Chewing the Cud on the UK Cheddar Market: This time it's different.

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Why this report?

At Kite it is an aim to provide participants in the UK dairy value chain – from barn to buyer - with objective analysis on the (UK) dairy industry and its participants. In several of our previous reports we focused on the UK liquid milk market, the changing global dairy commodity flows, and the implications thereof on UK dairy farming and processing. At present, the UK cheese market and UK cheesemakers are in focus. This is justified by the unusual circumstances in the UK cheese market which will be illustrated in this report. These unusual market dynamics have partly been triggered by Brexit and are now exacerbated by the protracted Ukraine crisis. This report will substantiate why UK cheesemakers pay the milk price they do – and how the current market circumstances may adversely affect the security of UK cheese supply for the UK market when short-term thinking prevails over a sound long-term sourcing strategy.

Who should read this report?

This report provides insights on the UK cheese value chain to all involved in it: from farmers to retail or B2B buyers.

Where – what is the geo-focus of this report?

The report focuses on the UK market, adding, where needed, global market perspectives.

When – what is the time horizon?

This report focuses on data up to Q3 2023, occasionally going back more than two decades to illustrate longer-term developments.

How has this report been created?

This report is based on the analysis of statistics from multiple sources (e.g. DEFRA) and on interviews with selected industry experts who prefer to remain anonymous.

What is the content of this report?

- How cheese production has increased in relevance in the UK dairy value chain
- Where the UK cheese business is different from the UK liquid milk business and where not
- How the UK raw milk price disconnected from the Oceania cheddar price in 2022
- What has driven this disconnect, and with what implications for UK cheesemakers
- What the outlook is and why the outlook relates to the security of UK cheese supply

Why care?

The potential consequences for the UK cheese sector.

Executive summary

Over recent years the liquid milk sector has been through some extremely challenging times, having suffered from significant periods of unprofitability. In comparison the cheese sector has been stable and more profitable, with better prospects for manufacturers and their suppliers.

This year, however, the tables have turned, and cheesemakers now find themselves in the midst of a perfect storm of weak demand caused by inflationary price increases at retail level; a high cheesemake on the back of strong milk volumes; and expensive stocks valuations resulting from record high milk prices.

This, plus the higher cost of borrowing, means working capital costs have increased significantly. In addition, many cheesemakers have found themselves in a weak negotiating position, up against retailers who are battling with their own competitive pressures and who have retendered for significant quantities of business.

Commodity cheese prices are now exceptionally low, especially in relation to the milk price paid when the cheese was initially made several months ago, and in relation to the current prices cheesemakers are having to pay to stay competitive with the liquid sector.

Some cheese processors are undoubtedly vulnerable and there is a real risk of long-term damage to the sector unless there is a greater understanding of how the supply chain works, and greater buyer empathy towards the challenges it currently faces.

Retailers and buyers are advised to think much more about the longer term, and to reflect on how poorly short-term thinking serves the interest of themselves, their customers and their suppliers. This is especially the case if work towards sustainability is to be improved and hastened, because work on sustainability will be hampered by the inherent lack of profitability in the supply chain.

Retailers may be tempted to have little mercy, given the ample supply situation and the fact the cost-of-living crisis also hurts their margins. But it is not in their longer-term interest to squeeze UK cheesemakers until the pips squeak, as doing so will only push them and their supplying farmers into further losses. The net result will be fewer cheesemakers, fewer farmers supplying them, less milk and less cheese for the UK market.

UK retailers need a strong, viable UK-based cheese value chain who want to supply them. Currently UK cheesemakers would generally rather sell abroad than in the UK. Time and investment to develop these export markets is already invested by some players. Once these markets have been created, they will start to take priority. This is an extremely bad dichotomy for the sector in the long term, and due warning is given in the report on this if it was to continue.

Retailers who have understanding and empathy, and who are prepared to work with their supplier, will find they will go the extra mile for them. In contrast, those who don't care (and they don't have to!) will increasingly see cheesemakers supply their products elsewhere. These retailers will lose out, because over time they will lose the best suppliers and the best products. They will be left with average products, from average factories, with average service levels.

Introduction

The UK cheese industry is a wonderfully diverse sector. It not only plays a role in providing affordable, sustainable and enjoyable nutrition to consumers, but also in the success of rural communities. It provides many thousands of jobs relating to milk production and cheese manufacturing, and roles in transport, maintenance, marketing and trading.

We have literally hundreds of cheesemakers, from very small specialists who craft their product by hand, to sizeable multinationals who produce many thousands of tonnes per year. They can be classified into several sub-categories:

a) High volume cheddar makers, including Saputo, Arla Foods, Lactalis, First Milk and Dale Farm;

b) Medium-sized cheddar makers, including South Caernarfon Creameries, Wyke Farms and Barbers Cheesemakers;

c) Farmhouse cheddar makers, such as Alvis Bros and Parkham Farms;

d) Mozzarella specialists in Leprino Foods UK and Dairy Partners;

e) Territorial specialists in Belton Cheese and Joseph Helers Cheese;

f) Stilton specialists in Cropwell Bishop and Long Clawson;

g) Specialist small soft cheese makers like Lubborn Cheese;

h) Those who make cottage cheese or quark as part of a diverse range of products, for example Meadow Foods and Grahams Dairies;

i) Small hard and soft artisan cheesemakers, such as the 280 who are members of the Specialist Cheesemakers Association.

This report primarily focuses on cheddar, because it is by far the biggest and most important sub-sector of the industry, and because, right now, it is under serious pressure. The market, according to one seasoned trader who has been in the business for over 30 years, is "broken". It is not yet in crisis, but easily could be. Global and domestic factors are buffeting the sector head on, making the cheese manufacturing and selling environment more demanding than it has been in years - perhaps even ever. These factors include:

- The cost-of-living crisis and challenged household budgets mean cheese consumption has fallen. Consumers are also buying cheaper (younger) cheeses and are eating less mature and extra mature varieties;
- Consumer spend on cheese has been affected by a move from (the once) Big Four/Five retailers to the discounters;
- Consumers are buying fewer brands and moving to cheaper own-label products instead;
- Consumers are also spending less money on casual dining, eating out or takeaways – all of which are significant outlets for cheese;
- Raw material (milk) costs, and production costs in general, have increased significantly over the last two years. Many manufacturers could not get retailers to agree price rises to cover these costs, putting their businesses under tremendous pressure;
- Cheddar has to be stored and matured, and many thousands of tonnes now in store were made at very high milk prices. This needs to be financed by the processors at ever higher interest rates;
- The cheese made at those higher prices is now being sold on to a market that has collapsed, resulting in significant losses to the processors if they are not selling on formula prices;

- Reduced by-product (whey) valuations is also cutting incomes to cheesemakers;
- There is limited availability of storage for maturation, and what there is, is costing more;
- Brexit is making exports more challenging;
- There is additional capacity in the cheddarmaking sector at a time of falling demand;
- Retailers are showing little mercy to processors, with some very aggressive retail tenders having been in play recently, and with some reports of formula-based contracts being ripped-up.

While processors might currently be sitting in the middle of a perfect storm, with the retailers holding many negotiating cards, it should not be assumed this will last indefinitely. Everyone in the supply chain needs to be aware of the changing challenges and dynamics in the market. If they aren't, then there is a risk significant long-term harm could come to the sector. This is particularly true as it looks like the liquid premium could be returning to the sector. If cheese cannot match liquid milk returns, farmers are likely to migrate away from the cheesemakers, thus reducing milk volumes for the sector. In addition, if UK cheesemakers cannot secure good margins from UK retailers, they will look further afield to do so by expanding exports. This move to greater exports is already happening and it is hard to see it changing anytime soon.

Milk Utilisation – how much milk is made into cheese?

When thinking of the UK dairy industry, the tendency is to first think of the UK liquid milk sector. Traditionally, it is by far the largest UK milk processing segment. Moreover, the structurally poor margins achieved in the sector have led to industry consolidation which also attracted dairy buyers' attention. Recently Tomlinson's closed, Medina and Freshways teamed up. Given the shrinking market (more) capacity may become superfluous in the future, with all the challenges this entails. Due to the declining volumes, the role of liquid milk in the UK dairy sector has gradually diminished. DEFRA data, available since 1995, shows the volume of liquid milk processed in the UK as a percentage of total raw milk processed in the UK has dropped by almost 10% to 42% in 2022 (Figure 1).

Over the same 27-year period, the available milk pool increased by only 2%. Consequently, the displaced milk has ended up in the cheese sector, with output volumes growing by 50%, of which 30% is in the last decade alone (Figure 2).

