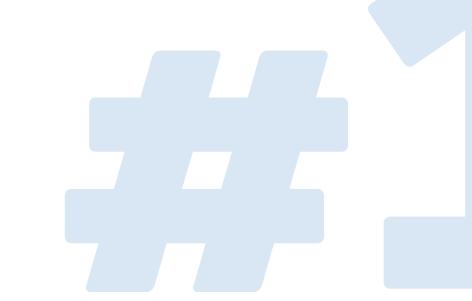


Horizons.

Our insights on Today's Global Dairy Business







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A Festive Welcome to Our Christmas Edition!

As the holiday bells chime and the spirit of the season fills the air, we're delighted to bring you a special Christmas edition of our newsletter! This festive issue is brimming with insights, updates, and cheer to close out the year on a high note.

- Market Direction takes a closer look at Global Milk Production, providing key trends and forecasts to guide your strategy.
- Our Deep Dive unwraps the fascinating world of Butter, exploring its market dynamics and what to expect in the coming months.
- In the Quick Note section, we're excited to feature insights on Whole Milk Powder by Carey Yu and an update on SGX Futures by Bart Whiteley.
- The World Comment spotlights Yoran Ensing, Product Manager for Dairy Ingredients Americas, sharing his perspective on global industry trends.
- Lastly, in Hoogwegt Happenings, we celebrate our Sustainability Achievements,
 highlighting how we're making a positive impact across the globe.

This season is all about connection, gratitude, and looking ahead with hope. We hope this issue provides valuable insights while also adding a little festive joy to your day. Wishing you and your loved ones a warm and fuzzy Merry Christmas and a prosperous New Year!

As Always,

Hoogwegt Horizons Editorial Team

Market Direction All is Milk, Milk is all.

US Milk Production

Outlook for Q1 and Q2 2025

We anticipate growth in Q1 and Q2 of 2025, with particular strength expected from a solids perspective. However, the ongoing Bird Flu outbreak in California remains a short-term concern, having negatively impacted production in the region as anticipated. Margins should give farmers the incentive to ramp up production. Cheese production facilities are expanding across the U.S., which may shift milk supplies away from NFDM and SMP production if overall milk production isn't increased significantly.

USDA's latest report on milk production was on October 2024. Our expectations were mild growth, combined with Californian blue tongue worries. Indeed October registered a mildly positive +0.24% growth compared to October 2023. California's figure was negative; -3.4% YoY.

Key points to note:

1. Economic Indicators:

- Farmgate milk prices remain higher than the previous year, coupled with lower feed costs. This has resulted in robust margins, with income over feed costs ranking historically in the top 10%.

2. Production Trends:

- October production in California declined, aligning with expectations. California accounts for approximately 18% of total U.S.
 milk production.
- Despite the challenges in California, nationwide milkfat and protein levels have reached their strongest levels in recent years, resulting in year-over-year (YoY) growth in milk solids production. Protein levels have increased by 0.6% compared to last year, while fat percentages are up by an average of 2%.

3. Herd and Yield Metrics:

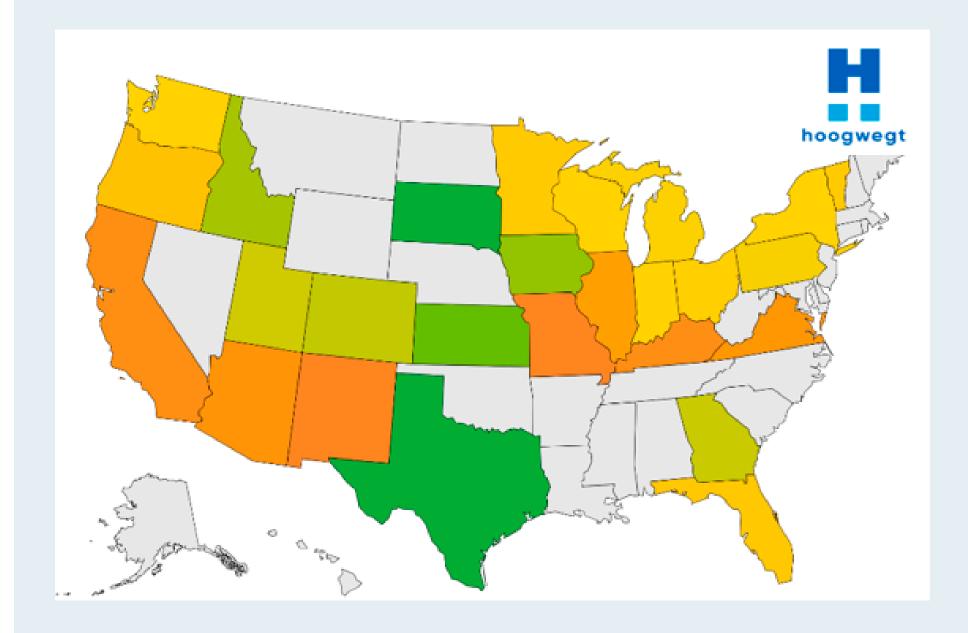
- October yield per cow maintained its positive trend, increasing by 0.13%. However, growth is showing signs of moderation.
- Herd size turned positive in October, reflecting a 0.11% YoY increase due to reduced slaughter rates.

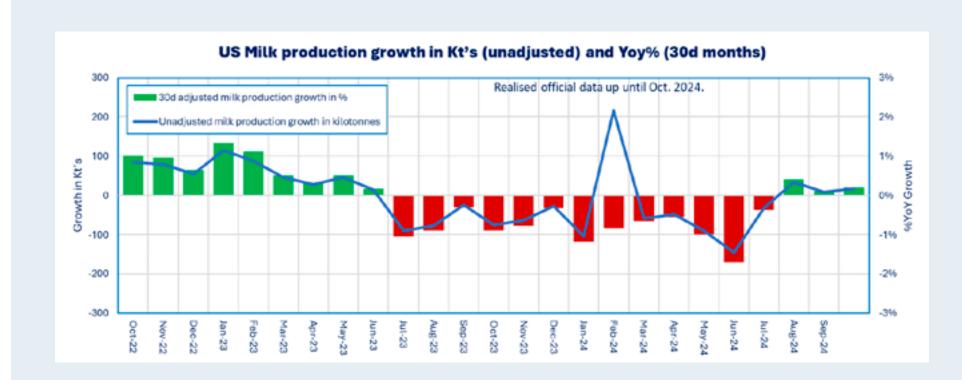
4. Challenges in Herd Management:

- While slaughter rates have been low, the high cost of replacement heifers continues to challenge efforts to expand milk supply.
- In contrast, California has experienced an uptick in cow slaughter, exacerbated by the Bird Flu situation.

5. Historical Context:

- The basis for comparison is weak, as the corresponding months in 2023 showed subdued performance. As such, Q4 2024, along with Q1 and Q2 2025, are expected to outperform YoY.
- Full-year production for 2024 is likely to conclude slightly below neutral levels.







→ continuation

EU Milk Production

Our stance remain unchanged; potential mild growth in Q4 and Q1 for European milk production. Similar to other exporters, margins are giving the incentive to ramp up production. Since most comparison are on a year-over-year basis, the estimated gross margin for farmers has increased by almost 20% based on September data. And since then, the farmgate pay-off has improved a bit more due to the increases on the milk fat-value. September also broke the trend in solids. Both the fat level and the protein levels in Euro-milk saw a rebound and broke the negative streak. Let's see how October comes in, as it can also tell us a bit more on the effect of Blue Tongue (BT) on solids. While the US, or specifically the Golden State, struggles with an animal disease, Europe still struggles with BT.

