For all the variables we consider, for all the windows we look through, milk production is still (and always) the single most important dairy market fundamental. Not enough, and markets can go wild (not least because it is hard to immediately get more). Too much, and markets can crater (not least because it is hard to immediately turn off the spigots).

From where we sit, EU milk production has been the single most important story over the past three years — with stretches of “too much” and “not enough” coloring global markets. During that stretch, we have not spent much time fretting about US production. Sure, there are always weather issues. And last Spring’s market swoon had us thinking for a minute. But, for the most part, US production has been on a reliable upward trajectory. But as expansion rolls on and on, should we be looking for cracks in the facade?

Texas makes up 7% of the land mass in the United States. It holds about 9% of the total US population. Texas is big. Texas is oil. Texas is Friday night lights. Texas is...dairy? That’s not the conventional wisdom. But Texas is a big dairy state, too. State production ranked seventh nationally in 2016. It may end up ranking number five this year, with output up 15.5% year-to-date through July on a Leap-Year adjusted basis. A big factor: more cows. At times this year, the Texas herd topped the year-prior total by as many as 47,000 head. In July, the difference added up to 35,000 cows.

So here’s a reasonable question: how much US growth in 2017 is about Texas? And, an important follow-up: can we count on similar growth going forward?

Through July, total US milk output was 2.0% ahead of the 2016 pace. Take Texas out, and growth adds up to only 1.3%. In July, the US herd was up 74,000 head year-over-year. Take Texas out and that figure drops to +39,000 head.

The second question is more difficult to answer. Various contacts say that expansion at just a few farms explains the growth. Further, those same contacts don’t see another 25,000 or 50,000 cows rolling into the picture.

So maybe Texas growth slows down in 2018 — in real, fewer-cows-added terms as well as in difficult-statistical-comparison terms.

What about the whole US? Where is milk production going?

At a high level, models drawing on milk income and feed costs look good. Milk futures for October 2017 through December 2018 point to an All-Milk price in the $18.00 per hundredweight area, up from about $17.50 for the previous 15 months. Feed costs project a little higher: $8.30 per hundredweight for October 2017 through December 2018 compared to $7.95 for the previous 15 months. In MPP terms, we calculate 2018 margins at $9.65 per hundredweight, not much different from $9.70 in 2017. Both are ahead of the $8.50 per hundredweight average over the five years covering 2012 to 2016.

Our milk production model has ROY 2017 growth at +1.5% and 2018 at +2.0%. There is not a lot of noise around the 2018 expectation — no month is below +1.7%, no month is above +2.1%. For whatever it is worth, USDA expects 2018 output to grow by 2.1%.

We like our milk production model, by the way. Over the past 36 reports, its average error is at -0.04, with the median miss at -0.02. It’s been off by more than 0.05 six times (17% of the occasions). In short, history doesn’t offer a compelling reason to talk the model down or up.

Yet...

We wonder. Is this expansion cycle getting tired?
Production has been up for 43 consecutive months. That’s not unprecedented — we saw 59 straight months between July 2004 and May 2009. But it’s the longest streak since then.

While margin-over-feed models suggest okay and maybe even good times, the off-the-spreadsheet, on-the-ground reality may be different.

On the income side, milk premiums continue to erode, a phenomenon not likely to end so long as manufacturing capacity remains tight. Absent tangible new capacity, manufacturers won’t likely be encouraging farms to grow. Cattle income — from culling and bull calf sales — is still down from the 2015 highs, with some estimates saying the deficit adds up to more than $1.00 per hundredweight. Less rBST use in Wisconsin and elsewhere will also cut into gross income in the months ahead.

On the cost side, labor is tight and getting more expensive. US Department of Labor data shows farm and forestry wages up 2% year-over-year in the second quarter of 2017, with an 11% uptick in Q2 2017 versus Q2 2012. Environmental mandates are not receding anywhere, with producers in the Pacific Northwest especially encountering additional costs.

Alternatives are not great outside of tree nut conversions in California. Selling the cows and just growing corn is not as attractive as it was five years ago. But more than one contact tells us that some farmers are looking at the current situation, looking at medium-term prospects and deciding to put their capital and time elsewhere.

