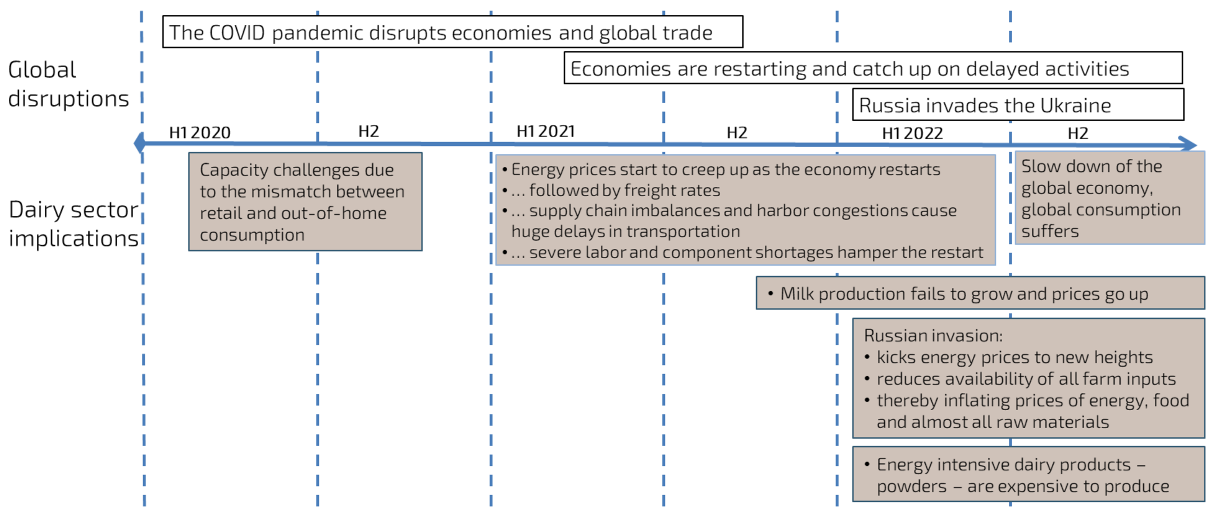
What did the high dairy commodity prices do to trade patterns in 2022?

Where is the "normal"

In the past couple of years we lost track of the "normal" when it comes to dairy consumption and dairy commodity prices. In 2020 and 2021 we witnessed lockdowns around the world turning familiar dairy consumption patterns around and causing massive logistic disruptions. Subsequently, in 2022 we saw the war in the Ukraine adding additional turbulence to dairy markets by pushing milk production costs to high levels and thereby reducing export supply - please also read our Insight 'Are we at a long term turning point for milk revenues'? The resulting appreciation of dairy commodity prices may have caused a lot of deviation from traditional buying patterns in the key import markets of the world. "Demand fall out" in price sensitive markets, "delaying purchases" during the peak of dairy commodity prices in H2 of 2022 can be considered two of the normal buyside reactions one would expect during the turbulence of 2022.

Figure 1. Timeline of global dairy market disruptions (2020-2022)



Buyside reactions

The year 2022 was a perfect case to test the reactions of the buyside of the market when prices break out of the normal range and reach historic heights. One would assume that:

- Buyers keep minimal stock levels when prices peak;
- End consumption in less affluent markets declines when dairy prices are high.

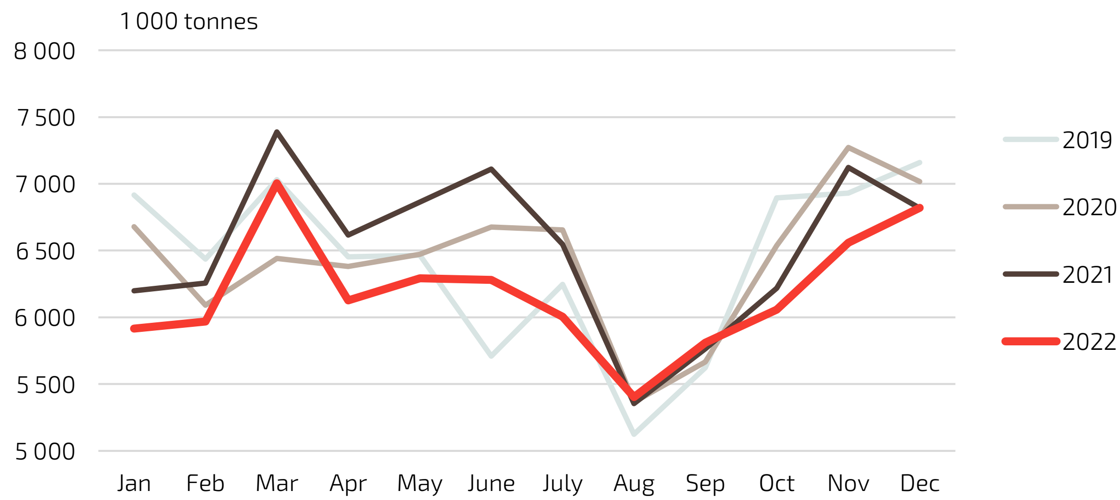
Now that dairy trade data of the full year 2022 are available we will check the validity of these assumptions. More importantly, as 2023 may become the year of returning to the "normal", we take a forward look at the longevity of some of the shifts in trade patterns that took place in the 2020–2022 period.