There is a bit more known by now:

There are different variants of the BTV virus active. Not all have vaccines. The Netherlands (Kind of the epicenter of current BT wave) registered a handful farms with BTV-12, which has no vaccine. The vaccines won't stop spreading permanently, it reduces symptoms, and there is a duration on immunity but the length is questioned as they lack data.

What can we learn from the Dutch data on BT:

- During the infection peak (the start of when a cow becomes infected) the estimated loss of production was a whopping 8-9kg of milk per cow per day.
- Past that peak infection, the effect lasted 9-10 weeks with a negative impact of 1Kg per cow per day.
- The average Dutch cow gives you close to 30Kg of milk per day as a ball park (varies per month, etc.)
- Note there was also an indication on epizootic haemorrhagic disease in SW
 France. That has been the case since September 2023 and the spreading
 started in Europe from North-Africa and the Iberian Peninsula, and it currently
 is not considered impactful compared to BT.
- Our previous outlook noted supply-side worries on the short term due to BT.
 We assume spreading has stopped for now, but the issues with herd management due to a mortality rate remain.

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Key notes:

- Margins for farmers are profitable, with an average 50+ cents farm gate price and 20% lower feed costs compared to last year. (SMP+Butter equivalent price still gives room to increase (to 56ish cents)
- Protein levels improved to positive since July. Fat levels improved in August and Sept. Both levels are reported to be improving since.
- Spread of cases of BT disease in NW Europe had a negative effect on milk production. Spreading eased on lower temperatures, but herd management remains a problem and here and there cases still are popping up throughout NW Europe.
- Speaking of herd; Pre-BT June reports saw stronger than average decreases in Germany, Ireland, NL, Denmark, Belgium. The top-12 producing countries together lost 2% YoY, vs. a 5-year average of -1%. Mostly in West-Europe. This limits the ceiling for milk production growth.
- Eurostat data hasn't been perfect and don't be surprised if there are going to be revisions. Italian milk collection and Polish milk collection datapoints had surprising numbers, but were adjusted.

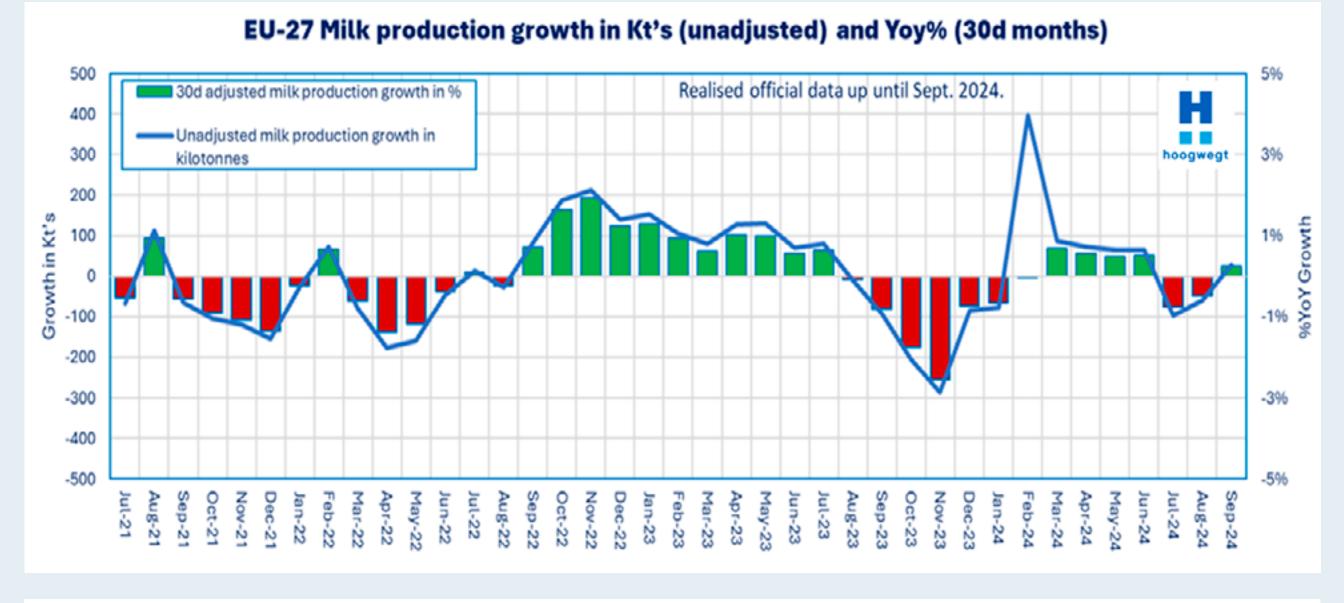
New Zealand: Positive Season

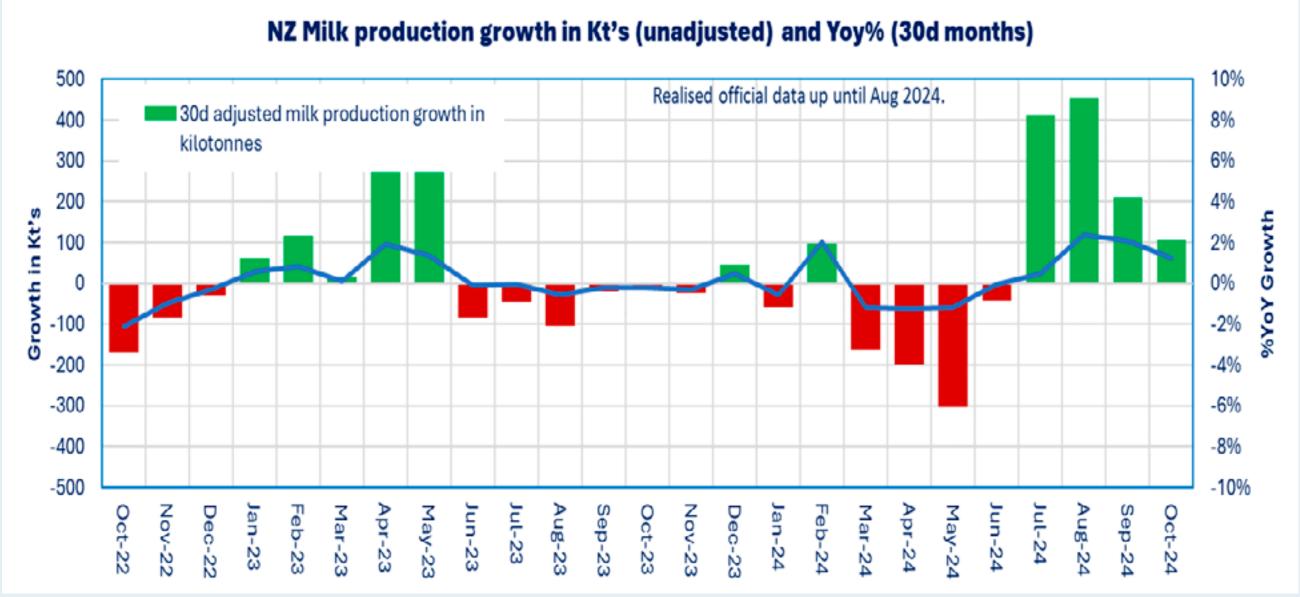
Stance: Positive season.