Figure 1: Raw milk utilisation by product group in UK dairies

In % of total raw milk pool available for processing (Source: Defra)

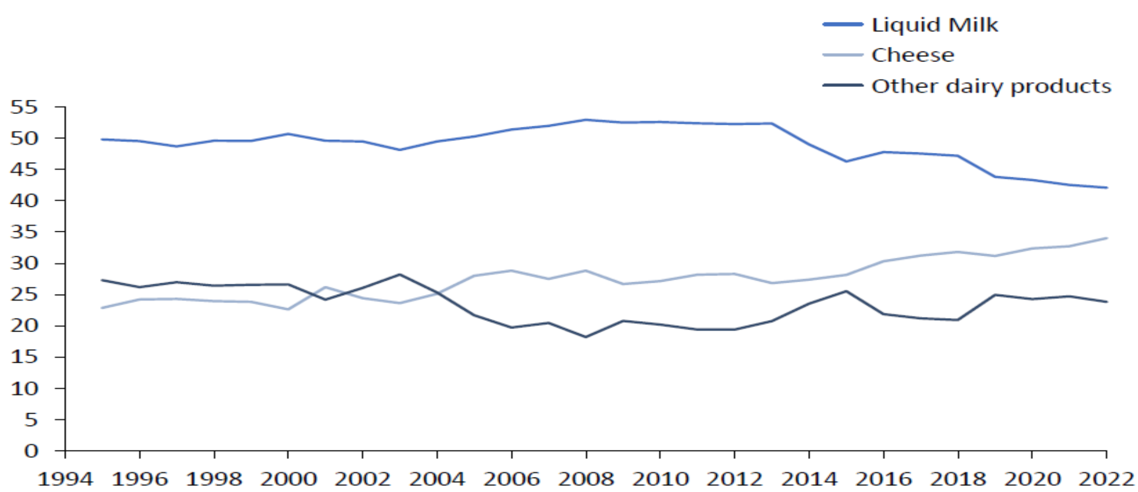
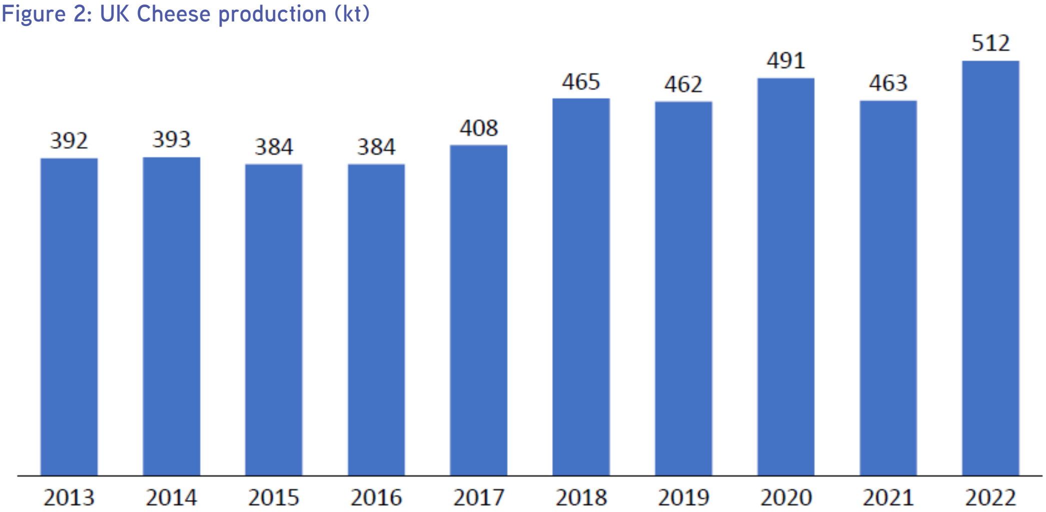


Figure 2: UK Cheese production (kt)



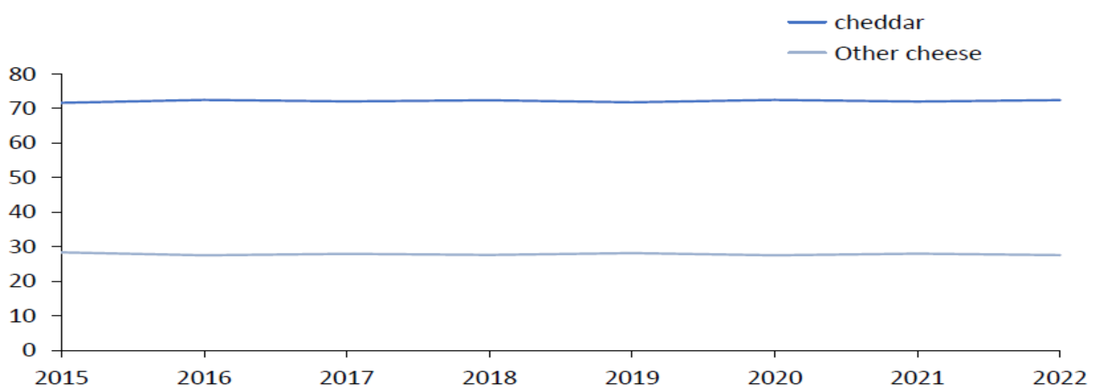
DEFRA has provided data on the split of raw milk use over different cheese types since 2015 (Figure 3), and from this we can see the amount of milk processed into cheddar has been remarkably constant over time. In other words, cheese production has increased proportionally across the entire range of products manufactured in the UK. In 2022, cheddar manufacture accounted for 73% of the cheese made, with territorials accounting for 6.5%, short life territorials 1.4%, blue vein cheeses 2% and the rest classified as 'other cheeses'. This will include the likes of mozzarella.

Consequently, there has been significant expansion in cheddar-making capacity, from the likes of Saputo, First Milk, South Caernarfon Creameries and Dale Farm. Others may have done so under the radar. A new cheesemaker is also starting up in North Wales (Mona Dairies), with the promise it will make several thousand tonnes of cheese a year although the split of products the factory will make is not yet known.

This new capacity must be used to the full, as there are few things more costly to a cheese plant than failing to use a factory's entire capability. Some manufacturers have leveraged their balance sheets to realise this expansion of course, and now face significantly higher costs as interest rates have risen.

Figure 3: Raw milk utilisation by cheese types in UK dairies

In % of total raw milk pool available for processing into cheese (Source: Defra)



Imports

On top of domestic production, the UK also has significant imports. The data shows that from 2010 to 2018 the net import volume hovered around 320,000 tonnes, but by 2022 this had dropped to 240,000 tonnes – possibly due to Brexit (Figure 4).

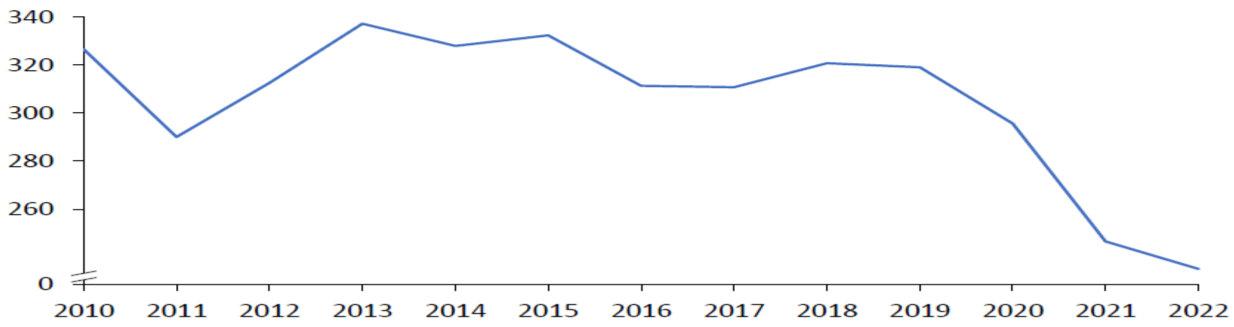
In fact, the industry is often criticised for the amount of cheese we do import (witness Liz Truss' much ridiculed "THAT IS A DISGRACE" speech at the 2014 Tory party conference). However, the overall statistic includes cheese we don't make here, won't ever make here or can't make here – it's a bit like damning the fruit and vegetable sector on the back of import statistics that include bananas or avocados, for example. What matters are imports of the cheeses we *do* make here.

Exports

On top of imports, the UK also exports premium cheddar and territorials, and cheese in the form of curd and mozzarella. We shall look in greater detail at imports and exports elsewhere in the report.