Finally, note that historically, slower milk production growth is more about decreasing expansion than about increasing exits. Exits happen all the time. Overall growth depends upon expansion outpacing that attrition — witness what has been happening in Texas.

Overall: our gut sense says US milk production growth at 2% is not automatic for 2018.

What’s butter going to do between now and year-end? It’s the number one question directed to the Blimling team over the past several weeks. That makes sense given that the CME market is sitting in the $2.45 per pound area, has not been below $2.00 in a long time and had two runs to $3.00 in the not-too-distant past. And, oh, prices are well beyond the $3.00 per pound mark in the EU, with recent prints north of $3.60 in Germany and the Netherlands (on an 80% fat basis). Futures for 2018 are trading in the $2.35-$2.40 area. Stocks were down 8% year-over-year in July. Production is off 1.4% year-to-date. Finally, it’s been hot again in California, presumably crimping output in the nation’s leading butter manufacturing region.

Arguments for steady-to-higher from here: stocks are light, global forces could pull on US butter, a flat-to-inverted forward curve has discouraged production and storage to a degree that will generate a bid in Chicago in the weeks ahead. Arguments for steady-to-lower from here: US manufacturers can’t deal with exports at this time of year, New Zealand is going to have fat, cream is plentiful enough to allow marketers to churn through any shortages, domestic demand is underperforming and 300 million pounds in storage is more than enough.

On any given day, we can convince ourselves that one argument or the other is more persuasive. It’s a close call. Our bias? Steady-to-higher. Or, at least, not dramatically lower. It would be surprising to not see a robust bid in Chicago over the next four-to-six weeks. Export potential, even if more theoretical than real, will keep the pot stirred. End users will likely buy breaks toward $2.25.
Milk production growth remains steady, with output increasing 1.8% in July. Cow numbers slipped by 1,000 head from month-to-month, the first decline in 10 months. An uptick in culling activity — up 6% year-over-year — may have prompted the decline. Still, the herd is 74,000 head stronger than in 2016. This cow power should help drive milk production growth of around +1.5% through year-end.

Growth is divided along regional lines, with the Southwest accounting for much of the expansion. July output rose 12.1% in the region, thanks to a 54,000 head year-over-year increase.

Production declined along the coasts. Northeast output slipped -0.1% — the region’s first year-over-year loss in three years. In the Northwest, milk flows fell 1.0%, a combination of hot weather and ongoing malaise. California continued to struggle, with output off -0.2% and cow numbers down 8,000 head over the past three months. And, the recent California heat spell — the third or fourth of the summer — may have a lingering impact on output late into 2017.

Despite some weather concerns, crops appear to be in okay shape. December corn futures are trading near $3.60 per bushel, foreshadowing another year of moderate feed costs.

According to Blimling and Associates estimates, All Milk prices are forecast to average $17.75 per hundredweight over the second half of 2017. With estimated costs near $15.00, producer margins should land around $2.75 per hundredweight. That’s slightly above the five-year average of $2.40. First half 2018 futures point to a similar margin structure.

Actual farm margins may not be as good as margins on paper. Milk premium erosion in places like the Midwest, Mideast, and Northeast could put some producers in a financial tight spot. That may curtail incentives for expansion. And with the added challenge of limited surplus processing capacity to take on extra milk, production growth into 2018 may begin to slow.
• After a slow start to the year, EU milk production has taken a positive turn. June output increased 1.8% year-over-year, the strongest showing since early 2016. Strong output in Ireland (+7%), Poland (+7%), and Italy (+6%) — and weak year-to-year comparisons — drove performance. And, early indications point to continued expansion in July. Through the first half of the year, output was tracking 25 million pounds below 2016.

• Production in Germany and France, however, continues to struggle. During the first half of the year, output from the two largest producers fell by a combined 2% (1.6 billion pounds) from 2016. That’s like losing all the milk produced in Vermont so far this year. More recent figures show losses are starting to diminish but continue to track below prior-year levels. Meanwhile, production in the Netherlands dropped 2% in July as they work to reduce phosphate output.