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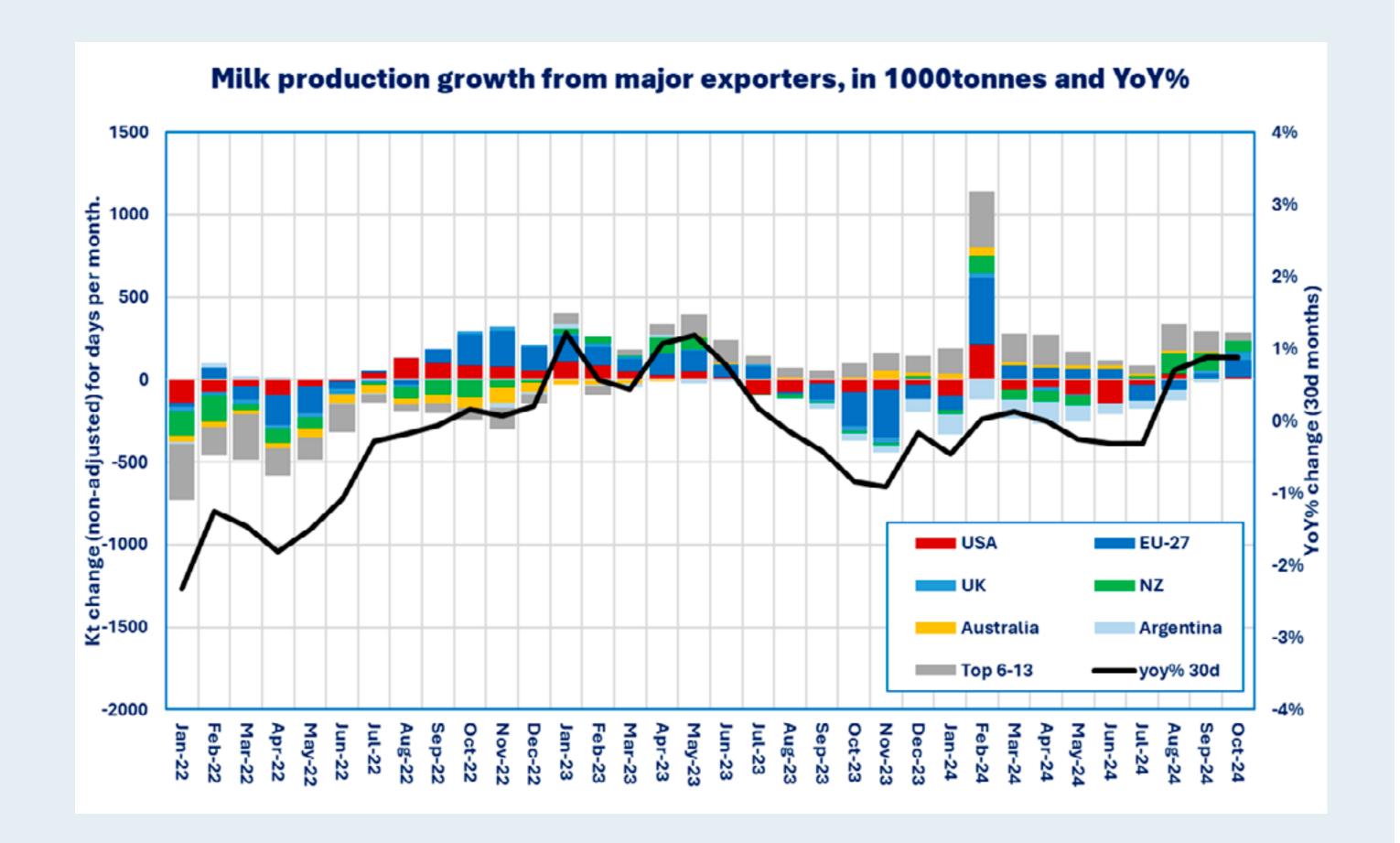
New Zealand milk production for October 2024 was up 2.1% year-on-year (up 5.2% on a milk solids basis). Overall, signals are looking positive for NZ, but given it's very weather dependant it's also harder to estimate. But what is known:

- Margin: Pay-out for farmers has improved compared to a year ago.
- Herd: Dairy herd at the season kick-off was -0.3% YoY smaller, well below the 5y average reduction of 1.4%.
- Slaughter has been low both in July (-29% YoY), August (-37% YoY) and September (-14% YoY). October had a first small uptick (+8%). All in all around 35k cows slaughtered less.
- PGI 30d rolling is positive, mostly due to the SI. The NI had a weaker end of November.





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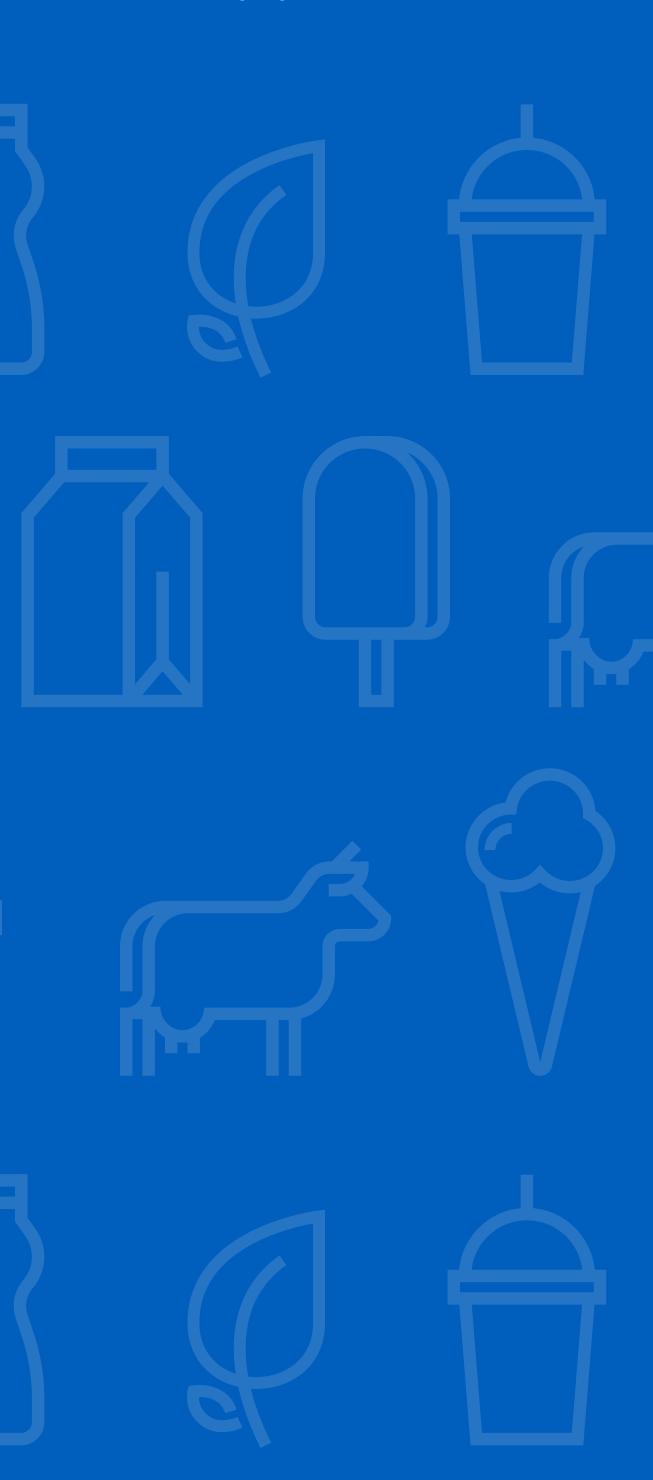


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Global Exporters Milk Production Summary: Mild Growth.

