Government income injections, by their nature, keep less efficient, low-yield farms in operation despite prevailing

market factors that could have forced their closure or driven consolidation with larger producers. These subsidies create a confluence of two major supply movements. In several large-scale milk production states, the removal of quota is expected to trigger an immediate bump in milk output. At the same time, small-scale farm communities – particularly those in Eastern Europe – will continue to grow milk supply in the short term using subsidies as a crutch, regardless where EU farm gate prices might stand. So long as direct farm payments are exercised, EU aggregate milk supply will not be appropriately balanced entering the quota-free era. These imbalances will in turn distort regional milk prices and place a greater financial burden on larger scale producers.

The EU government also recently introduced a new support measure titled the “Milk Package.” The intent is to enable producers, chiefly those in less advantaged areas, to collectively negotiate as “producer organizations” and to obtain written supply contracts with processors. These contracts will formalize milk supply terms – including the prices for raw milk, minimum volume requirements, contract period and payment terms.

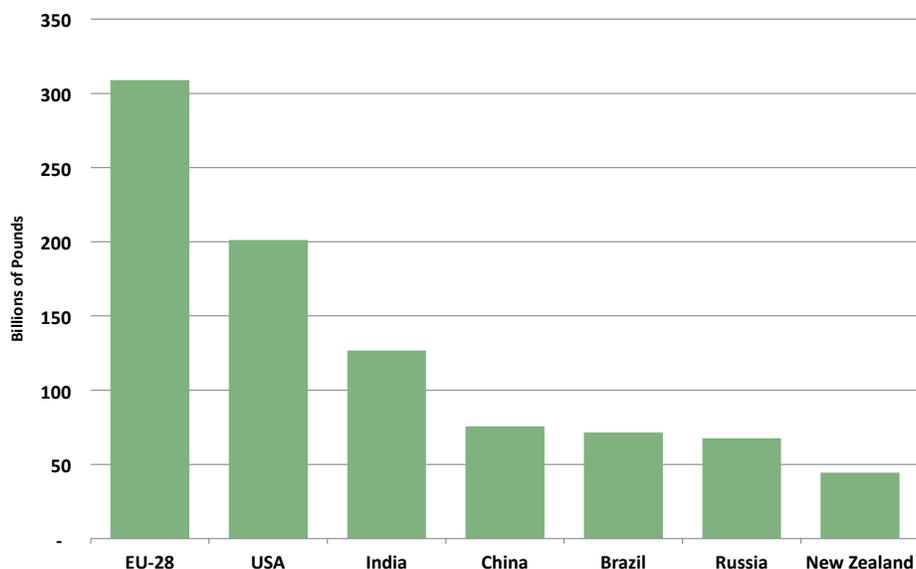
At the processor level, several market support programs are expected to remain in place to aid in the quota transition. Such programs include public intervention purchases of skim milk powder (SMP) and butter, private storage aid and export assistance. Import duties for several dairy products – including cheese, butter, milk powders and whey products – will also continue to be enforced.

effectively established a market price floor. But as chronic oversupply became the norm, governments could no longer afford to fund such programs.

Consequently, the EU instituted a quota system for the dairy industry in 1984. The proposed caps benchmarked national historic output on a country-by-country basis. These quotas were re-evaluated on an annual basis for the new quota year – defined as

April 1 to March 31. Each country could then allocate quota among its individual farmers and monitor output levels to ensure compliance.

At the onset, the EU’s plan was to administer production quotas for five years. But persistent surpluses suggested that the quotas were not restrictive enough. Accordingly, regulators tightened the quota system and extended its tenure first in the late 1980s and again in the 1990s.

Figure 1: Global Cow Milk Production, 2013

Source: USDA/FAS.

The most significant changes came in 2003, when policymakers reformed CAP to streamline policies and mechanisms for all EU agricultural industries. The focus in CAP reform was to re-purpose farm support. Support prices and coupled direct payments (linked to farm output) were scheduled to be removed and replaced by a new single farm payment structure. The new payment scheme was more fairly distributed among all states, while also putting less strain on the EU budget. Indeed, the static nature of the EU's CAP budget further underscored the need for reform as new member states – added from the central and eastern European regions – did not receive their fair shares of support even after a controlled transition into the program. These efforts paved the way for reform on multiple dairy support mechanisms, most notably the production quota system. For dairy, the reform placed a 2015 end date on quotas, noting that the system no longer satisfied its intended policy directive. With that decision, the EU dairy industry took its first steps toward creating a more market-driven platform.