• Stronger cheese and butterfat prices are helping to bolster producer payouts. July farmgate prices will likely come in just shy of €34 per 100 kilograms — a Euro ahead of the five-year average. These strong pay prices should help encourage growth into the second half.
• Milk production in New Zealand is ramping up seasonally. June milk production increased by 20% and early indications point to sustained growth into July. This strong early-season growth was likely aided by good contract premiums for winter milk. But as the new season rolls in, estimates are calling for growth near 3% from the 2016/17 season.

• Weather remains a key watch factor heading into the new production year. It has been a wet spring and forecasters say there's a good chance for above-average rainfall over the next few months. Temperatures may trend higher as well. So long as those rains combine with some warm sunshine, grass will keep growing.

• Early estimates point to strong farmer payouts. The region’s largest cooperative forecasts its base milk price at $6.75 for the 2017/2018 season, the highest payout in four years. This should help boost producer morale and perhaps encourage further investment.

• Manufacturers in New Zealand are making tough decisions on where to put all that milk. Current milk return estimates signal a possible push toward SMP/butter production.
• Tepid, lackluster, soft. That’s just a sampling of words used to describe domestic demand. Those familiar with scanner data point to a near 2% drop in natural cheese sales at retail for the four weeks ending August 12. Process demand appears to be struggling too, even with stronger-than-anticipated fast food restaurant sales. Year-to-date through June, implied domestic demand was tracking about 1% above 2016 levels—pretty far off the +3-4% from years’ prior.

• After two consecutive month-to-month inventory declines, cheese stocks jumped by a record 58 million pounds from June to July. Warehouses are full of cheese — 1.375 billion pounds, in fact. That’s more than 41 days’ worth of domestic cheese demand — the most in at least 20 years.

• Even with cheese in the warehouse, fresh supplies are a bit harder to come by as milk availability dwindles seasonally. With that, there’s a little less cheese moving to Chicago. And as the old saying goes: show me less cheese at the CME, and I’ll show you steady-to-higher prices.

• With a little less fresh cheese available, barrels shimmied higher — even surpassing blocks for a day for the first time since March. But contacts continue to point plentiful supply, especially for product with some age on it. The question: when will the product tied up in the carry trade find its way to the market? And when it does, will there be an impact to the block-barrel spread?

• Exports are stronger. US exports in the second quarter increased 36% from 2016 thanks to sustained demand growth into Mexico—up 18 million pounds year-over-year. But the competition is stiff. Prices in the EU are reportedly sitting around $1.90 per pound, while New Zealand values are trending around $1.85. Yet, contacts note more aggressive pricing in the trenches.

• With the end of the year inching closer, end-users are starting to think more about 2018 coverage. Similar to early 2017, buyers appear to be finding value between $1.65 and $1.75 for the first half.
Region-specific dynamics continue to play out in the butter market. In the US and New Zealand, prices are prone to softening, while EU values keep marching higher. One theme remains constant everywhere: market participants are uneasy.

Insufficient supply is the apparent issue in the EU. Production during the first half of the year dropped 6% (155 million pounds) year-over-year. That’s like losing three months’ worth of butter output in California. Stronger butter/SMP returns should help increase availability in the near-term, but higher output through year-end won’t likely be enough to calm nerves completely.

In the US, inventory levels appear generous. At 308 million pounds, July 31 stocks were running 15% above the five-year average (even if trailing 2016 by 25 million pounds). And, the pile isn’t dwindling as quickly as normal. Since May, inventories only dropped 5 million pounds, down from 17 million on average over the past five years. Stocks levels are holding up even with softer output. Year-to-date through July, butter output fell 16 million pounds (-1.4%) from 2016.

Butter keeps making its way to the CME spot exchange. In August, 150 lots of butter changed hands — adding to July’s 187 lots. The flat forward curve encouraged manufacturers to sell today rather than storing for tomorrow. Soft cream multiples likely helped to make it happen. But as the nights turn cool and churns start to prepare for the holidays, those sell-side volumes may begin to wane.

Demand remains a bit uncertain. In the US, implied domestic use through July was running just 1% above 2016. Across the international market, China imports were stronger year-over-year through July, but the Middle East wasn’t buying as much. Questions linger around US export opportunities. More specifically, will stronger trade leave the US market short in the fourth quarter? Today, it appears that New Zealand is best positioned to meet those global needs.
The global NDM/SMP market remains beleaguered by oversupply. Stronger demand is keeping product moving across the international market, but it hasn’t been enough to chew through the excess.