- Margins are overall good.
- NZ had a very positive start, so did Australia (+1.4% YoY in September, +1.3% in October).
- Current BT puts a question mark on its impact on EU milk, Bird Flu on California.
 But let's not forget margins are providing an incentive. Europe has stronger months to compare. The US has weaker comparable months and might have a higher ceiling due to a stagnating NW European dairy-world.
- Argentina (-1%) and Uruguay (-1%) are closing in on neutral figures and leaving strong declines behind.
- Belarussia continued to publish growth: 2.8% YoY for September 2024. Russia was slightly negative: -0.6% YoY.
- We're expecting a mild positive global/exporters milk production going forward and growth in milk solids.
- China's milk production growth is easing, we're hearing it's negative due to slaughter triggered by the significant decreased milk price.
 The black line in below graph represents the milk production YoY growth% (right axis) in 30d months (adjusted for leap years and days per month).

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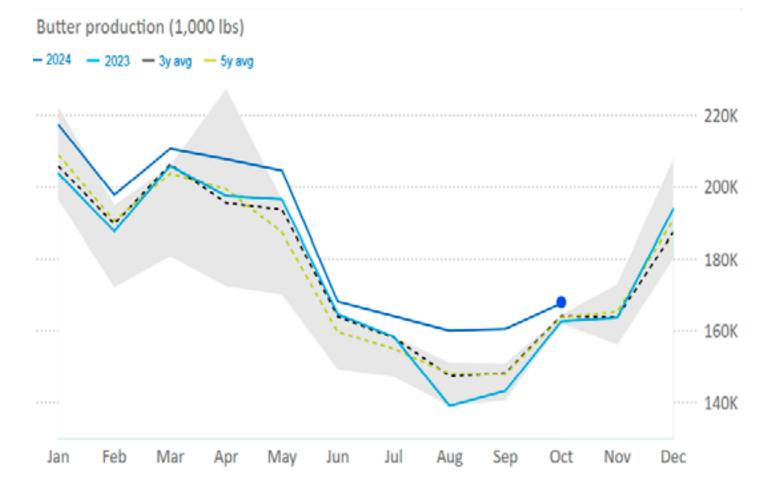
Dairy Deep Dive

Buttery Goodness.

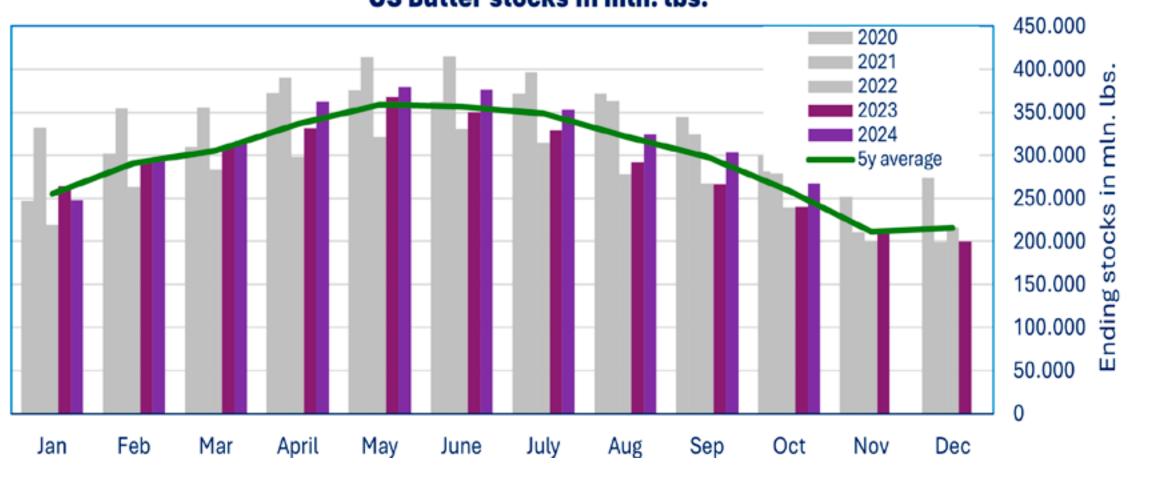
Butter production + Cold Storage

October 2024 butter production rose by 3.1% YoY (167.5 million pounds), setting a new monthly record. The MoM increase was only 1%, below the 5-year average of 7.9%. Which was the smallest September-to-October increase since 2016.

- Central and Atlantic Regions: Production climbed by 5.2% YoY (Central) and 14.5% YoY (Atlantic). Contributing factors included robust fat tests, increased butterfat production, and weaker cream multiples. States like Wisconsin, Texas, Michigan, South Dakota, and Minnesota saw higher fat pounds, driven by both increased milk production and higher fat tests. New York experienced a 1.9% YoY gain in butterfat production, ensuring ample cream supply for churning.
- Western Region: Butter production declined by 0.1% YoY, marking only the second drop in 2024. California, which produces 1/3 of US butter, saw a 4.5% YoY decrease, contributing significantly to the region's decline. Excluding California, the remaining 49 states showed a 6.5% YoY production increase.
- Cold storage: Butter stocks registered at 267.5 mln pounds in October, climbing by double-digits YoY for a third month in a row.



US Butter stocks in mln. lbs.



Demand Side: Not all October demand numbers have been published yet, but given the stocks draw and the production, domestic use should be slightly above the 200 million pounds in October. US butter exports increased modestly in Q3 2024 and that trend continued in October with Canada remaining the dominant market. Meanwhile, anhydrous milkfat exports experienced substantial growth, driven by strong demand from Canada and Mexico, alongside new market entries such as Costa Rica. Both categories reflect the growing competitiveness of U.S. dairy in global markets.

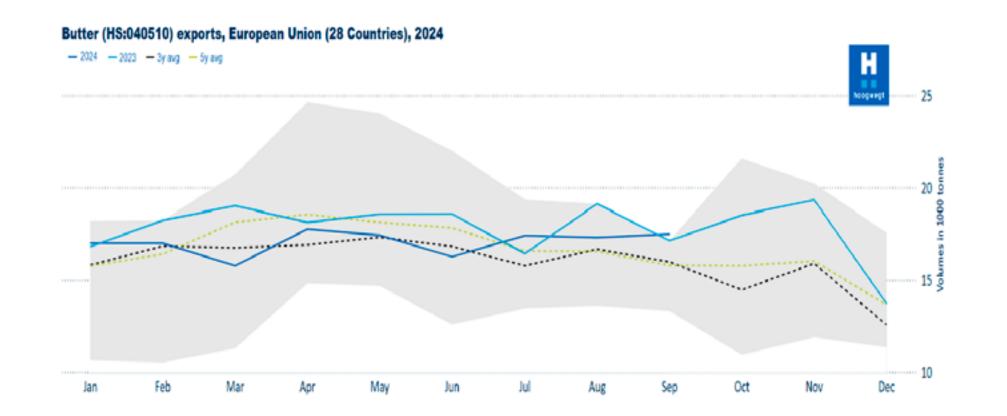
Lest not forget exports last year were weak as US Butter was heavily priced compared to the rest of the world back then. This year October exports grew for the fifth month in a row. 5.3 million pounds were shipped abroad, a 21.8% YoY growth, accounting for 3.3% of US Butter production.