As of 2007, quotas remained in place as work on CAP reform lingered. Around that time, the EU dairy industry was getting (another) lesson on the pitfalls to the system

amidst an unexpected and unprecedented run-up in global dairy prices. Following a severe drought in New Zealand, the world market was in immediate short supply. As world market prices quickly moved to record highs, EU producers faced greater headwinds than their peers as a function of prospective over-quota levies.

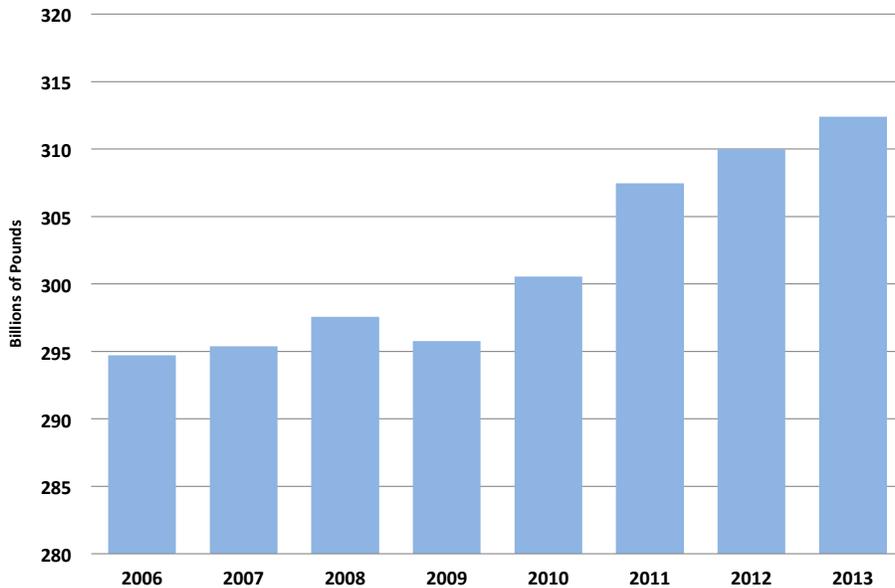
In response to these unfolding market conditions, the 2008 “CAP Health Check” resulted in an immediate 2 percent expansion of quota on April 1, 2008 and a further 1 percent increase over the next five years.

This gradual loosening of the quota was termed the “soft landing.” (The lone exception was Italy which received a cumulative 5 percent increase in 2009 in response to its continuous quota overruns.) As of April 1, 2013, quota levels peaked and those levels will be maintained until the system expires in 2015.

EU Milk Production Overview

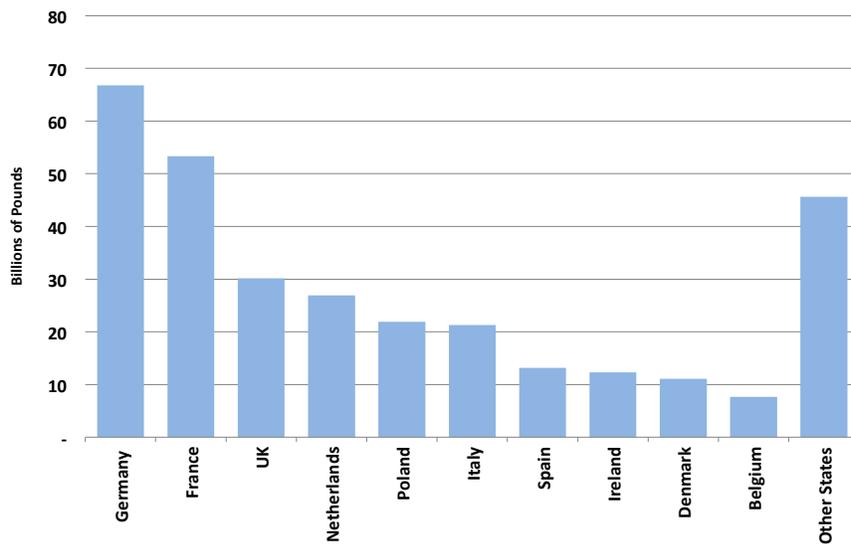
To provide proper context for anticipating post-quota milk production growth at the aggregate level, it is important to first understand diversity within the EU dairy industry. The European Union spans a broad geography featuring numerous cultures, languages, histories and even climates. Not surprisingly, its dairy industry is diverse. Farm operations vary in many ways – small or large, pasture-based or confinement-feeding, cooperative-affiliated or private, “commercial” entity or household farms. These distinctions – combined with location, climate and available natural resources – go a long way toward dictating producer efficiency and profitability. Understanding these various farm types and their variability within certain EU sub-regions allows one to better anticipate how producers might operate in a quota-free environment.