Figure 4: Net imports of all cheese types by volume into the UK

In kt (all cheese types: fresh, processed, grated, powdered, blue veined from all countries)



What happens to the cheese?

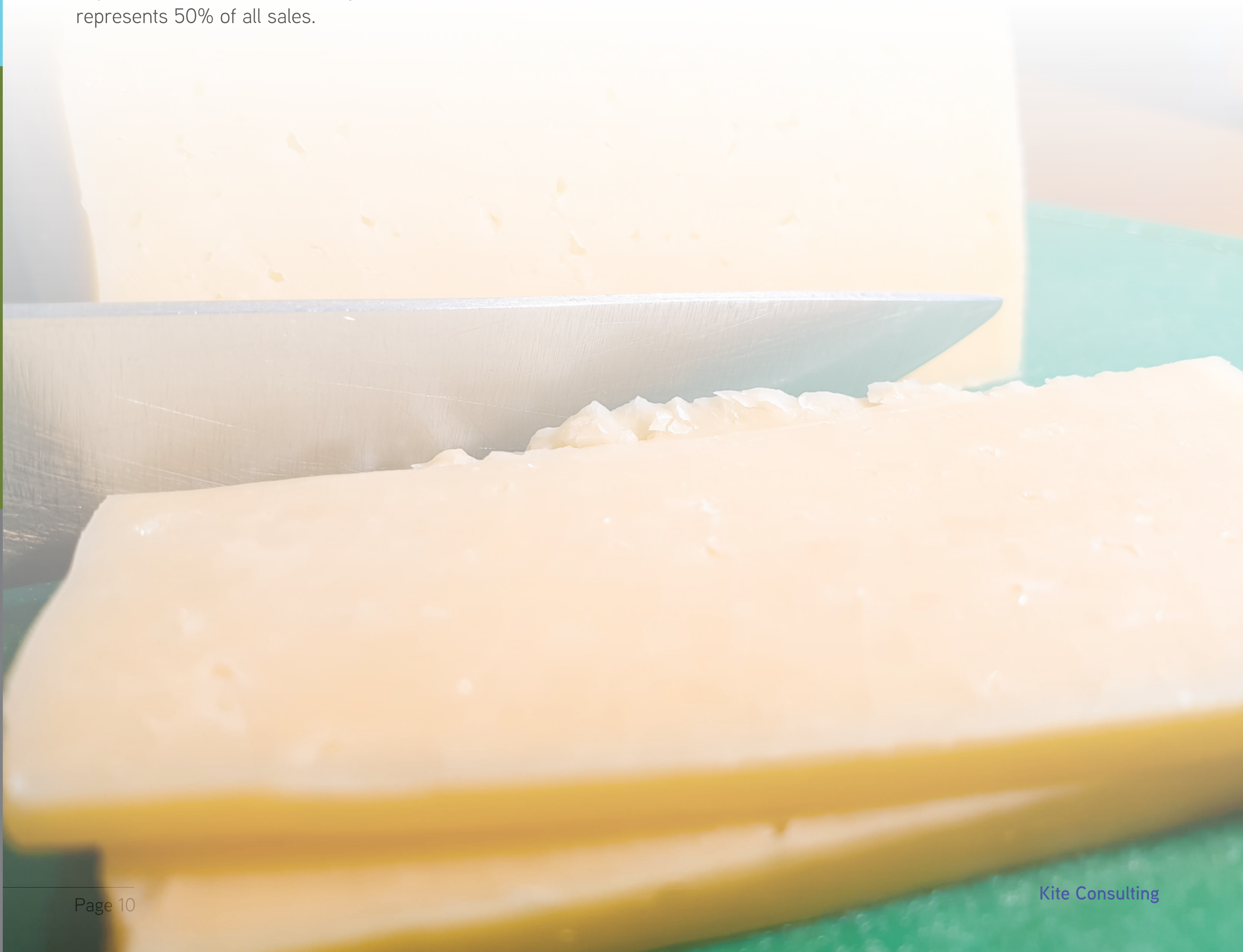
Domestic consumption

Most of the cheese made in the UK has stayed in the UK, because our cheesemakers mainly choose to sell in the UK. The market is on our doorstep and our cheese-loving population is envied by many other countries. But it is also not without its challenges.

Consumption of cheese over time has been relatively static - until recently. The cost-of-living crisis and food price inflation that goes with it, twinned with a rise in on-farm and manufacturing costs, increased the price of cheese markedly. This has resulted in significantly reduced demand, with the latest data showing volumes down 4% on nearly 500,000 tonnes of sales (of all cheese, including imports). Cheddar was inevitably the biggest loser as it represents 50% of all sales.

Simple maths on that data set suggests cheddar consumption is down 10,000 tonnes (half the output of a medium-sized cheese plant), but other statistics suggest the consumption drop in some sectors is significantly more. Branded sales for the UK's biggest cheese brand – Saputo's Cathedral City – are reported to have collapsed by 15%, or (supposedly) the equivalent of 17 million packs of cheese.

Whatever the exact figure, the decline in consumption has had a major bearing on the market. Not only is less being consumed but the cheese initially destined for branded sales has been diverted onto the spot market and into Private Label sales. We will return to this later.



Recent import and export trends

Imports

At its peak between 80,000 to 90,000 tonnes of cheddar were imported each year, mainly from Ireland and much of this used to be sold by the retailers. But the UK is importing less cheddar than we did – *especially* from Ireland. Several factors have come into play which have changed this and UK buyers can no longer rely on the Irish. These factors include:

- Better margins for the Irish from other markets, products and brands - for example, from its Kerrygold butter brand. Investment in this has doubled volumes from 50,000 to 100,000 tonnes a year, for example;
- A move from the retailers to 'UK sourcing' for their cheddar for 'Buy British' PR reasons, which diverted more Irish cheese to the vagaries of the food service sector;
- Six years (and counting) of Brexit trade uncertainties;
- Investment in Ireland to soak up the 50% increase in milk produced from its 'Food Harvest 2020' project of 2012 has been in non-cheddar-making plants. Much of the new capacity has been in butter-powder manufacture (Kerrygold Park), continental cheese (Tirlan and Royal A-Ware plus Tine) and in mozzarella (Leprino);
- An expansion in Ornua personnel around the world, to develop new and different markets away from the UK.

Consequently, Irish cheddar imports to the UK have generally declined from a peak in 2019 (Figure 5).

As a result of this, the UK's self-sufficiency has increased accordingly (Figure 6).

Figure 5: UK cheddar imports from Ireland (ton per month)

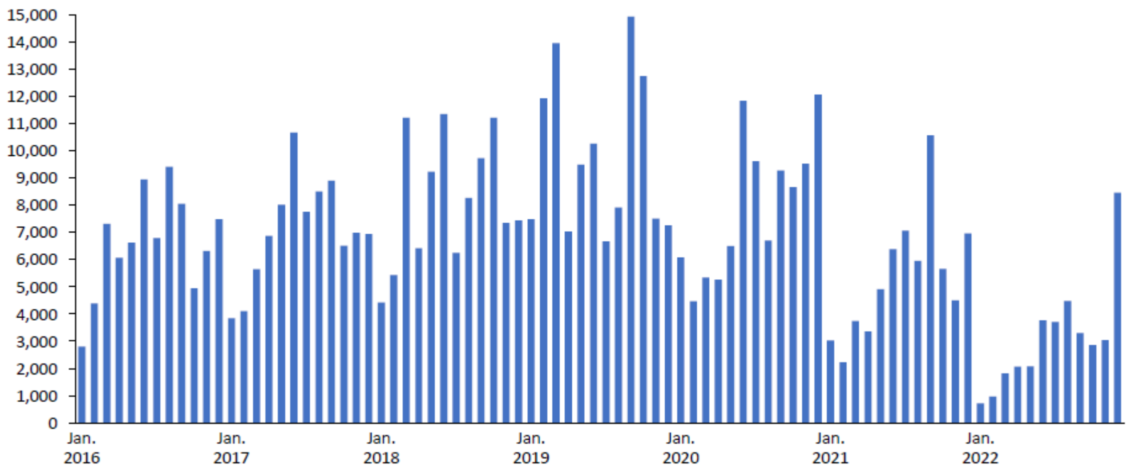
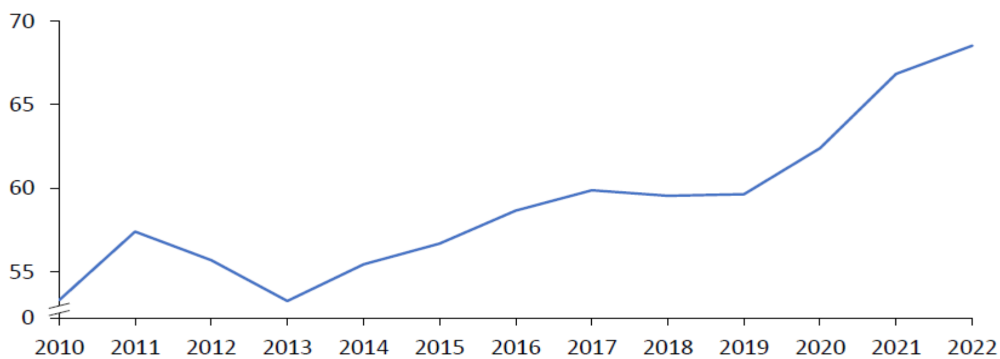


Figure 6: UK self-sufficiency in cheeses; all types (%)



The new post-Brexit trade deals with Australia and New Zealand are unlikely to result in significant quantities of cheddar being imported from there. Australia doesn't have spare milk anymore and it is hard to imagine why New Zealand would manufacture cheddar and ship it to the UK in significant quantities in return for the small margins retailers allow.