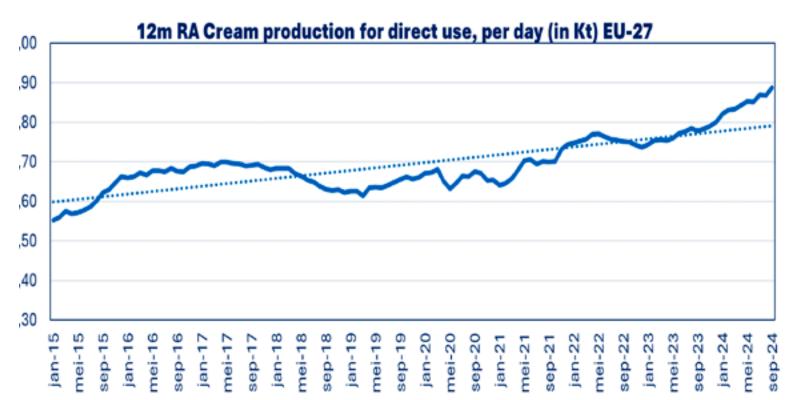
European Butter Supply and Demand

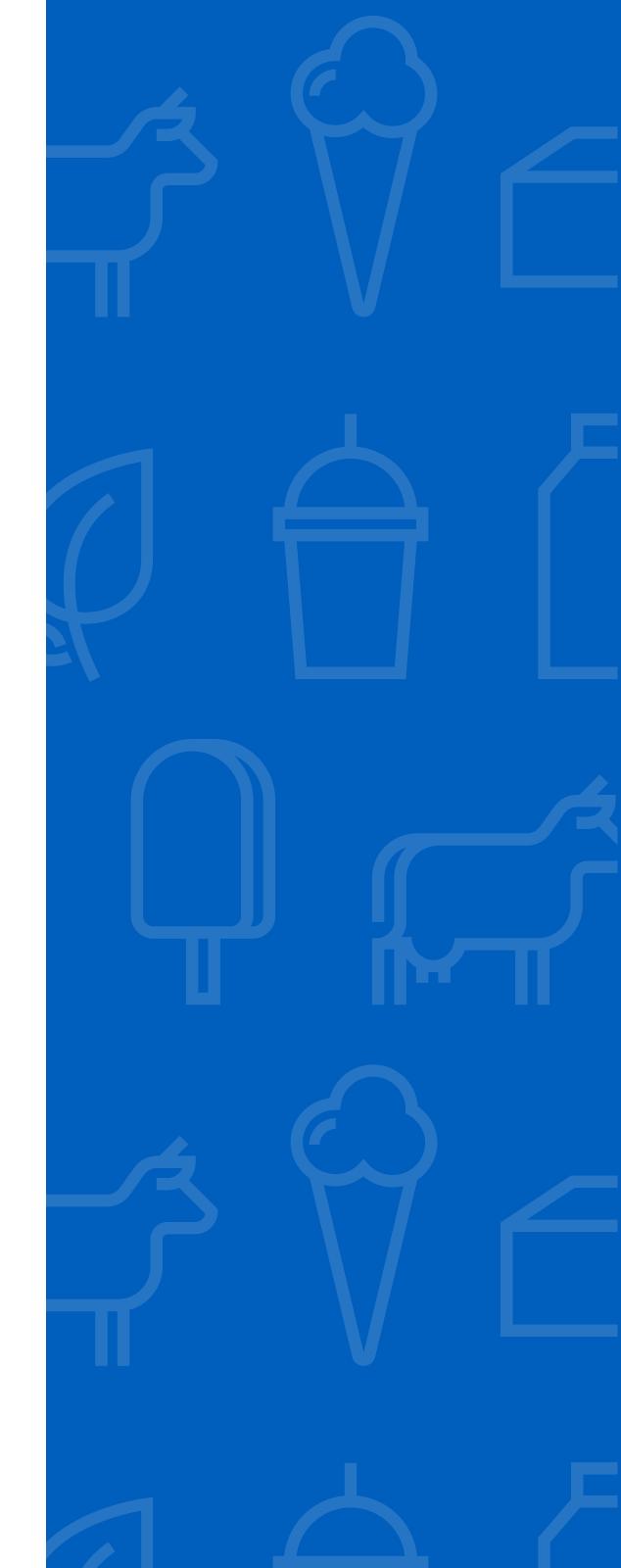
European price levels for milk fat skyrocketed, and Butter became quite expensive. Fundamental reasons can be found in the low Butter stock level in Europe, which in September (latest datapoint) was lower than September 2023 and below the 5 year average. On top of that, the milk production struggled due to Blue Tongue and fat levels in the milk were lower due to the heat wave, as heat seems to affect the fat content in the milk. Demand for Cream was strong, part of that could be the same heat wave. The strong demand for cream on low availability pushed prices for milk fat up.

