What impact could an armed conflict involving Russia and Ukraine have on world dairy supply and demand, and what will this mean to the UK dairy industry?

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Introduction

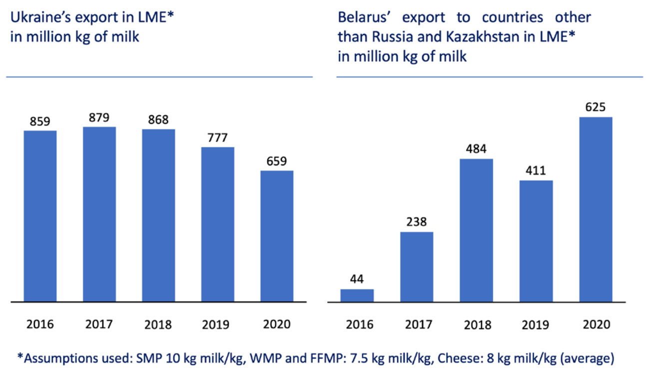
The biggest conflict in Europe since World War 2 has started, with Russia invading Ukraine. It appears it's a full-scale invasion with the objective of replacing the current government and possibly installing a new government, like the one in Belarus. Whilst the conclusion of this is, of course, unknown at present, and will depend on Ukrainian resistance, we have conducted analysis to understand the potential impact of such a development on global dairy supply and demand, and what that might mean for the UK dairy industry.

We are already seeing Western countries implement economic sanctions against Russia and, as the situation escalates, then governments have committed to escalate these sanctions to a punitive level. This will have an economic impact beyond Russia's borders but is clearly preferable to getting involved directly in military action.

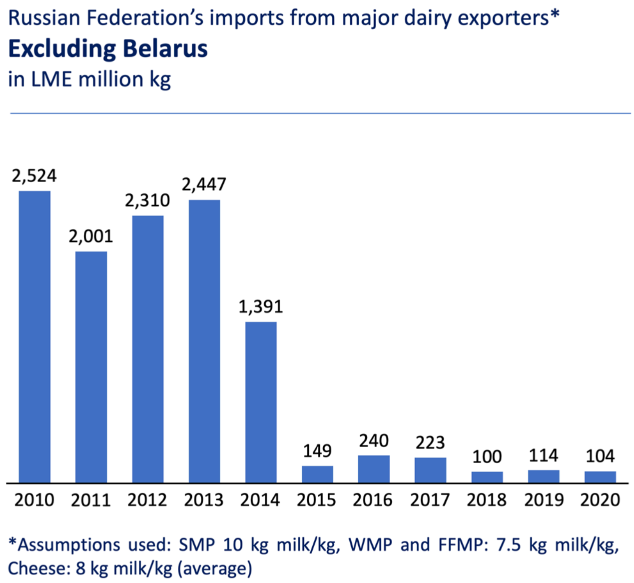
This document outlines what this developing situation may mean for global dairy supply and demand and, consequently, milk prices.

Milk demand and supply in the region

Ukraine and Belarus are net suppliers of dairy on to the world market.



Russia is a net importer of dairy from the world market



The dairy exports of Ukraine and Belarus to the world market clearly exceed that of the Russian Federation's imports from the world market. The net loss of Ukraine's, Belarus' and Russia's dairy commodities trade would mean a loss of about 1.2 bn kg/year of raw milk equivalents in dairy supply to the world market.

How would conflict affect supply and demand on the world dairy market in the short and long-term?

Any conflict in Ukraine is likely to impact global supply and demand of dairy products and, initially, it is likely this will lead to higher global dairy commodity prices.

Supply changes on global dairy markets:

Short term - supply falling

- With an anticipated takeover, dairy exports from Ukraine will cease immediately due to military action. In addition, punitive western sanctions (for example, potential exclusion from the international SWIFT payment system) could stop all Belarus dairy exports, except those to Russia and Kazakhstan. This may even impact exports to other nations, such as China, as export destinations, even though they remain neutral in the conflict, due to payment issues.

- Natural gas export volumes from Russia to the EU will, at least partly, reduce due to pipelines through Ukraine being blocked. As a result, a sharp increase in global energy prices will mean dairy farm margins being hit directly, through rising on farm energy and fertiliser costs.

Longer term – supply increases?

- Over time, higher dairy commodity prices may, via higher milk prices, trigger a global increase in dairy output.
- Belarus may, over time, re-establish routes to export to 'neutral' markets.