March 2023

Decline in trade volumes actually quite modest

Whether markets experienced declining end consumption due to elevated dairy prices can be tested by comparing full year volumes in 2022 with previous years. The overall picture for 2022 may be somewhat obscured by the strong decline in Chinese imports, but even when China is included total imports declined only by a marginal 2.7%. If we exclude China then total trade actually increased by 4.3%. Which is quite remarkable in a year when most of the dairy commodity prices were considerably above their historic averages

Figure 2. Monthly world dairy trade volumes in the years 2019 – 2022
(in milk-equivalents)



Source: Dairyntel analysis, 2023

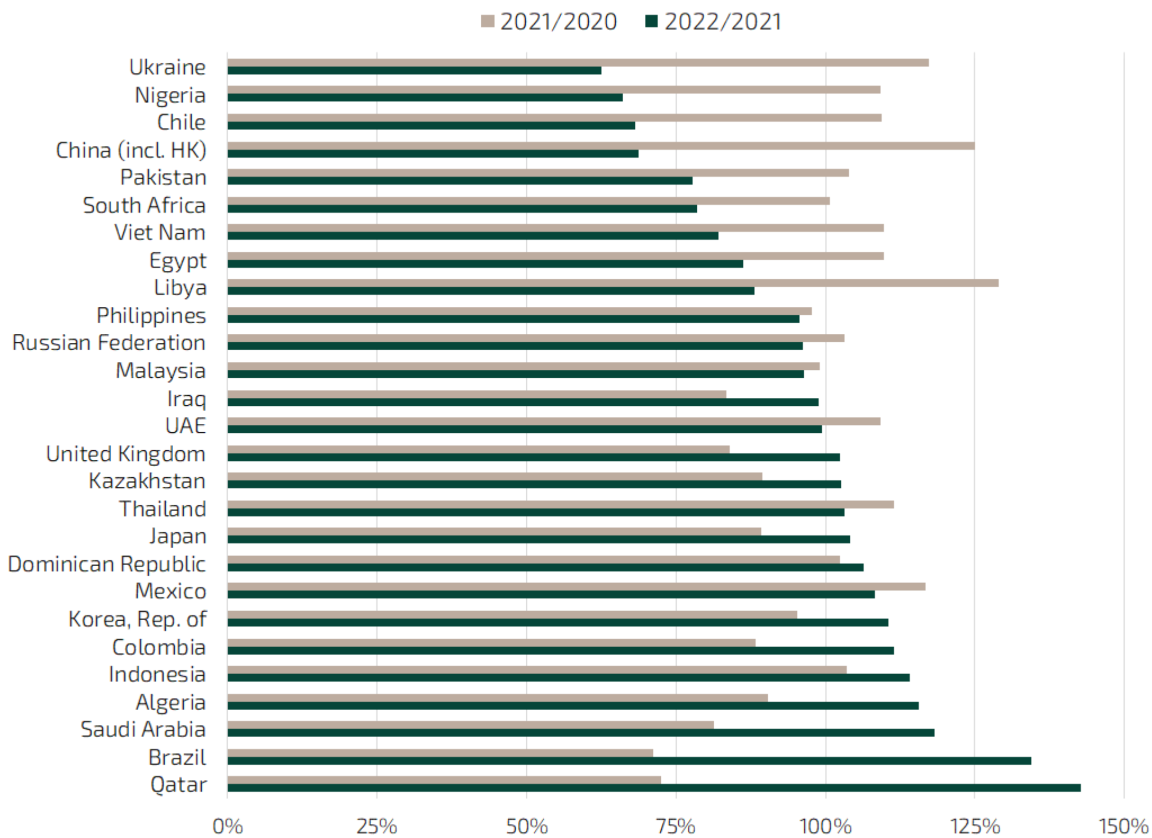
If we take a look at buyside behavior during the peak of prices in H2 of 2022 then it seems clear that buyers indeed held back for as long as prices continued to go up. The 2022-line in figure 2 shows that global trade was weak in comparison for almost every month of the year with the exception of December. The quick drop in dairy commodity prices that started in November apparently caused importers to abandon their short term focus and started purchasing and importing more confidently by the end of the year. Given that this development may have been initially cautious, it seems safe to assume that Q1 2023 data will reveal that the process of "catching up" probably continued for as long as commodity prices sustained their downward momentum.

Large spread across countries

If we zoom in on the individual countries then we observe a large spread across different countries. Energy exporters showed the largest growth. But weaker economies like Brazil and most of the Southeast Asian importers also continued to import strong volumes throughout 2022 despite the elevated prices on the world market. The observations above seem to indicate that dairy consumption may for various reasons be more resilient than often assumed. It's safe to say that other demand regions for a significant part compensated for the slowdown in China.