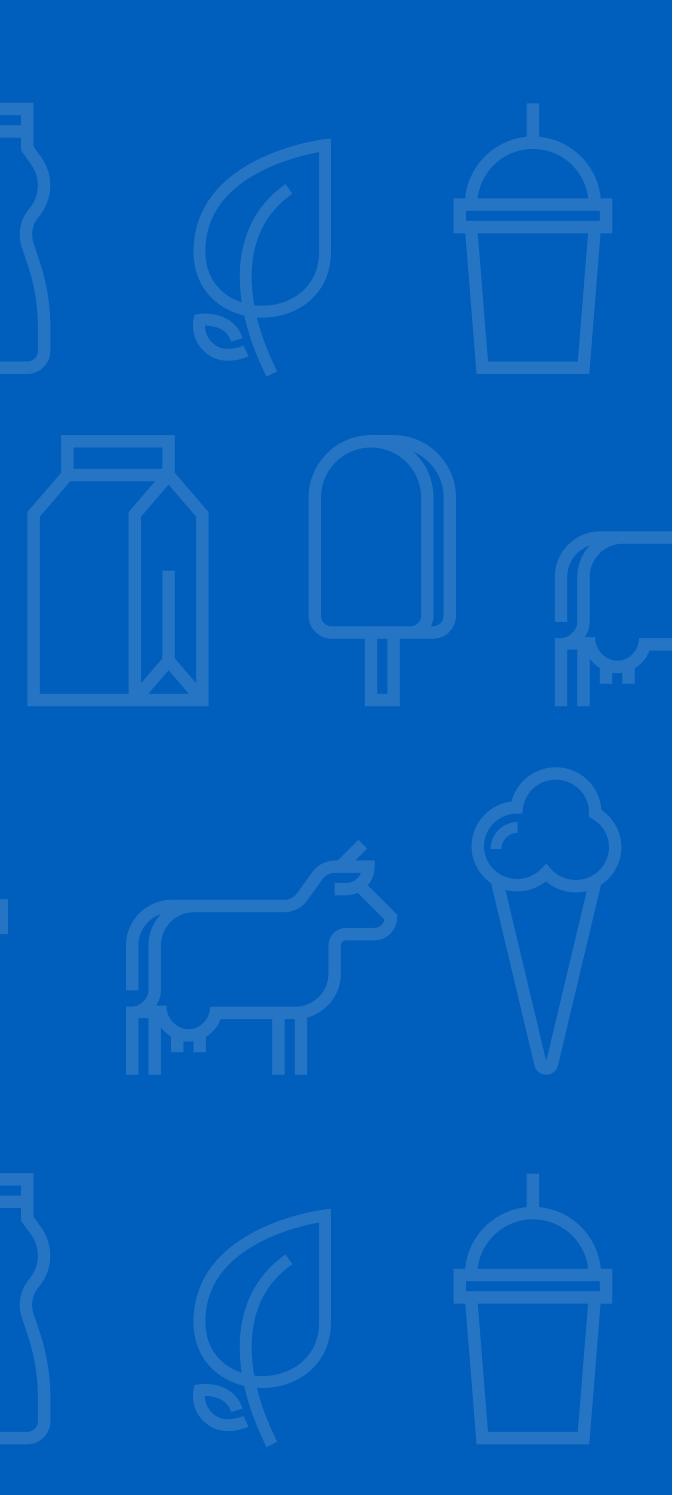
European data is always lagging a few months behind, but September figures are known: Based on the reported milk production and fat-levels, September 2024 gained around 11Kt of milk fat production YoY. Most of that was fat% growth. On a YTD basis the summed Jan-Sep pulled the total milk fat production back to a very mild positive, accounted for the leap year. After weaker summer months, September registered a neutral butter and butterfat production in major countries: Ireland gained production. Germany, NL saw negative YoY production Poland and France were flat. Overall September saw a 1Kt loss compared to last year. -40Kt YTD for 2024 as a whole, compared to Jan-Sep 2023. Production of cream for direct consumption gained 1Kt in September, production YTD. (Jan-Sep) was 62Kt stronger.

Seasonally nobody can expect for the butter stocks to really rise, as Europe is not in their lush yet so milk production still isn't great. Usually when prices for butter are high there is some demand destruction, as was the case in H2 2022, and strong production from NZ can provide some non-salted alternative, as does India, but there is not enough production in these months to outweigh demand, even when we're taking demand destruction into account. Do note that Cream demand is related to the holiday season and when people have covered their needs, there is a window when Cream isn't the strong driver for butter prices. The question is, how big is that window, as buyers might have been waiting longer to cover their needs on these prices.







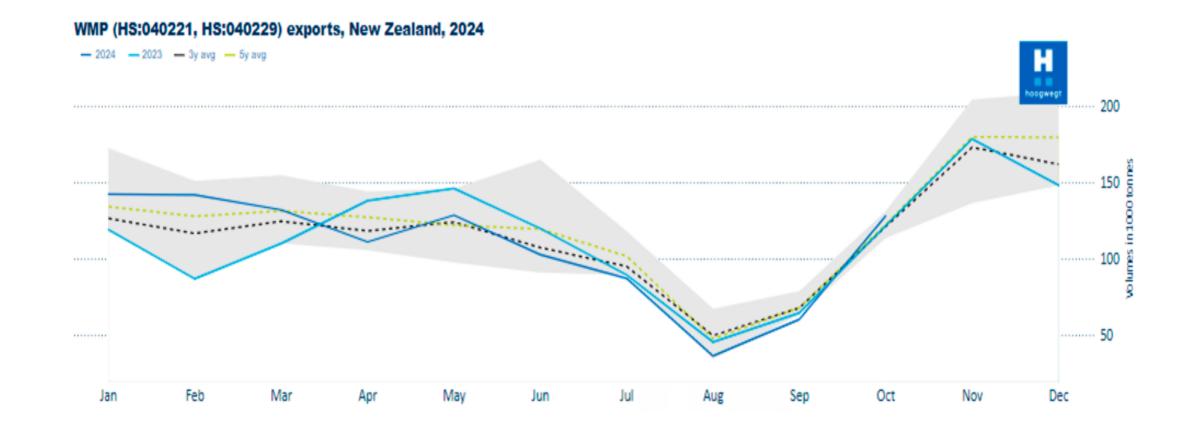


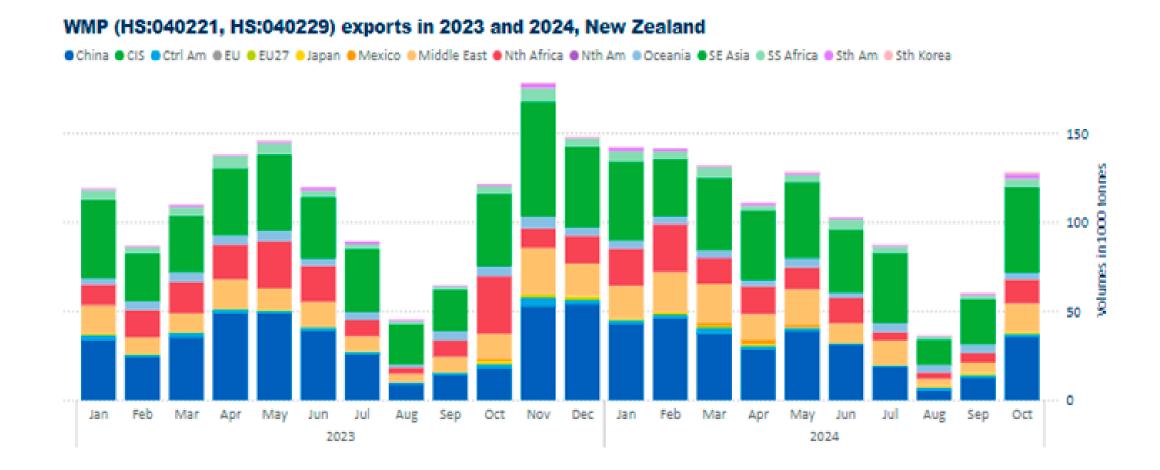
A Quick Note On... The Global WMP Market.

Although for some regions, Oct export data have not been released yet, global WMP trade should recover YoY for the first time in Oct after reducing YoY for 6 months in a row.