Exports

At the same time as imports of cheddar declined exports generally increased (Figure 7), although that did dip during the key years of Brexit uncertainty.

Nevertheless, despite the recent drop, exports as a percentage of imports continues to rise (Figure 8). We turn to the importance of this later in the document.

Figure 7: UK cheddar exports (ton)

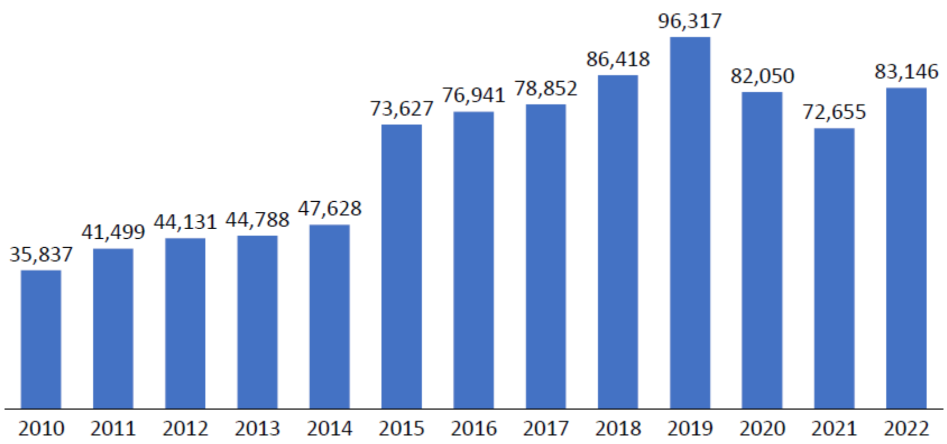
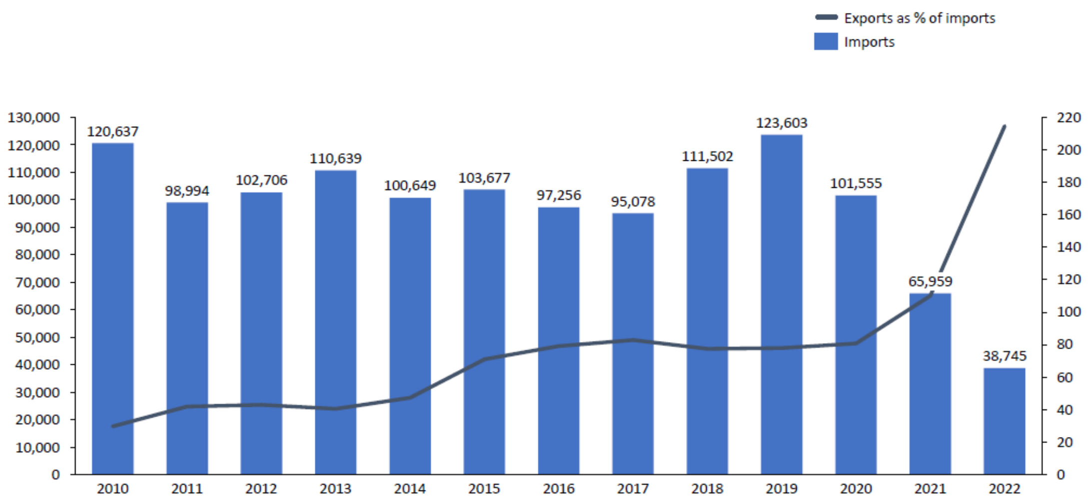


Figure 8: UK cheddar imports (bars, in ton) and cheddar exports as percentage of cheddar imports



The complexity of the cheese supply chain versus liquid

Raw milk is by far the most important cost item for both a liquid milk producer and a cheesemaker. But what is different is the relative timescale of the milk price to the profitability of the business, the liquid milk business operating in a relatively straightforward way. Raw milk is collected from the farm, standardised to the right fat level, pasteurised, bottled in the factory and shipped to the retailer. The latter happens ideally within a minimal number of days of milking – perhaps just two or three. In such a scenario the short- to medium-term volatility of the raw milk price does not matter.

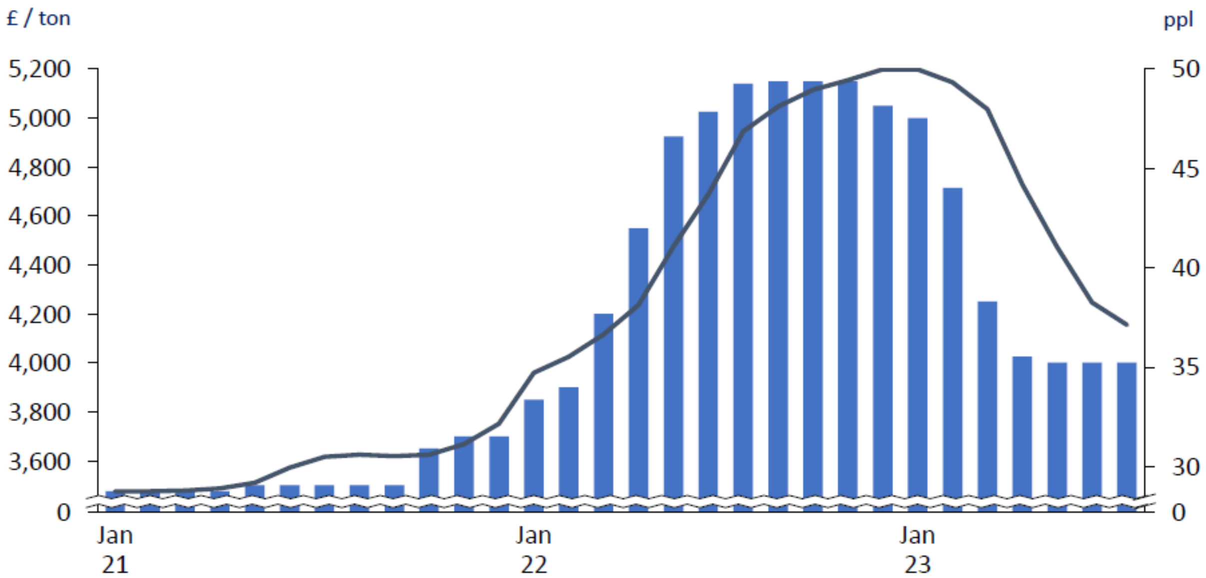
But this is not the case for cheese. Cheesemakers produce a long-life product. In fact, cheese was invented to enable the long-term preservation of raw milk. So, this provides cheesemakers with options and challenges liquid milk sellers do not have. Where liquid milk is sold immediately, cheese isn't. Manufacturers have a range of choices:

- make and sell very young cheese (curd) almost immediately;
- mature a cheese and sell it at three months (mild) or longer (medium, mature, extra mature);
- sell the cheese as a whole wheel or block or cut, slice or grate it, and sell it pre-packed;
- choose the UK as the market or sell the cheese abroad;
- sell the cheese to a retailer, into food service, to B2B customers or on the traded spot market.

The timescales on the above options are critical because the cost of the milk is incurred when it is purchased to make the cheese. But the sales income comes at the time the cheese is sold – and that can be many months later (Figure 9).

Figure 9: UK mature cheddar prices (bars, £/ton) and raw milk prices (line, ppl)

Raw milk price data are shown with five months delay to reflect prices when the cheddar was made.
So, cheddar sold in July 2023 has typically been produced by raw milk paid for in February 2023.