Figure 2: EU-28 Milk Collection, 2007-13



Source: Eurostat.

Figure 3: EU- 28 Milk Collection, 2013 – by Country



Source: Eurostat.

In 2013, 23 million European dairy cows on 920,000 farms delivered 312 billion pounds of milk for processing. (See Figure 1.) Collectively, the EU nations are the world’s top cow’s milk producer, accounting

for 30 percent of global output. Since 2008, EU milk production has increased 5.6 percent – or 1.1 percent annually – due in part to the gradual easing of quotas ahead of 2015 expiration. (See Figure 2.) Although 1 percent annual growth does not seem like much in percentage terms, it translates to over 3 billion pounds of new milk supply each year, equivalent to Colorado’s annual production. Moreover, when considering that internal EU demand has been stagnant, the incremental milk volume all flows to the bottom line in accounting for global cheese and powder export potential.

Geographically, EU milk output is most concentrated in the central and northwestern regions, commonly referred to as the “European Milk Belt.” The region stretches from Ireland and the United Kingdom, to northern France, the Netherlands, and Denmark, and onward through northern Germany and Poland.

Germany leads the continent, with output of 66 billion pounds in 2013 – just 2 billion pounds shy of California and Wisconsin’s combined production. (See Figure 3.) France is second, contributing 53 billion pounds annually. The UK, Netherlands and Poland complete the top five, together adding another 79 billion pounds of milk.

Collectively, the top five countries account for 64 percent of total EU supply. When taking into account the next five largest producers – Italy, Spain, Ireland, Denmark and Belgium – the top ten milk producing states make up 85

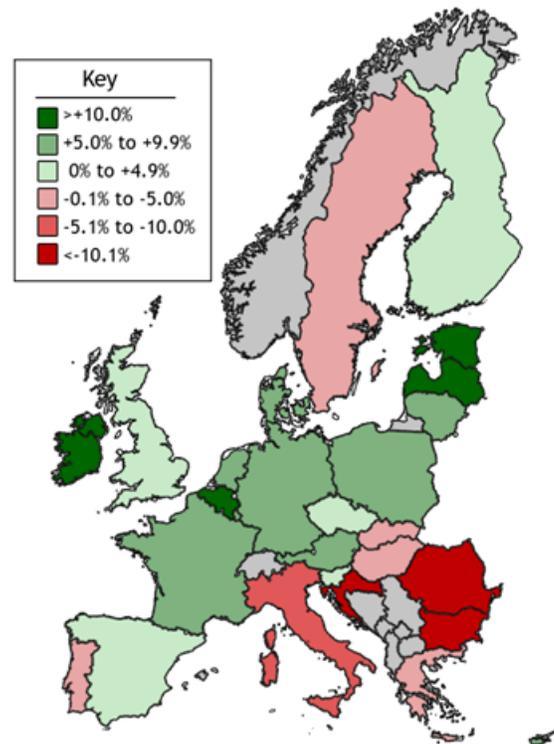
Figure 4: EU Milk Collection Growth: 2009 to 2013

percent of total EU supply. What is more, nine out of those ten countries have seen milk production growth over the past five years, with Italy as the single country in retreat.

Historically, overall EU milk production growth has been largely driven by the top-producing member states. Yet there are a few outliers. Output in four of the top five milk producing countries grew by more than 5 percent from 2009 to 2013. (See Figure 4.) Poland experienced the largest jump, increasing 8.6 percent, while Germany, the Netherlands and France grew 7.3 percent, 6.4 percent and 5.9 percent, respectively. While their production gains occurred from lower supply bases, substantial growth was also recorded in Belgium (+17.6 percent), Ireland (+13.3 percent), Austria (+8.3 percent) and Denmark (+6.0 percent). Not to be dismissed, the Baltic States also saw production growth, particularly in Latvia and Estonia, although those gains do little to move the needle on total EU output.

Figure 4 also points out another important development likely to have lasting implications post-quota: the dairy sectors in central and southeastern Europe are in decline. Croatia, Bulgaria and Romania are among the worst performers, with five-year output falling 25.3 percent, 14.5 percent and 10.1 percent, respectively. Italy, Portugal, Greece, Hungary and Slovakia complete the list of member countries with declining production. Commercial farms in these countries tend to be smaller in scale and exhibit lower efficiencies than those elsewhere in the EU. Generally, quota sunset is not expected to reverse this long term production trend.