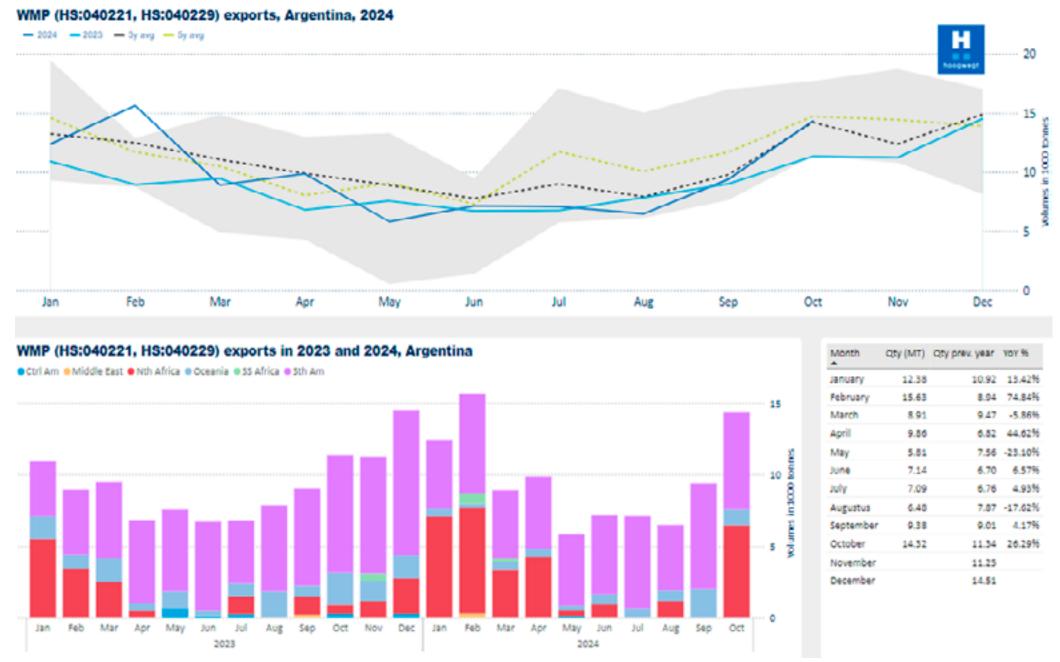
New Zealand, as the largest WMP exporter on the earth, raised their WMP exports in Oct for the first time since Apr with rising demand from main WMP importers. New Zealand had a good start for milk production this season, and WMP is responsible for their top one dairy product.

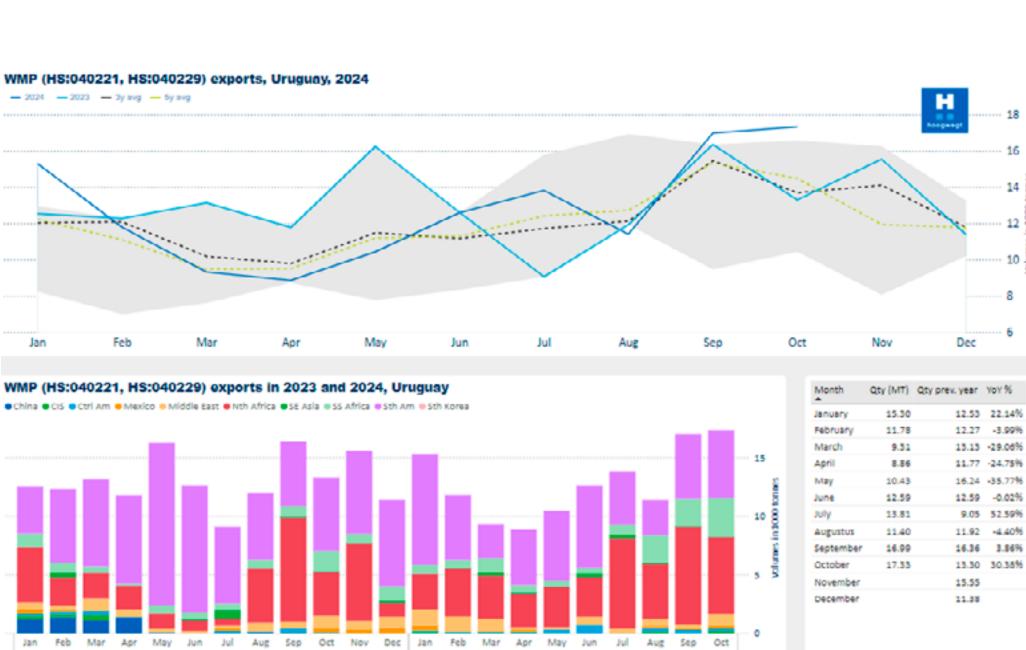
China, as the largest dairy importer in the world, imported more WMP from New Zealand in Oct compared with last year. South East Asia and Middle East also increased their WMP imports from New Zealand in Oct YoY, while North Africa bought less WMP from New Zealand than the same period last year.





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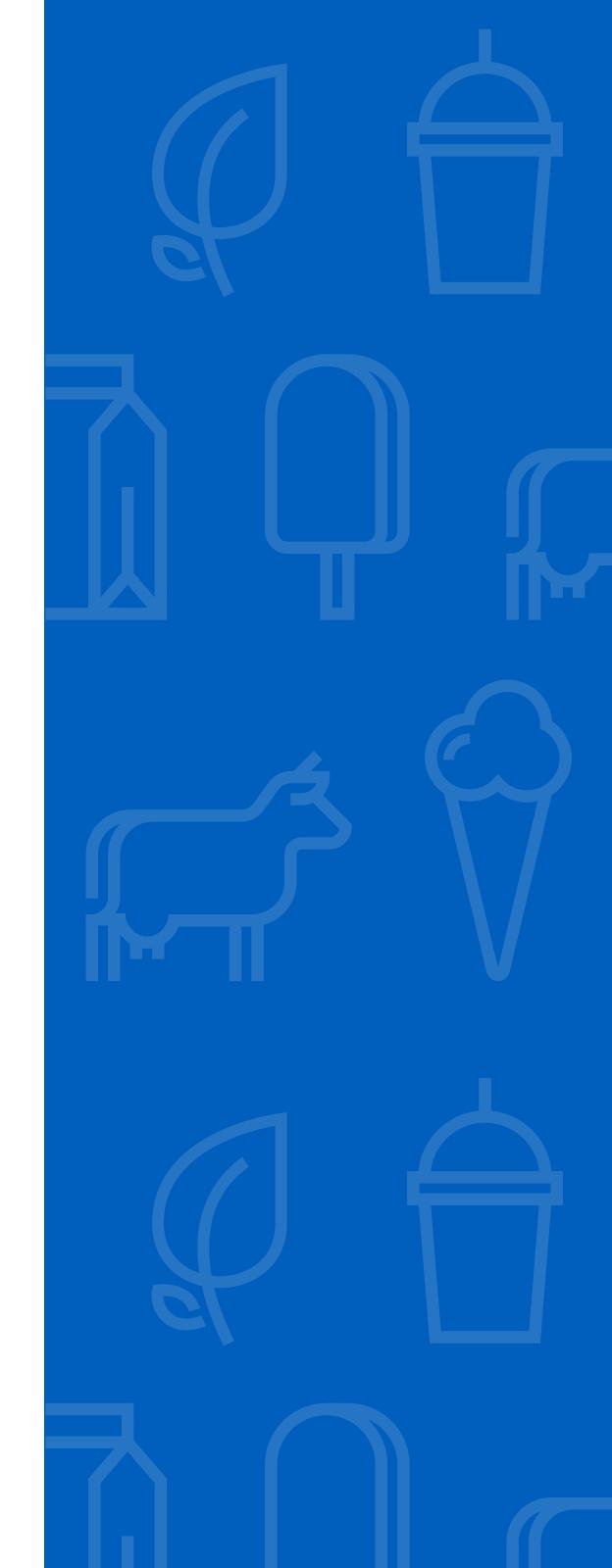




