

Food System Strategic Assessment: Trends and issues impacted by UK economic condition

Figure 4: Issues and trends impacted by current UK economic condition and estimated timeline to impact as highlighted by experts consulted for this study. Only the most relevant issues and trends with regard to FSA remit are discussed in this section.

In section 2.1 the most pressing current economic factors that affect overall UK condition are highlighted. They act as systemic drivers for trends and issues outlined in sections 2.2 - 2.5.

2.1 Driver: UK economic condition, status March 2023

UK economic condition: steadily increasing impact over the next two years.

Over the past 12 months the UK has seen a further rise of energy and fuel costs due to geopolitical factors. Gas prices rose by 129% over the year of 2022 to the end of December and electricity by 65.4% over the same period affecting household consumption levels (Department for Energy Security and Net Zero and Department for Business, 2023; Office for National Statistics, 2023b). Despite decreasing wholesale gas prices since mid-late 2022 energy prices for consumers are predicted to stay around 80% higher at least throughout 2023 than in 2021/22.

In early 2023 inflation was around 10%, a level not seen in decades. Continuing upward pressure is expected as a result of energy prices, a tight labour market and other factors. On February 2nd the Bank of England increased its base rate to 4%, and in March to 4.25%, and predicts that a

reduction to 3.25% might only be achieved within a three-year period (Bank of England, 2023). Consumer price inflation for food and non-alcoholic beverages increased by 16.6% throughout 2022 with its sharpest increase in the second half of the year, with some of the lowest-cost everyday grocery items, such as vegetable oil, pasta, tea, chips, bread, frozen vegetables and milk, having increased prices by 20% (Office for National Statistics, 2023a). Written evidence by the FSA presented to government in September 2022 reported the following specific increases in production costs for foods: meat 19%, bread and cereal 21%, dairy 21%, animal feed 22% (FSA, 2022a). Food price inflation is expected to increase further in the first half of 2023 and predictions that it will come down slightly in the second half of 2023 remain to be seen.

Overall, most forecasts predict a continuation of the current cost of living crisis in the UK at least throughout 2023 and very likely well into 2024 with uncertainties about when the situation might improve (UK Parliament, 2023). Moreover, global economic forecasts also seem to expect economic recovery from the numerous effects of the Covid-19 pandemic, the war in Ukraine, and the rising fuel prices in 2022 among other factors to be less pronounced throughout 2023/24 than previously predicted (Kishan, 2023). The World Bank predicts food prices to remain high at least throughout 2023 and possibly into 2024 globally, with high-income countries being increasingly affected by high levels of food inflation (The World Bank, 2023). They state that the main drivers for these developments are high fertiliser prices (that have a pass through time to consumers of over a year) and the impacts of the war in Ukraine. In addition, global harvests may be affected throughout 2023 due to the climate impact of a "triple dip" La Niña ocean current anomaly and possibly in 2023/24 due to extreme heat as a result of a high intensity El Niño phenomenon (Leon, 2023; World Meteorological Organization, 2022).

These various economic challenges not only affect consumers, but also food producers, processors and retailers with the latest available ONS data showing that the food sector is the most affected sector of all UK industries (Office for National Statistics, 2022). With regards to consumer choices it is expected that food producers and retailers will continue to adapt products to accommodate a reduced consumer spending power as well as to their need to cut production costs, which may reduce the variety of food products on offer (Coyne, 2022).

Despite data from January 2023 indicating that easing of inflationary pressures may have started at the beginning of the year with annual Consumer Price Inflation (CPI) decreasing to 10.1% from 10.6% in late 2022, these economic conditions could persist throughout 2023, and impact on the FSA remit areas such as food safety and food crime among others, as they directly affect food production, processing, distribution and sales (Office for National Statistics, 2023c).

As the numerous impacts on current UK economic conditions are expected to persist into the near- to medium-term future, the UK economic condition is likely to remain a strong driver for change impacting all levels of the food system as was agreed by most participants in this study. Consumers will be affected by high food prices impacting their choices and attitudes. The producers, processors, distributors and retailers will be affected by high input costs.