Figure 3. Changes in import volumes in the main dairy import markets

(2021 and 2022 import volumes versus the previous year, in %)



Source: Dairyntel analysis, 2023

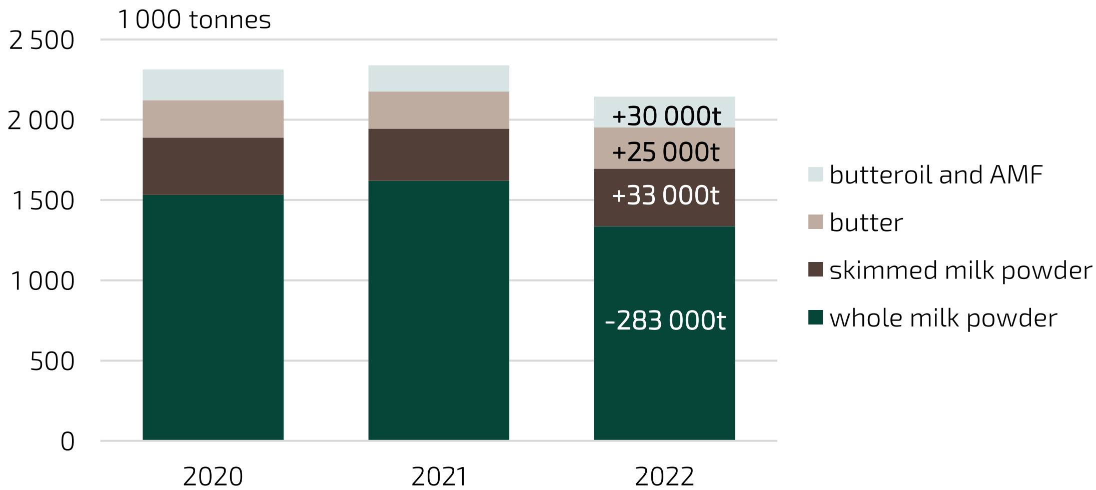
The strong import performance of energy exporting countries like Qatar, Kuwait, Saudi Arabia, Algeria and Indonesia can probably be explained by the strong energy revenues in these countries in 2022 compensating for the higher dairy expenses. But weaker economies like Brazil and most of the Southeast Asian importers also continue to import strong volumes throughout 2022, despite the elevated prices on the world market.

The observations above seem to indicate that dairy consumption may for various reasons be more resilient than often assumed. Of course weaker economies in Africa will see consumption decline as in most households in these countries dairy is not a staple. For most of the other key countries however, several mitigating factors allow dairy consumption to be less affected by high price levels.

What did China's weak 2022 dairy imports do to New Zealand's export focus?

China's weak import performance caused some significant changes to New Zealand processing allocation as well as its geographic prioritization in 2022. It is no secret that China has become New Zealand's key priority in terms of product prioritization and customer focus over the last 10 to 15 years. It is interesting to see that a strong reduction in China's dairy purchases caused New Zealand's main product destined for to China - whole milk powder - to drop 283 thousand tonnes in volume. This freed up a significant volume of butter(oil) (55 thousand tonnes) and skimmed milk powder (33 thousand tonnes) for the world market.

Figure 3. Changes in New Zealand's exports of milk powders and butter(oil) in 2022 compared to 2021
(2020-2022 export volumes)



Cheese exports fell by a modest 4.2% in 2022 and liquid and fermented milk volumes hardly changed. The most impressive change that occurred in terms of New Zealand exports in 2022 was a staggering 170% increase in exports of condensed and evaporated milk.
In terms of geographic reallocation, most of the excess volumes of milk powders and butter remained in the Asia Pacific region, but Algeria in the case of milk powders and Central America in the case of AMF also received a relatively large share of New Zealand dairy exports in 2022.

What can we expect in 2023?

With respect to the situation of buyers catching up on their inventories and forward positions it seems safe to assume that a lot of them are still somewhat behind on their normal level of comfort. At the moment buyers are probably cautiously trying to get their timing right when it comes to building towards normal buffers. Prices have come down a lot in Q4 but the market balance still seems shaky and renewed upward price momentum can't be ruled out.

The resilience of dairy end consumption in most of the key import markets leaves doubts about the old assumptions about price elasticity of dairy products in most diets. Apparently dairy has already become a staple in many countries that were once considered emerging dairy markets. It still remains to be seen though if dairy consumption remains unaffected during times of possibly stronger economic headwind in 2023.

Finally it will be interesting to see if New Zealand's more diversified export focus of 2022 needs to be repeated in 2023. It seems to be too early to tell if China is on its way to a "normal" import performance in 2023. Consumption may recover now that the economy opens up again, but other variables affecting the local dairy market balance -like for instance local milk production and the government's self-sufficiency targets - may require New Zealand to diversify its export focus more structurally.

If you are interested in our in-depth market insights or data underlying this analysis, please feel free to contact us.

March 2023