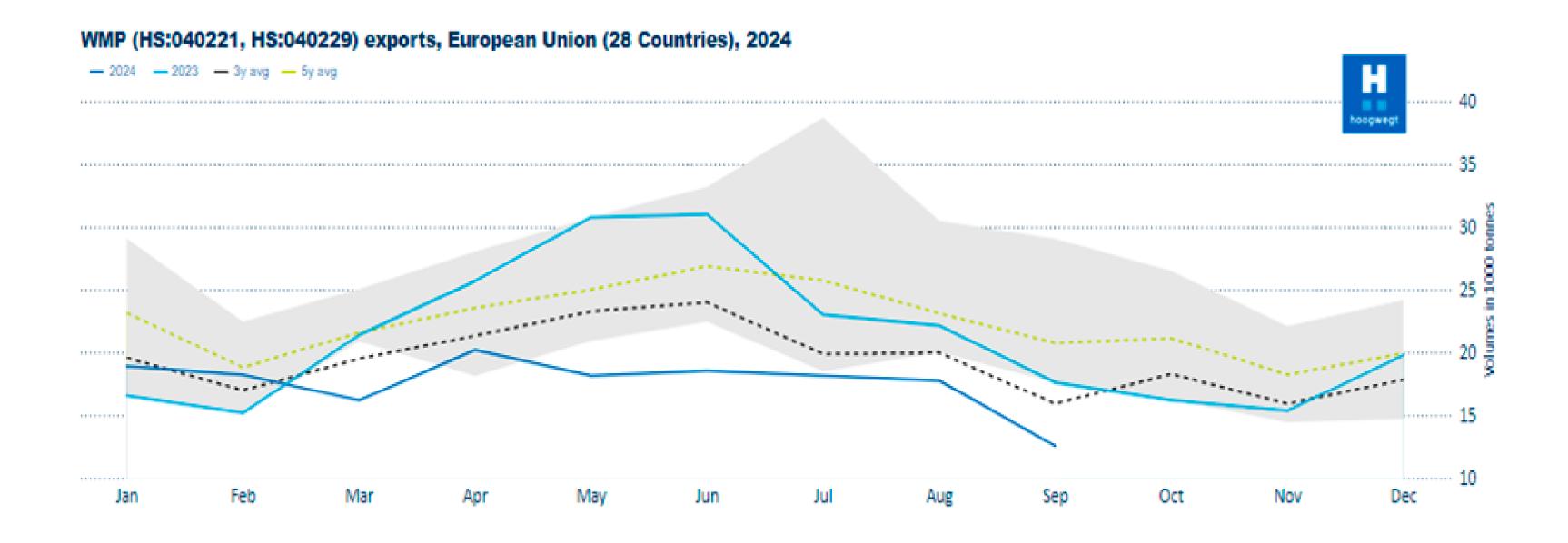
Both Argentina and Uruguay increased their WMP exports YoY and MoM obviously in Oct.

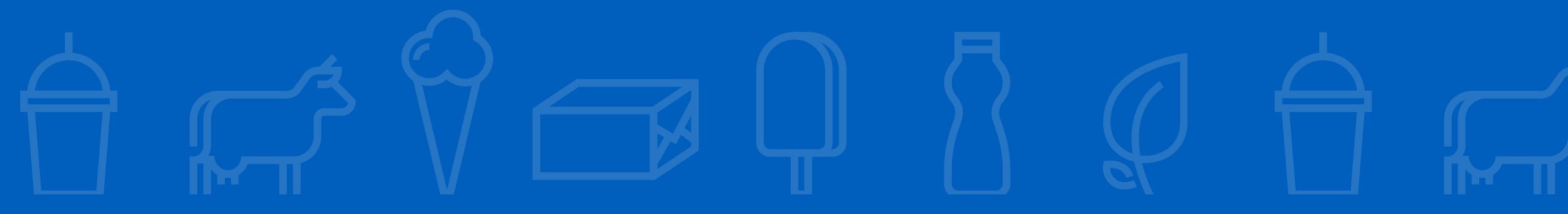
Though North Africa reduced their buying appetite from New Zealand, they bought more WMP from South America in Oct. Sub-Saharan Africa WMP imports also advanced compared with last year.

Meanwhile, WMP trade within South America reduced with sliding demand from Brazil.



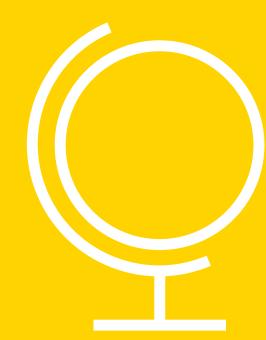
Looking forward, South American milk production is recovering so that their WMP production and exports are forecasted to recover in coming period as well. EU WMP exports kept at low level since March due to their high WMP prices, making them less competitive in the global market, while higher GDT offering quantities in past months may indicate more WMP exports to the global market from New Zealand in Q4 & Q1.





World Comment.

Yoran Ensing
Product Manager
Dairy Ingredients Americas





In this month's World Comment, we have the pleasure of having our Yoran "Triple A" Ensing share his thoughts on Hoogwegt and the latest dairy trends.

Can you please introduce yourself and your role within Hoogwegt Group.

Triple A – Arnhem, Africa & America. Little over 6 years ago, I started the Hoogwegt journey at our head office in Arnhem, joining the Africa team as an Export Manager. Looking back, I could not have had a better start in my working career. In August 2018, I graduated from University, in September, I joined Hoogwegt and in November, I took off to Mauritania for my first market visit, how cool! After 5 years of marketing dairy commodities for the African continent, Hoogwegt asked me to join Havero Hoogwegt to grow our high protein business in the USA. A new continent, a new product group, a new culture and a new home, Chicago! How cool!

Can you tell us one memorable experience you have had working for Hoogwegt Group?

That is a hard one, there are too many. I would like to share instead a bit more on the overall experience in my commercial role for Hoogwegt. I wrote already twice "how cool", but how cool is it to learn continuously on how to conduct business in different regions in the world. New cultures, new languages, new industries and new macro-economic influences.

In October 2023, I moved to our Chicago office with the goal to grow our high protein business in North-America. It was a year of learning everything about high dairy proteins, both commercially and technically. It was a year of learning a lot about the cultural differences between Europe, Africa and the United States. Now, after

a full year of learning by doing, I feel enriched by the experience of what it takes to grow business in (for me) a new industry on a new continent.

What are the latest dairy trends you see from a Dairy Ingredients point of view?

Over the last year, we have seen a high protein market that was (and still is), on the rise! Prices keep on climbing and the demand doesn't seem to slow down. In the US, we see all time high production figures for Whey Protein Isolate (WPI) while we are hitting all time low national stock levels! This does make you wonder, where is all that demand coming from?

An interesting new trend, that adds demand to the high protein market, is the trend of using a GLP-1 agonist drug for weight loss. Ozempic and Novo Nordisk are two examples of GLP-1 agonist drugs. To quantify the today's popularity of the drug: Global spending on obesity medications totalled \$24 billion last year and could reach \$131 billion by 2028, according to Reuters. It is estimated that around 10 million people in the US are currently using the drug to lose weight. Now circling back to the high protein demand - Consumers of the GLP-1 drugs for weight loss are recommended to maintain a high protein intake to avoid muscle loss. Hence, extra demand for high dairy proteins.

As you can see, it seems like demand for high protein products are still evolving and I am excited on what other forms of innovation our dairy industry can bring!



Hoogwegt Happenings.

Thank you for the great collaboration and trust over the past year.

We wish you and your loved ones a Merry Christmas and a New Year filled with success and happiness!

Warm regards,

Your partners and friends at Hoogwegt