European Intervention inventories continue to loom. There’s still more than 785 million pounds of SMP sitting in storage, but it’s getting older by the day. By the end of August, just 3% of the stockpile was less than a year old, and some of the older product was getting ready for preschool. The current supply glut—and corresponding low prices—pushed milk out of SMP production during the first half. Between January and June, EU SMP output dropped by 10% (202 million pounds)—the rough equivalent of one month’s worth of US NDM/SMP production. Yet, as butter prices climb, more milk may find its way into SMP dryers. One thing to keep in mind: there are nearly two pounds of SMP produced for every pound of butter.

But oversupply isn’t only a European concern, the US has a lot too. US NDM manufacturers’ stocks at the end of July reached 299 million pounds, up 16% year-over-year to the highest point since 2009. Though dryers are now reportedly running lighter schedules, year-to-date NDM/SMP production through July was running 2% above last year.

A little farther south, New Zealand’s seasonal peak is approaching. Sustained strong butterfat pricing should keep milk flowing into SMP/butterfat production too.

Demand for SMP is starting to improve—driven primarily by growing Asia demand. China’s imports, for instance, more than doubled year-over-year in July to 58 million pounds. Mexico remains a big buyer too, importing 295 million pounds year-to-date through May.

Despite improving global trade, the NDM/SMP market will likely remain stifled by burdensome supply. This may keep significant upside price movement at bay for the near to medium-term.
• Dry whey fundamentals remain weak, dampened by ample supply and waning demand growth. Inventory levels at the end of July reached 95 million pounds—up 37% from a year ago. Sustained production growth isn’t helping matters any. Year-to-date through July output increased 6% (35 million pounds) year-over-year to 602 million.

• A portion of this supply-side pressure is the result of sustained unfavorable WPC and carbohydrate returns. Manufacturers with flexibility have been shifting whey solids into dry whey production, furthering the excess.

• Surplus supply is also sapping whey values across Europe. Until recently, cheese had been the breadwinner on milk returns—keeping whey production rising.

• The recent slowdown in export demand appears to be exacerbating the oversupply situation. Contacts point to slowing interest and China’s July trade data confirmed as much. Whey imports there slipped to 103 million pounds, on par with 2016 levels but down 15% from June.

• Heavy supply will likely continue to weigh on the dry whey market through year-end and possibly into the first half of 2018.
• Tax cuts. Revamped health care. Deregulation. Better business confidence. All touted as upside in the Trump era. All cited as contributing to a stronger US Dollar. From election day to Inauguration Day, the US Dollar Index increased by 2.6%, while the Euro lost 2.3% versus the greenback. So far, though, things have not turned out as expected. Major legislative initiatives have stalled or died. Confidence is idling. Against that backdrop, the US Dollar has weakened. Since President Trump was sworn in, the US Dollar Index is down 8.3%, with the Euro up 11.2%. Last week, the Euro traded at more than 1.20 versus the USD for the first time since January 2015.

• Oddly enough, the weaker USD has not been especially good for commodities. Since Inauguration Day, crude oil is down 11.4%, corn -3.9%, block Cheddar cheese -9.2%. The overall Bloomberg Commodity Index is off by 3.8%.

• Failure to generate any real commodity market momentum is in part related to moderate-at-best global growth. The IMF sees the world’s economy expanding by 3.5% in 2017 — decent, but not hot. According to The Economist, consensus expectations call for 2.3% growth in the US and 1.8% expansion in the Euro area in 2018, with China at 6.3%. All far from disaster. But…all uninspiring.

• One bright spot that may be signaling better overall growth: despite all the talk about trade barriers, global trade is expanding. Data published by the Netherlands Bureau of Economic Analysis shows trade up 4.7% in June 2017 versus June 2016, much better than average growth in 2016 (+0.7%) or over the previous five-years (+1.8%). Similarly, net tonnage through the Suez Canal was up 3.4% year-to-date through July, ahead of full year 2016 (-2.4%) and five-year average (+1.0%) performance. Port traffic in the US has been stronger, too: up 9% year-to-date through July in Los Angeles, +6% in Seattle and +6% in Long Beach (total TEUs).