For an extra mature cheese, the time lag between raw milk payments and cheese income easily exceeds a year. In such a case, the volatility of raw milk prices over time really starts to matter. However, formula pricing is a useful and necessary mechanism to iron out the difficulties processors face in their production and cash flow challenges. It is not known how many processors use formula pricing models, and their exact nature as they are commercially confidential, but the more used the better.

There is no competitive advantage or disadvantage among different cheesemakers in this. They all operate in the same price cycle, meaning they all gain when cheese prices rise in advance of the milk price and suffer when cheese prices fall in advance of the milk price.

Therefore, in times of increasing raw milk prices, consumers see only moderate price premiums for extra mature cheese over young cheese. The extra mature cheese can be relatively cheap compared to the younger cheese because it was produced by using cheaper raw milk than that used for the young cheese. This was the case in late 2021 through to the spring of 2022 when the mild and mature spot prices, as recorded by the Provision Trade Federation, were the same.

Currently, however, the reverse is true. Now we are facing declining raw milk prices and thus extra mature cheese has a relatively high cost price compared to young cheese, because it was made with milk priced much higher. Consumers in today's cost-of-living crisis are cautious with their spending so are trading down from mature and extra mature cheese.

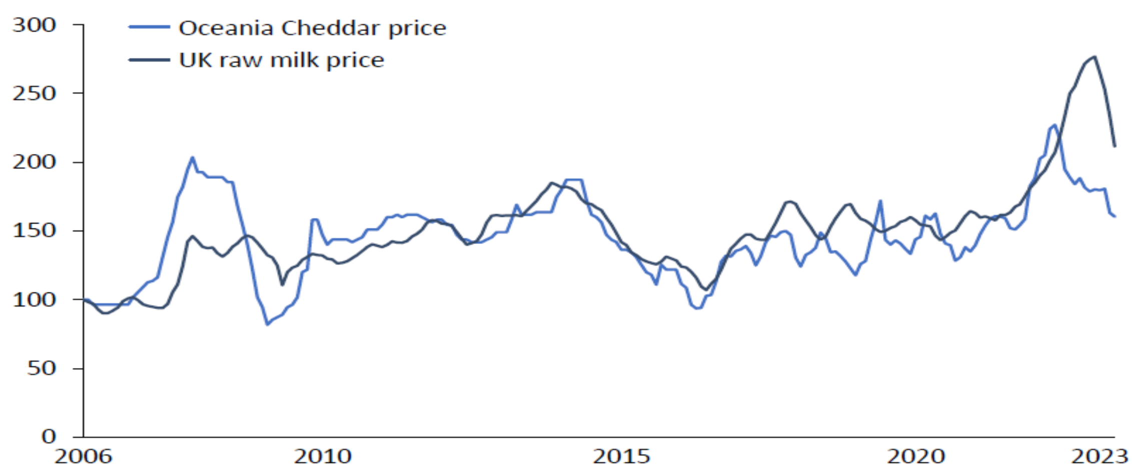
This lag factor hasn't been such a major issue in the past as it is now. Figure 10 shows the Oceania 'young cheddar' commodity price (originally in US$/ton) in the period January 2006 to May 2023, with the UK raw milk price (originally in £/litre) added. Both are indexed at 100 for January 2006.

The graph shows that from 2010 onwards, 'world market' prices of cheddar and UK raw milk prices generally correlate. The UK raw milk price moves a few months behind the Oceania cheddar price, but from 2010 to 2022 the two roughly show the same degree of volatility over time.

However, in times of extremely volatile and rapidly changing raw milk prices, such as in 2021 and 2022, we see the UK raw milk price (index) climb to unusual heights compared to the global cheddar price. The extraordinary drivers in the market (the Ukraine war and resulting cost price inflation) resulted in volatility the likes of which we haven't seen in many years – if ever.

Figure 10: UK raw milk price (monthly average) and Oceania cheddar price (monthly average)

Both indexed at 100 for Jan 2006. Source raw milk price: Defra (in £/litre), cheddar: GDT in US$/ton



Why is this time different for UK Cheesemakers?

The perfect storm

Figure 10 shows dairy markets are intrinsically cyclical and volatile. UK cheesemakers know this and know how to cope. Indeed, they would have gone out of business long ago had they not known how to operate in such markets. But they have rarely before been exposed to such a major hike in commodity prices in one year, followed by a massive absolute drop in dairy commodity prices the next. The swing in raw milk prices has been exceptional. And this is what makes this time different.

The crisis in Ukraine is the first and foremost factor that has driven the changes, but it is not the only one. In response to the Ukraine crisis costs skyrocketed and this led to unusually strong upward price swings (as seen in Figure 10) - even by dairy market standards.

Northwestern Europe has been (and arguably still is) more heavily hit by the energy crisis related to the Ukraine conflict than the rest of the world. The crisis, and the resulting 40-year high in consumer price inflation, triggered dairy prices to rise to unprecedented heights. In Europe (and the UK) prices increased more than those of the world commodity markets, and this had significant implications because exporting cheese on the world market became next to impossible. Although major exports were never a priority for most UK cheesemakers (as was argued above), it *is* important for Europe as a whole to keep moving product into export markets. If it doesn't, it backs up here in cheese stores. As far as UK processors are concerned, the unfavourable economics also made exporting cheese harder and less profitable. Where the liquid milk market supply and demand is a 100% UK-only dynamic, those UK cheesemakers at least partly selling in foreign markets suddenly saw their sales volumes and prices abroad drop, and re-looked for sales opportunities in the UK.

All the many and varied goings-on in the market resulted in a perfect storm the sector is still in the midst of today. A vicious circle has enveloped it, which runs like this:

1. **High cost price inflation** hits farmers and manufacturers (see Kite report *Project Reset: Why we face a new normal in dairy product prices.*);
2. The drop in income results in unhappy farmers **curtailing their milk output and national and global volumes start to fall** in response to the higher on-farm costs;
3. **Higher milk prices start being paid** across the supply chain, including by cheesemakers;
4. **Battles among retailers and cheesemakers flare up**, with cheesemakers unable to gain cost price rises from procrastinating retailers to pay for these higher milk prices fast enough. Several retailers decide to begin retendering as a result;
5. **Stocks of cheese start to be laid down on the back of unprecedentedly high milk prices**;
6. **Rampant inflation across everything increases manufacturers costs**, including on labour, storage, energy, and transport;
7. Eventually retailers have to respond to the higher cost pressure in the supply chain by **increasing their prices in store**. Over time cheese prices increase significantly faster than those for other foods, with rises of over 30% (Figure 11);
8. These higher prices ultimately resulted in **less demand for cheese,** especially for premium matured products. Consumers switched away from matured to young cheese faster than producers adapted their maturation planning. Cheese produced with high-price raw milk **went in storage warehouses** (some for an undeterminable period of time).

Figure 11: UK consumer inflation (Y-on-Y change in %)

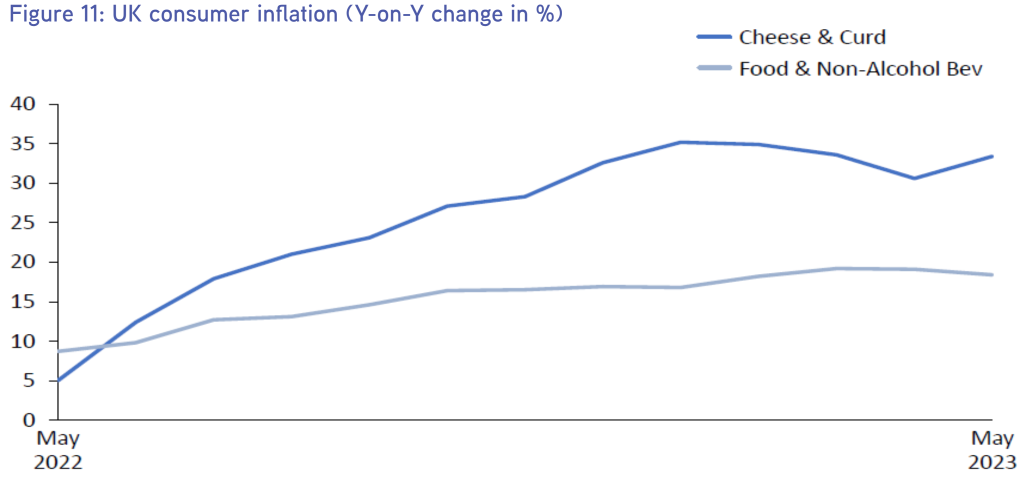


Figure 12: Reduction in retail business growth of industrial sales for Saputo in its UK Dairy Division - % of revenue