Demand changes on global dairy markets:

Short-term - demand falls

- Russia may have to terminate any 'western' dairy imports (mainly from Argentina) due to exclusion from international banking systems.
- Over time, the increase of dairy commodity prices and/or an invasion and global economic downturn as a result of consequent high-energy prices may reduce world dairy demand.

Long-term - demand increases

- Over time, trade flows between Russia and other countries will be re-established, with Russia again re-entering the world dairy market, possibly working through proxy operators like Armenia.

How will input costs rises impact milk supply?

With the Russian invasion of Ukraine escalating into a full military conflict, it is likely that global natural gas and fertiliser prices will increase, but the scale of any increase is uncertain. The same is true for the impact of increased fertiliser and (partly indirectly) total energy prices on the cost-of-production on dairy farms.

But, even without knowing exactly how post-invasion gas prices may develop, and the magnitude of any resulting increase in farm input cost, some conclusions can still be drawn:

1. Farm input costs may well increase faster and relatively more severely than dairy commodity prices and, therefore, raw milk prices.
2. As a result, globally the on-farm incentive to increase production and/or to invest reduces, at least in the short to medium term.
3. The reduced incentive to respond with production expansion to higher dairy commodity prices will, in the short term, sustain rather than alleviate the global supply shortage due to the loss of exports from Ukraine and, potentially, Belarus.
4. A further increase is expected in farm input cost. This triggers a slow initial on-farm response to (even) higher dairy product prices. So, supply shortage will not be alleviated directly.

What does this mean for milk prices?

The direct effect of military action will be a short-term price increase for global dairy commodities. This price rise will be caused by the 'overnight' loss of Ukrainian and Belarus supply of dairy commodities to the world market.

The volume loss due to these two exporters being blocked (to all markets except the Russian Federation and Kazakhstan) outweighs the possible dairy volume freed up in countries like Argentina that now sell to the Russian Federation.

The world dairy market will, in all probability, shrink when dairy commodity prices increase further. The elasticity, however, is moderate, as most of the current world dairy importers are already mid-income level countries. Prior to demand loss due to elasticity significantly decreasing actual import volumes, commodity prices will and can go up (even) more.

Impact of rising fuel costs

A secondary effect will be the negative impact of increasing energy prices on consumer buying power worldwide. As, however, several large dairy importing nations are also large net 'fossil energy' exporters, the relevance of the indirect effect could well be moderate to minimal, as high energy income in these countries tends to trickle down to higher consumer buying power, and thus higher dairy import demand.

Summary

An invasion of Ukraine by military forces of the Russian Federation will see, in the short term (up to at least the end of Q2 2022), global raw milk prices increase even faster than we've seen in recent times.

At present, the global dairy markets have not yet fully factored in the implication of such an invasion, so despite the current high dairy price levels, a further increase is possible.

'Panic buying' in the global dairy market, resulting from an overnight loss of Ukrainian and Belorussian exports, may trigger further price increases, even when only moderate volumes are being traded. In the UK, farmer pressure on the UK processors to keep pace with global raw milk price increases is likely to build.

Despite ever higher milk prices, farm milk production may not respond, or may even contract, as energy prices rises lead to on-farm cost-of-production increases that may outpace milk returns, certainly in the short-term. Farm output growth that could somewhat dampen dairy price increases is, therefore, unlikely to happen in the short term.

UK dairy processors will face the effects of higher energy prices on their milk purchasing costs, their own operating costs, and on consumer buying power. A further increase of energy prices will drive up consumer inflation even further, hitting consumer buying power. Consumers are already clearly feeling food price inflation and retailers know this. This may impact on demand, and so UK retailers are likely to be highly resistant to further dairy price increases.

As a result, selling to global dairy commodity markets will potentially become even more attractive to those processors that have that option. Evidence of selling options in foreign commodity markets may be needed for UK retailers to be willing to accept further price increases from processors, which will be required to maintain UK milk supply if farmers are under further cost of production pressure.

Should this situation escalate, it will be important that UK dairy processors are able to increase sales prices even faster than they have been in recent months, to enable them to cover their own additional cost inflation and to be able to pass on higher income through milk price to farmers to cover further on-farm cost increases.

As a result, inflation of consumer dairy prices in the UK seems an inevitable consequence of conflict between Russia and Ukraine, due to the arising impact on global dairy markets.