While relative location may have a hand in milk output trends, milk price actually has the most influence on production levels. Farm-gate milk prices show dramatic variability across the region. (See Figure 5.) The average EU milk price from 2011 to 2013 was €34 per 100 kilograms, where the low end reached €28 and the high end topped out at €38. (These euro-denominated milk prices would be equivalent to \$17.02 per cwt, \$20.67, and \$23.10, given that (a) a kilogram equals 2.2046 pounds, (b) the exchange rate averaged \$1.34/€1.00 during 2011-13, and (c) no allowance has been made for higher EU protein and butterfat content.) Italian

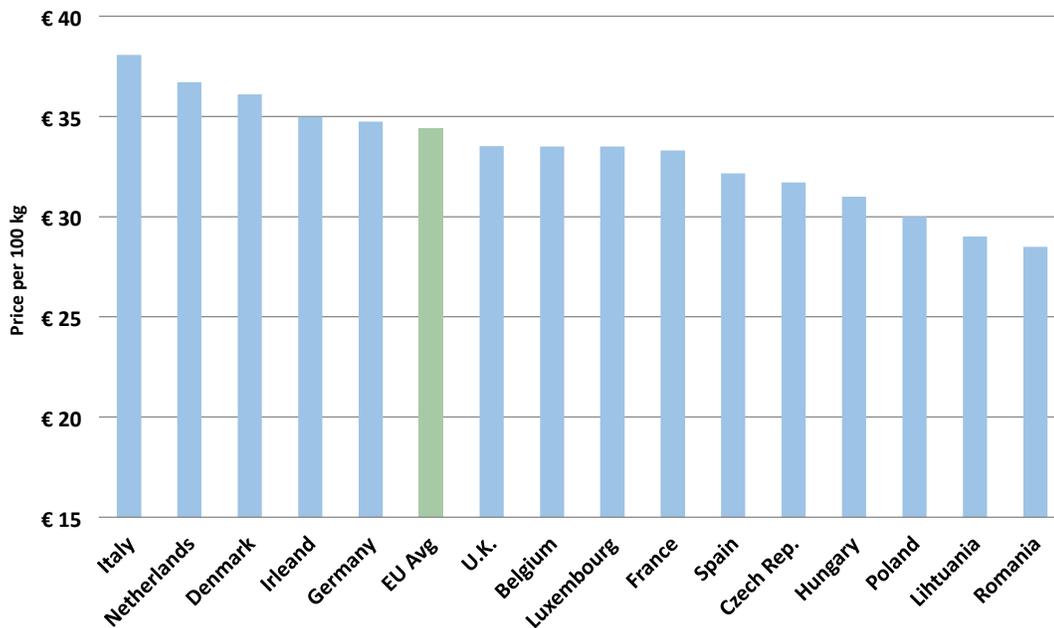


producers benefit from prices well above the EU average thanks to a focus on higher valued specialty cheese. Denmark and the Netherlands also command a price premium relative to the EU average. Major production centers like Germany, France, Ireland and the UK feature prices closer to the EU average. On the low end of the EU price scale are the Eastern European countries. These producers tend to receive lower relative prices due to quality concerns derived from its small-scale farming, along with high shipping costs needed to transport milk to more western-based processing centers.

Farm profitability – like revenue – also swings dramatically from country to country. Margins tend to be directly linked to the production system employed. For instance, producers in Ireland and Poland enjoy lower costs of production due to predominant use of pasture-based feeding. Consequently, margins in these two countries tend to be more durable and easier to

Figure 5: Selected EU Farmgate Prices

€ per 100 kg, Average 2011-13



Source: European Commission.

manage through periods of low milk prices. In contrast, the larger-scale, more modern farms in Germany and the Netherlands tend to rely more on free-stall operations and outside purchased feed that carry higher operating costs. Scale economies along with the deployment of more modernized farming practices and equipment can, however, partially mitigate those costs. Milk prices and on-farm profitability remain the core drivers behind EU milk production growth and will no doubt continue to drive supplies in the post-quota era. Logical as it may appear – turn a profit, make more milk – historical volatility in both milk prices and feed inputs place a certain degree of risk on near term EU milk supply growth. Since 2008, EU average milk prices have oscillated from a low of €25 per 100 kilograms in 2009, to a high of €41 in late 2013. With feed and other inputs costs also exhibiting volatility, dairy margins often fluctuate dramatically year to year.