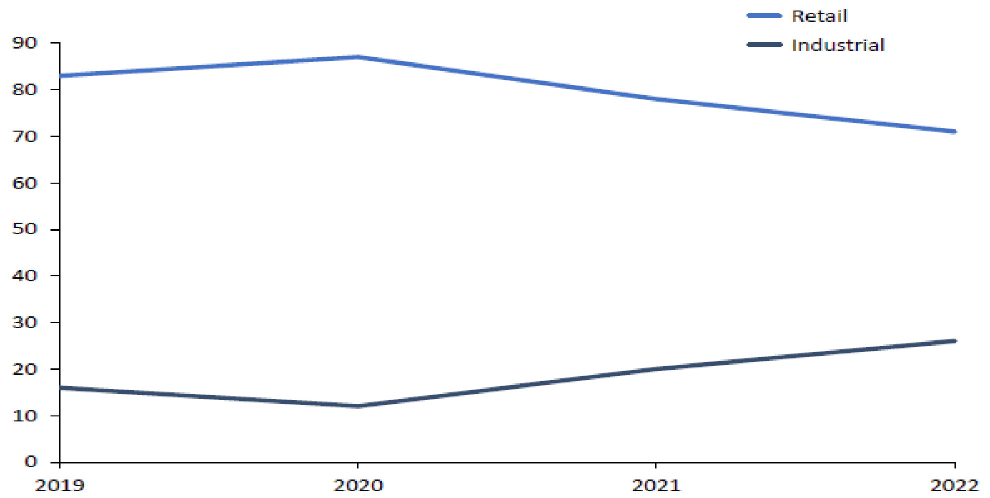
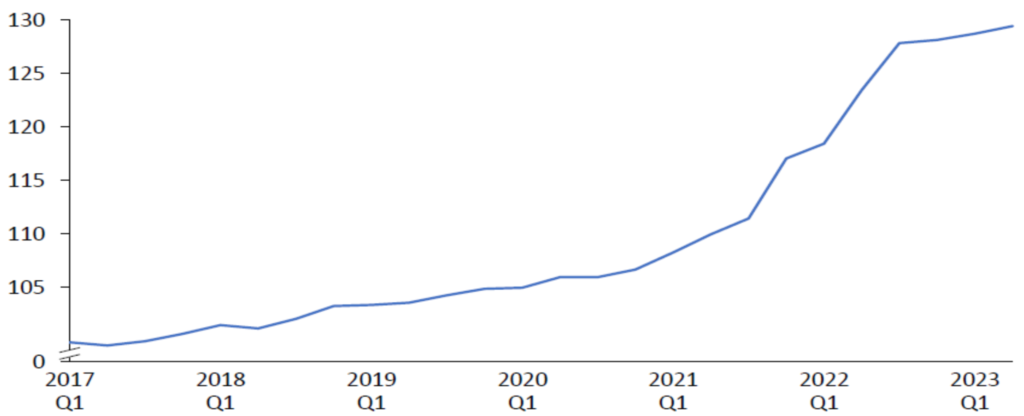


Figure 13: UK warehouse and storage inflation (Indexed; Q1 2017 is index 100)



Source: ONS

9. **Consumers also shifted away from brands to private label**. For cheesemakers and retailers alike, brands tend to generate greater margins but consumers who are no longer willing to spend their cash on brands hurt the margins upstream for the entire dairy value chain. For example, sales of Cathedral City, the UK's biggest cheese brand, fell by 15.8% or the equivalent of 17.4m packs of cheddar for the year ending December 2022 (*The Grocer, 'Britain's Biggest brands 2023'*). Not long after, concerns over falling milk volumes had resulted in Saputo recruiting millions of litres of extra milk into its factory. We can see the trend in Saputo's sales into the retail and industrial markets, with retail accounting for 87% of revenue in 2021 and dropping to 71% in 2023, while industrial sales increased from 12% to 26% over the same period (Figure 12);
10. As food prices increased, **retailers increasingly came under the spotlight from Government**. As part of this, and to be seen to be doing the right thing for consumers, it can be argued the retail cheese scene became an *even more* competitive battlefield, with cheddar being used as a traffic generator for consumers as liquid milk had been for years;
11. At the same time however, **higher milk prices paid over several months had resulted in even greater volumes of milk being produced** in the UK, Europe and globally;
12. Thus, **the demand drop and the increase in milk volumes going into cheese leads to an over-supply situation**;
13. Meanwhile **storage (for maturing and ripening cheese) has been getting increasingly expensive**, and still is (Figure 13);
14. This expensive storage, twinned with **rising interest rates**, make it even more expensive to store and mature cheese, especially when sales of those products and brands, is falling. This is important for the cheese sector because manufacturers that paid out high prices for milk haven't been paid for it, and so have to finance the stock through working capital. Cheesemakers are used to coping with this working capital 'game', but not at these high interest rates and at ever higher storage rates. The implication for cheesemakers is that the working capital cost of maturing cheese has easily doubled. Moreover, in financially uncertain times, access to capital, in this case for stock financing, is also more difficult. So, cheesemakers now see both their access to capital as such being challenged and their cost of working capital go up. Both items directly hit margins. On top of this, some cheesemakers may have recently incurred significant debts as they expanded their asset base to increase production capacity (Figures 14/15);

Figure 14: Medium-sized cheesemaker stock valuations (£/ton)

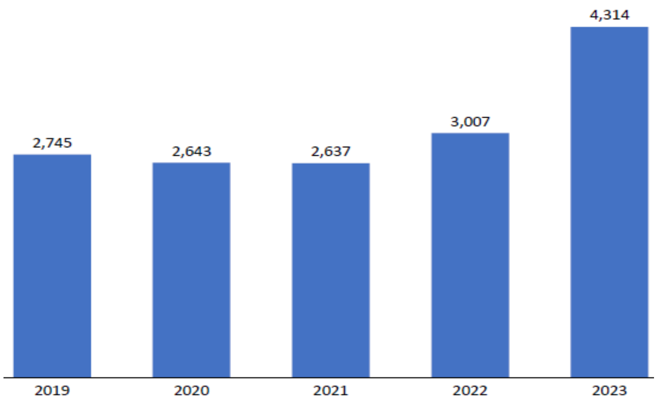
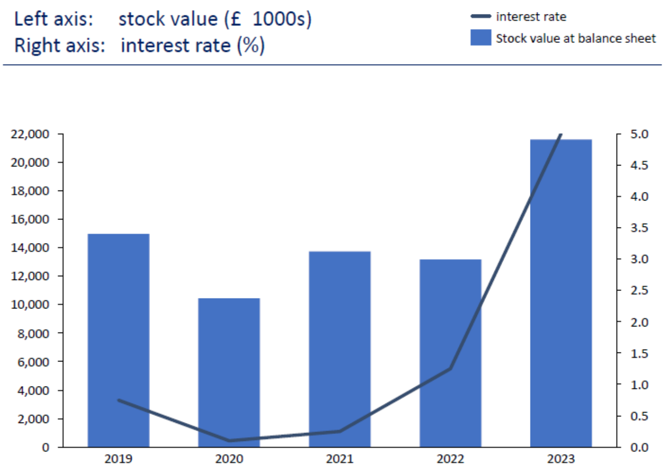