2.2 Supply chain volatility and disruptions

Supply chain resilience has been much discussed in response to the impact of the Covid-19 pandemic on global supply, and food supply chain vulnerabilities of just-in-time supply models have also been highlighted in the National Food Strategy as well as in the academic literature (Garnett et al., 2020). Supply chain volatility affects the food system mainly in two ways: through sudden unavailability of goods with systemic impact, and increased risk of unexpected contaminants and quality issues when sourcing from new suppliers using new trade channels.

This volatility affects not only inputs into large parts of the food value chain from farming inputs to specific ingredients in food and drinks manufacturing, but also trade channels more generally. Many experts within food manufacturing and retail consulted for this study are currently

experiencing difficulties with sourcing certain foods and essential ingredients. A recent example of an abrupt essential goods shortage that disrupted large parts of the food system was the acute CO2 shortage in 2022 that affected the meat industry (animal slaughter) for months, causing animal welfare issues, as well as affecting large parts of the food and drinks sector (brewers, soft drinks producers, some packaging processors). Another example was the lack of sunflower oil and derived ingredients, such as lecithin (an emulsifier used in a vast range of food products), caused by the war in Ukraine which affected large parts of finished food manufacturing (Perrett, 2022a; Sudworth & Johnson, 2022). Issues reported internationally by industry experts consulted for this study around new lecithin sources included contamination with salmonella, peanut, mustard and soy, impacting production processes for months at times.

Responding to supply chain disruptions demands high adaptability, restructuring, and resource re-allocation within businesses, which puts additional economic pressures on their operations, with SMEs particularly affected. Finding new suppliers often requires setting up safety and quality control protocols anew, and more testing or auditing to ensure the new sources deliver the quality required, adding additional costs.

Key insights

Disruption of ingredient supplies for finished food products causes considerable backlogs in production as the finishing of products has to be delayed waiting for missing ingredients. Recent research by Barclays Corporate Banking has shown that the food and drinks sector is the consumer goods sector that is most affected by supply chain issues, with an estimated £3bn worth of goods being currently stored by manufacturers awaiting finishing (Perrett, 2022b). This could create conditions that might lead to food safety issues, as products have to be stored for longer periods of time at an unfinished stage, potentially also affecting the overall quality of products once finished at a later time point. However, at present there is no evidence of increased food safety incidents due to delays in product finishing.

As current supply chain volatility and shortages persist, there is more competition for high quality goods and their price increases at a time of generally increased economic pressures. This may lead to some producers, either knowingly or unknowingly, using lower quality, untested or contaminated ingredients in their products in order to be able to keep them on the market. However, most experts consulted for this study agreed that a marked increase in incidents of such cases has so far not been detected. Levels of risk awareness and preparedness for safety issues due to supply chain volatility are perceived as high within the food industry. However, preparedness and resourcing of regulatory enforcement agencies and local authorities to enforce standards (in particular of SMEs) are perceived by many experts consulted for this study as low, due to staff and skills shortages, as well as general long-term underinvestment into food standards enforcement capabilities in the UK (see section 2.4).

Moreover, SMEs may not have the resources, capabilities and skills in-house to deal with food safety issues resulting from supply chain volatility to prevent a potential decrease in food safety and quality. More direct communication with SMEs regarding supply chain risks would possibly be required to support them in addressing potential food safety authenticity, and allergen related issues. As supply chain issues around untested like-for-like ingredient replacements may go undetected, increased enforcement might be required to assess the current situation. Food industry experts participating in this study agreed that large businesses are generally well prepared and able to address potential food safety issues that may arise due to supply chain challenges.