In Europe, government subsidies should continue to bridge any gap between producers' costs and their milk checks, thus supporting near-term milk production growth. However, prolonged periods of extremely low milk prices could jeopardize short-term milk production gains. Based

on prevailing production costs, this outcome seems likely only if milk prices dip toward €30 or lower. But such prices are not too far out of line with current global dairy market fundamentals, including the direct impact from the Russian dairy import ban which has created even more localized supply-side pressures. Already, European milk processors have announced steep cuts in milk price for late 2014 payouts, and prevailing global market prices suggest a milk

price much closer to €30 versus the €37 average price recorded in the third quarter of 2014.

In order to assess which member states will be unaffected by quota abolition and which ones are quota-constrained, an analysis of country-level quota performance is necessary. The latter will likely see milk output jump on day one following the abolition of the EU's quota, provided the necessary farm investments were made.

EU Milk Production Quota Performance

With March 31, 2015, fast approaching, many EU dairy farmers – notably in large-scale production states situated to the north and west – are gearing up to produce more milk. Over the past several years, it was these countries where milk production quotas most interfered with internal growth. For instance, in the last full quota year – 2013/2014, April to March – six of the top ten EU producers attained 97 percent of quota or higher. (See Figure 6.) Collectively these high-production states drive 47 percent of EU total output. Hence, it follows that producers in these areas will be keen to

expand, and in the process will likely lift total EU supply, provided they have the right financial motivation and the necessary access to capital and labor.

As promising as a quota-free environment is for some, the harsh reality is that expansion is not a realistic avenue for many or perhaps most European dairy farmers. Farms situated in Eastern Europe, for example, historically produced at levels well under respective quota limits. In the 2013/2014 (April to March) production season, Romania, Bulgaria and Hungary each produced anywhere from 40 to 60 percent below their respective quotas. Several other eastern nations were down between 15 and 25 percent against their allowable ceilings. Poland was the lone exception, consistently achieving quota thanks to a relatively more advanced and entrepreneurial farming community.

While Poland is a top ten EU producer and is well-positioned to expand its production base in the post-quota era, there are several other large-scale producers

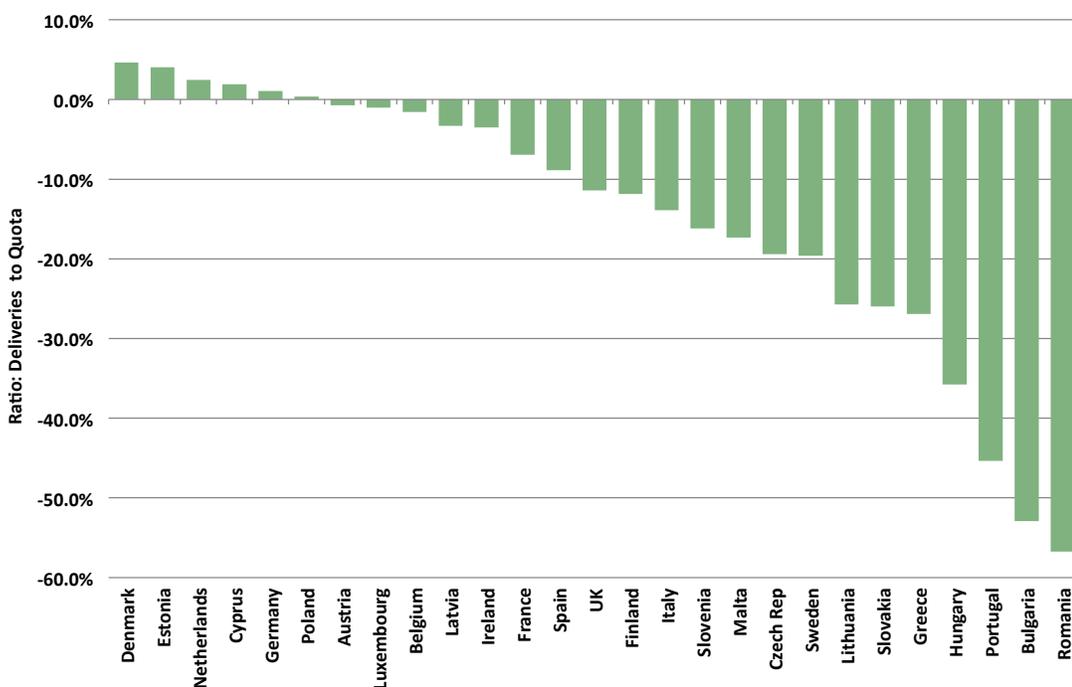
where quotas did not impede local milk production. In these particular cases, the removal of quotas will do little to trigger any immediate growth in 2015 and 2016. Examples include Italy (14 percent below quota in 2013/2014) and Spain (minus 9 percent). These countries are in fact some of Europe’s largest producers, suggesting quota shortfalls are not just a phenomenon specific to any one region or to any size producer.