Figure 15: Medium-sized cheesemaker stock value at balance sheet



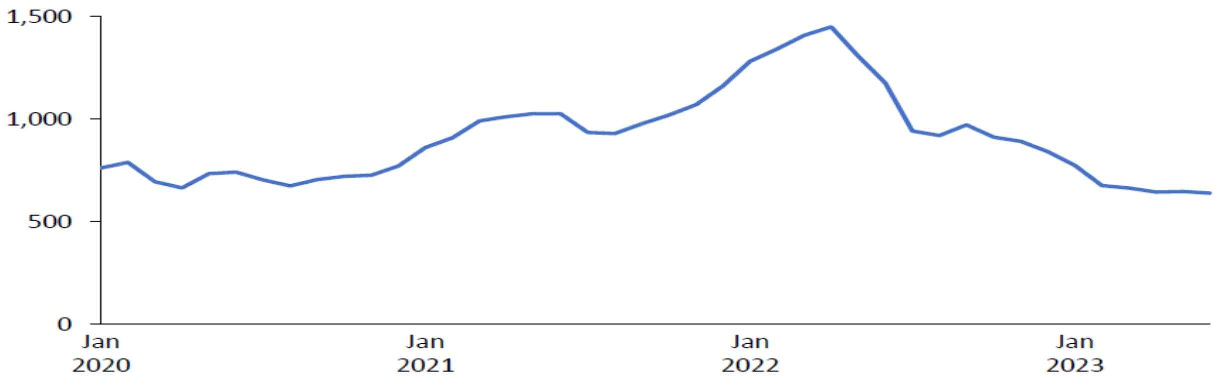
15. The need for some cheesemakers to generate cash for some still very high milk prices results in some **fire sales of cheese on to the market**, dropping the spot price markedly;
16. **Retail tenders now come to a head** at a time of major surplus in the market, with several firms in a position of weakness at this critical stage. This 'brutal' retendering process will also have resulted in lower selling prices, although it is not known to what degree as this is commercially confidential, and will (hopefully) be linked to formulas and trackers;
17. Some companies as part of their business model offer full **Open Book accounting**, whereby the retailers see all the costs of making and processing the cheese and agree a small margin in return. In other words retailers feed the manufacturer enough to keep it alive, but not enough to put much flesh on the bones. Retailers might think this is the ideal pricing mechanism, but it does have a major downside, in that the processors look to sell more of their product elsewhere (i.e abroad) for better margins;
18. And finally, the increased supply of milk as a result of the high milk prices (at a time of very limited demand for dairy commodities) eventually **collapsed the price of other commodities, so by-product prices (i.e whey) also dropped markedly** (Figure 16), again reducing processor incomes. There used to be a rule of thumb that whey returns paid for the processing costs of the cheese, but not now. Returns have been so low for so long now, and especially when twinned with inflationary increases, the cost of producing cheese is estimated to be £150 to £200/t more because the whey price fails to cover the cost (see Appendix on whey processing).

The net result of the above is a surplus of cheese, high stocks (we don't know how much - there are no public figures available), higher costs for those stocks, higher production costs and lower prices, fewer brand sales and more retailer price pressure.

Selling this volume at prices consumers today consider acceptable will inevitably mean someone has to pick up the bill of the losses incurred on that cheese for some time yet. Given the retailers hold many of the negotiating cards right now, it is the cheesemakers who are picking up that bill. However, the retailers might not hold the cards for long. We turn to this later.

Thus many if not most cheesemakers are now losing significant amounts of money on their cheese sales not covered by formulas or mechanisms to balance out the milk price versus sales price timeline conundrum. Business failures at worse, or more companies withdrawing from the sector, is therefore not out of the question.

Figure 16: Whey price quotation (Netherlands used as proxy for European levels) (€/ton)



Should retailers care: what happens if nothing changes?

Milk volumes

If dairy commodity prices (all commodities – not just cheese) continue to be low, and well below break-even levels, it is inevitable milk volumes will fall. A position of surplus in the sector will turn into one of shortage. No-one has any idea when this might happen of course, the balance is between supply and demand, and the latter is very difficult to predict. Nevertheless, history tells us it *will* happen, the dairy market has always been very cyclical. Farmers will not continue to produce milk indefinitely at very low prices. The brakes will come on one day, and the market will turn.

The milk versus cheese price and its impact on milk volumes

Because of the inherent lack of profitability in liquid milk over the last few years, cheesemakers have generally out-paid liquid processors over time (Figure 17). The gap closed in early 2022 and there was no differential until January this year when liquid processors started to pay more on the back of high retail prices and the return to profitability.

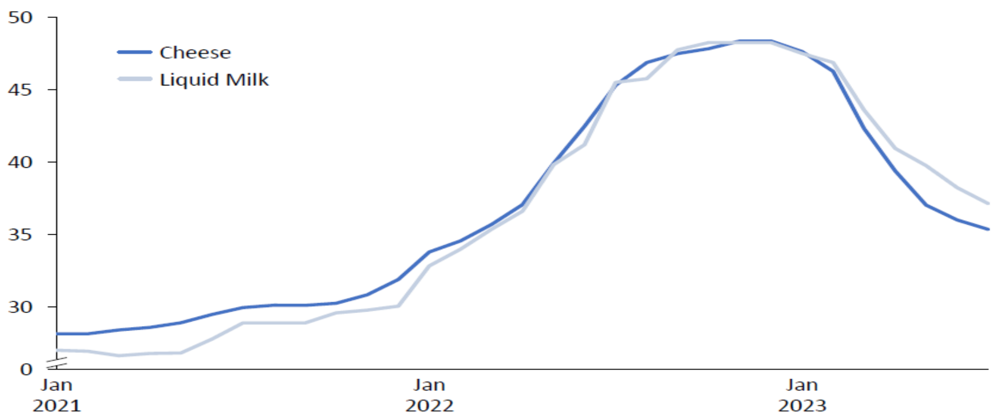
Now, though, the drop in commodity prices looks to have affected UK sales prices of cheddar more than the sales prices of liquid milk. The result is cheesemakers have had to drop their raw milk prices much faster and deeper than liquid milk players. The new Müller milk price pledge has also contributed.

This is important because if the gap between cheesemakers and liquid processors is not closed over time, the net result could be the migration of farmers now supplying cheesemakers to liquid processors. There are, of course, many factors that will affect the decision making, including farm location, milk quality and volume bonuses. Cheesemakers generally pay their farmers more for higher quality milk, but it can equally be argued liquid processors pay more for level supply and volume.

Nevertheless, cheese buyers should consider the long-term impact this could have on cheese availability, especially when it is likely there will be fewer, larger farmers in the future.

On top of this there is the impact of Government policy on some cheesemakers. The Welsh Government's new NVZ rules will cut milk volumes in Wales by an estimated 330m litres, for example. This will potentially lower milk volumes for at least three UK cheddar processing plants (First Milk's Haverfordwest Creamery, South Caernarfon Creameries and Mona Dairies), plus two mozzarella plants (Dairy Partners and Glanbia). A new liquid dairy in South Wales, due to come on stream in early 2024, could also draw milk away from these plants.

Figure 17: UK raw milk prices for Liquid Milk (excluding Arla, Crediton) and Cheese Milk (ppl)



In addition, the Government is due to legislate later this year on milk contracts, which may well have a bearing on the decision-making of both farmers and processors, with regard to which processors farmers supply, or which farmers processors wish to be supplied by, and when. The legislation could make it easier for farmers to move processors on a more regular basis, or to split volumes between two processors, for example. This could further erode the volumes and longevity of a particular cheesemaker's milk pool.

It cannot, therefore, be taken for granted cheesemakers will always have an inexhaustible supply of milk to make into cheese for UK cheese buyers, *especially* when twinned with increased exports.

Export focus

There is no doubt UK cheesemakers are increasing their export focus and activity. This will only increase in the future if returns from retailers remain low and there is a decent return on capital for cheesemakers. For example, one cheesemaker stated it now exports a third of its production, but this accounts for 90% of its profits. Open Book accounting, referred to earlier, is one driver for these exports as the margins under this mechanism are meagre, and export margins aren't.

Given the relative profitability, these export trends are almost certainly going to continue as there is now a huge emphasis on this in the UK from the Government, AHDB and the National Farmers Union. All are gearing up to assist British firms sell more abroad.

The central question, though, is whether exports increase at a faster rate than new capacity is being laid down. If it isn't, it is likely the UK market will continue to remain under pressure.

Alternative outlets

In addition to securing greater export markets, UK processors are also seeking to diversify away from retailers by selling into alternative markets, such as recipe box and home delivery schemes, and direct to consumers via the internet. Volumes may currently be small, but they might not remain small in the long-term. Just as milk migrates to the market with the best return, so too will cheese.

Cheese industry consolidation

The UK cheese industry, being more diverse and historically having been more profitable than the liquid milk sector, is not as consolidated as the liquid sector.

UK retailers have experienced what insecurity of supply means when working with companies that struggle to cope with the demands of retailers, or to even remain solvent. In response, the retailers sought safety in numbers, choosing to (mainly) source from large, trusted processors. Now, during this perfect storm, small- and medium-sized cheesemakers in the UK are likely to be pushed to the brink (or even over it) and consolidation or closure may inevitably result. This cannot by any stretch of the imagination be in a cheese buyer's long-term interest.

Formula prices will win in the long run

The routes to market are many and varied, with many lines, pack sizes and options. One continental cheesemaker is known to sell over 5,000 SKUs for example.

The routes to market are often complex with differing risk profiles. Exports can be affected by geo-political tensions, trade agreements and bans, currency fluctuations, dockyard strikes, container availability, a ship being stuck in the Suez Canal, civil unrest and war, for example. We have seen all of these and more in recent years.