In contrast, in the high-production states where quota has been restrictive – namely Germany, Denmark, Netherlands and Ireland – farm level expansions are already well underway. Here, the extent of the increase in output will depend on a combination of factors, including higher yields brought on by nutrition or genetic improvements, increasing on-farm stocking density, converting more land to dairy operations, and expanding facilities to drive economies of scale.

EU production figures for the current (and final) quota year, April through August, suggest post-quota

expansionary activities already influencing EU milk flows. In fact, current season-to-date milk output is up 5.0 percent versus 2013/2014. This compares to five-year historical milk growth of 1.1 percent. While some of this increase is likely tied to elevated producer milk prices in early 2014 along with a weak first half 2013 comparison, it seems unlikely that a 5 percent growth rate was achieved without any degree of farm expansion. Since the start of the final quota year, German and French production is

Figure 6: EU-28 Deliveries as a Percent of Quota, 2013/14



Source: European Commission.

4 to 6 percent higher, while Ireland has expanded by 8 percent. Perhaps more impressive, the UK is reportedly up 9 percent in 2014/2015 through August – a sharp turnaround from the 2013/2014 quota year in which output fell 11 percent below quota.

Post-Quota Milk Production Expectations

Producers in those countries where quota has clearly capped growth will also likely be the engine for EU supply growth in the years to come. But as advantaged as these countries might be, it is still unclear how much expansion or investment will unfold. Post-quota growth will also heavily depend on ever-changing market conditions. High milk prices and record margins will incent rapid expansion. However, insofar as prices subsequently moderate, it is equally likely that investment and expansions may slow. To explore what might be in store for the global markets as a result of the quota sunset, it seems most practical to assume normal weather conditions and average milk prices.

Additionally, two previously completed research studies provide some guidance on post-quota European milk production. First, the European Commission issued a forecast late in 2012 calling for a 10 percent cumulative rise in EU milk deliveries from 2009 to 2022, which equates to 0.8 percent annualized growth. Second, the joint OECD/FAO long-term agriculture outlook, issued in early 2014, took a far more conservative view, forecasting EU output to rise just 2 percent from 2015 to 2020, or a mere 0.4 percent annually.

Both studies posit similar outlooks for EU post-quota milk production. First, they project that in the subsequent 5-7 years, growth in production will amount to less than one percent a year – assuming normal weather conditions and average milk prices. (As noted previously, EU milk output has grown on average 1.1 percent a year since 2009.) Second, with the removal of quotas, a strong supply response is expected among the top-producing nations, chiefly in the north and west regions. Equally important, as those large-scale

producers work to expand milk production, countries with smaller, less endowed farms will continue to operate, relatively unaffected, by the quota transition. Increased subsidies ushered in by the latest reform will distort market signals for these farms.

Those conclusions seem plausible, but may understate potential, especially on the front-end. Though farmgate prices could alter trajectory some in the months ahead, production has been gaining significant momentum ahead of the sunset date, auguring for a strong start to the new era. Consider that, through August, year-to-date EU production was running 5 percent above year-prior levels. While higher milk prices were certainly a factor, it is also possible (perhaps probable) that European producers – certainly those in the top ten producing countries – are making investments and changing on-farm practices to boost milk supplies in a way that some official estimates might have missed.

Even as milk prices turn lower, we doubt that this signal will be strong enough or quick enough to slow individual producer plans over the next six-to-twelve months. With expansion among the top producers nearly certain, the standard argument is that attrition from the large population of smaller producers will offset most or some of those gains. However, attrition rates might be slower than anticipated, if lingering support programs effectively insulate or at least partially protect these producers from a downturn in milk prices. In any case, the process could be slow to unfold. Thus, if large producers continue to grow, and smaller producers are subsidized enough, the implications are clear: Europe will be making much more milk than most are expecting, and the market implications loom large given the sheer size of the European milk-shed relative to the rest of the world. ■

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