There are also risks, albeit fewer, on the domestic market, but they do exist. Lockdown, drops in demand, sudden additional volumes dumped on the spot market, a food safety crisis, a factory fire and other factors all add to the risk profile.

A material long-term threat to profitability will result in a cheese business de-risking their operation as much as possible, and some of the riskiest outlets or lines are the ones that will be affected the most.

Pricing formulas that link the end price of the cheese back to the milk price it was made on, and factor in other production costs, all help to dial down the risk profile and guarantee security of supply for the long term. Retailers and food service businesses who play fair on the 'risk v fair' reward balance will have nothing to fear. Those who don't, might find themselves exposed.

No money for investment in sustainability

A lack of money in the supply chain is likely to mean slower progress on sustainability because the processors cannot afford to incentivise their farmers to take action fast enough. Farmers *will* respond to financial incentives on sustainability. They are less likely to do so as if those incentives are not there.

Conclusion and Outlook

Short to medium term

The outlook for the cheese sector in the short to medium term is challenging, with the negotiating position of cheesemakers being weak due to that vicious circle from the perfect storm. Some processors are clearly vulnerable, having lost contracts in the last few months, and different companies will be exposed to a different degree depending on their stocks, strategy, customer base, relationships with their customers and balance sheet situation. What is clear is that much of it will be about cheesemakers' cash flows – or lack of it.

Retailers may be tempted to have little mercy, given the ample supply situation and the fact the cost-of-living crisis also hurts their profit and loss accounts, and their balance sheets. The competitive situation also means they may not have any wriggle room in terms of pricing. But UK retailers should not be exuberant. It does not look to be in their longer-term interest to squeeze UK cheesemakers (like they are doing now) until the pips squeak, as that will only further squeeze their supplying farmers into greater losses. The net result will be fewer cheesemakers, fewer farmers supplying them and less milk. UK retailers need a strong range of cheeses produced here, as consumers want to buy British and that requires a viable UK-based cheese value chain.

It simply cannot be good for the sector in the long term that at the same time as retailers want and need UK cheesemakers, those very same cheesemakers would generally rather sell abroad than in the UK. This is an extremely bad dichotomy for the sector in the long term.

It remains hard to see how the best long-term interests of UK cheesemakers, and their connected farmers, plus consumers, can be best served if cheese buyers push excessively hard on UK cheese prices at a time of a temporary over-supply situation, and where manufacturers have significant vulnerability to inflationary pressures and high costs.

Medium to long term

It may be hard to believe today, but structurally the global demand for dairy is predicted to exceed the world supply. Increasingly a low-income consumer in the UK will be 'bidding' for that litre of milk against a Middle Eastern, Indonesian or Chinese consumer. The global dairy market can be visualised like an auction, where prices are determined by the willingness and ability to pay. Given the uncertain economic outlooks of many UK-based low-income consumers, cheese may be out of their reach in this auction and become a luxury for them.

The security of supply at an auction requires the ability to outbid the other party. For UK-produced dairy, UK buyers and the consumers they serve should be able to do that, at least for the time being, if only for logistical cost advantage reasons. But it doesn't mean this will be the case in the long term. We have seen this in the curd market in recent years, which has undoubtedly pulled Irish and UK product away from retailers over the last few years to satisfy Middle Eastern customers. We will see it again.

There is a very close interaction between all dairy commodities, with the global cheesemaker rising or falling on the relative profitability between cheese, and other products like butter and powder. So, what happens in other markets, and with other products, directly affects the cheese market here. In fact, we can estimate around a third of the UK cheese market is directly exposed to the whims of global supply and demand of dairy. The degree of exposure expands or contracts depending on whether UK cheesemakers and their supplying farmers receive (or don't receive) the prices they need.

This will always be the case, but what we have seen recently is when global forces align, as they have done, there is a real risk of long-term damage to the sector. Instead of beating-up the industry during such times, as has been (and still is) the case this year through long-running aggressive tenders, retailers are advised to think more about the longer term, and to reflect on how short-term thinking best serves the interest of themselves, their customers and their suppliers.

Take home message

This report has been written to provide an insight into, and a better understanding of, the challenges cheesemakers are facing. The authors hope it has succeeded in that aim.

Of course, it begs the question of the retailer or food service buyer: why should I or my business care? And the answer is you don't have to.

But any retailer who wishes to retain and offer their customers the huge variety and choice of fabulous British cheese should care about the situation British cheesemakers find themselves in. The situation is precarious. British cheesemakers make the best cheddar in the world and British consumers know that. So, increasingly, do those abroad.

Those retailers who have understanding and empathy, and who are prepared to travel the tricky cheesemaking journey with their supplier, will find they go the extra mile for them. Their supplier will work with them, invest in new efficiencies and technologies and innovate in product lines, brands and recipes, so *everyone* in the supply chain benefits. This includes supplying farmers, the processors themselves, the retailers and their customers too. The farmers will also work with their processor and with the retailer on sustainability and the environment, so 'public good' gains will be made here too.

Clearly, though, retailers don't have to care. In this case cheesemakers will be forced to look to supply products elsewhere and they will go the extra mile in the opposite direction, including abroad. They will sweat increasingly tired factories that do not make the best products. They and the upstream farmers supplying them will not be able to invest, and one day may decide to exit. These retailers will lose out, because over time they will lose the best suppliers and the best products. They will be left with average products from average factories, with average service levels. Because average is what a policy of neglect and a lack of care will inevitably result in.

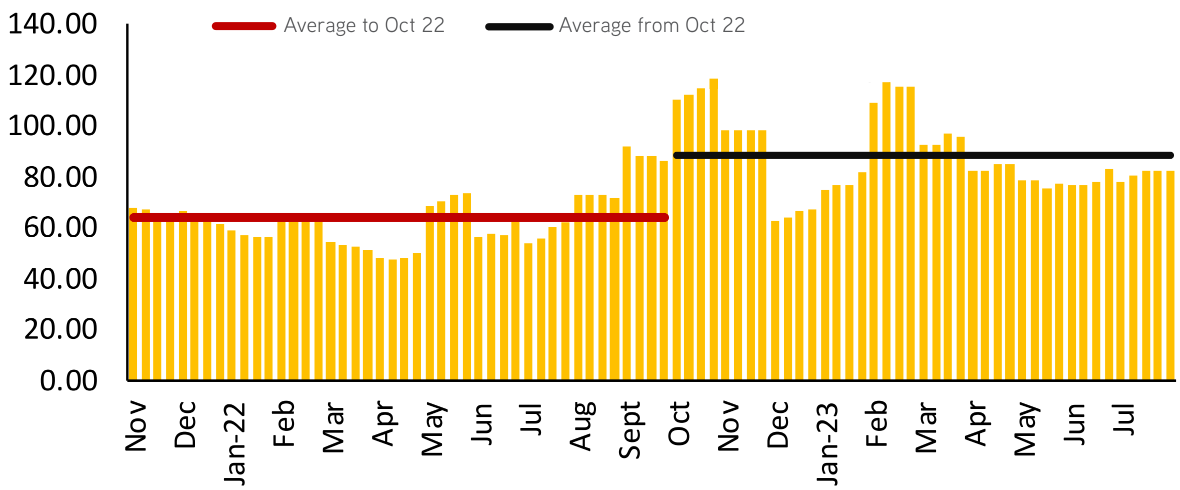
Appendix: Whey processing

Not all processors deal with their whey in the same way. Some process their own and dry it, others concentrate their whey to 30 - 35% dry matter and sell it to a dedicated whey processor. But this currently yields a very low price. The cost of processing whey has risen markedly over recent months too. When whey prices were good, processing costs were around 60% of the whey value. Now they average nearly 90%, and down from over 100% in the early part of the year (Figure 18).

Specialist whey processing also requires scale, which only Volac has in the UK, and it is capital hungry. Consequently many UK cheesemakers either contract out their processing to third parties or have joint venture arrangements.

Danmark Protein is Arla's main whey processing centre in Denmark, and processes the equivalent of 5 billion kg/year of raw milk in terms of dilute whey, more cheese milk than is processed in the UK. Sites like that reach the economy of scale to produce whey specialties cost effectively. No UK cheese processor (save Arla that exports to Denmark) can afford building a site for a wide and sophisticated range of whey ingredients.

Figure 18: Whey production costs as a percentage of Dutch price



Cost data taken from Milkprices.com LIVE UK Milk Futures Equivalent data set, and used with permission.