2.3 Household food insecurity

A person is considered food insecure "when they lack regular access to enough safe and nutritious food for normal growth and development and an active and healthy life." (FAO, 2022). A report based on consumer tracking data published by the FSA in June 2022 has confirmed that food insecurity has increased over the past year, stating that "food affordability and food insecurity is currently the most important aspect in consumer decision making and the way people think and feel about food" (Pettifer & Patel, 2022). The report, based on regular consumer tracking data states that in food insecure households 30% of consumers are skipping meals, 31% are eating less, 20% are hungry, and 12% are losing weight. According to a consumer study including data from the second half of 2022, the cost of food was a concern for 81% of respondents in December 2022 and 69% took measures to save on food spending (FSA, 2022f). Similarly, according to a poll conducted by Veg Power, a non-profit alliance promoting vegetable consumption, 26% of people that responded to a YouGov survey in the second half of 2022 bought fewer fresh vegetables because of higher prices. The figure was 49% for families with children and a household income of under £30,000 (Bayford, 2022).

Food bank use has also increased by 9% since 2021 with 15% of consumers reporting food bank use in March 2022. Moreover, around 20% of consumers are actively seeking out cheaper foods and change where they buy. By June 2022 around 15% of consumers lived in food insecure households (Pettifer & Patel, 2022). The most recent update from March 2023 shows that 20% of households across England, Wales and Northern Ireland were food insecure (Armstrong, King, Clifford, Jitlal, Ibrahimi-Jarchlo, Mears, et al., 2023). Given increased economic pressures since then, it is anticipated that household food insecurity will further increase well into 2023 and possibly beyond.

Additional consumer survey data provided by the Food Foundation also confirm that household food insecurity has increased over the second half of 2022, in particular affecting households with children, as is shown in figure 5.

Figure 5: Percentage of households with children that are experiencing food insecurity according to a poll by the Food Foundation in 2022 (1-month recall period).

Source: (The Food Foundation, 2022b).

Key insights

All currently available updates on economic developments presented in section 2.1 indicate that household food insecurity is almost certain to persist into the short- to medium-term future.

Several identified issues related to the FSA remit, such as concerns about the increased use of food banks and longer-term health impacts of food insecurity at the population level, will very likely continue to be of relevance at least well into 2024, and most experts consulted for this study expected this trend to be likely to persist well into the medium-term future.

"The risk of the economic gap increasing between Living Standard Measure (LSM) groups and expanding disproportionately will have an impact on the nutritional intake of the poorest unless guarded against." Expert, Food Industry

Food bank use has increased continuously over the past decade and most prominently over the past four years with the current number of food banks in the UK around 2,500 (Irvine et al., 2022). This not only implies a continuing upwards trend in terms of food insecurity since at least 2010, and hence represents a long-term trend impacting UK society, but also a potential expected increase in negative health outcomes at the population level in the near- to mid-term future, as food bank use is known to be associated with a nutritionally inadequate diet, a number of diseases and chronic conditions, as well as with reduced mental health (Rizvi et al., 2021; Sosenko et al., 2022). As current economic conditions have also affected volumes of financial and food donations to charities running food banks, current supply by food banks cannot keep up with demand (Bryant, 2023; Forrest, 2022; Legraien, 2023).

Recent survey data summarised by The Food Foundation also confirms that increased food insecurity is linked to reduced purchase of healthy food items such as fruits and vegetables (figure 6).

Figure 6: Percentage of food insecure households (left bars) who reported buying less fruit and vegetables compared to food secure households (right bars) according to a poll by The Food Foundation published in September 2022 (1-month recall period).

Source: (The Food Foundation, 2022a).

"Government leadership is crucial in order to ensure that there is a clear strategy in place to address short term affordability / cost pressure issues while also building a healthy, sustainable and resilient food system for the future." Expert, Consumer Association

Given food insecurity is rising and very likely a longer-term issue, the FSA commissioned a study that looked into potential food safety risks of community food provision and how to best support organisations providing such services (Ipsos, 2022). The study found that generally organisations operating community food provision employ staff that are aware of food safety and hygiene issues

and have often worked in the food industry before. All organisations included in the study had some form of food safety management process in place, so there is no current indication of increased food safety concerns due to the increase in the use of food banks.

2.4 Labour shortages in the food system

Labour and skills shortages in the UK have increasingly impacted the UK food system in the past three years as a result of Brexit, the Covid-19 pandemic, the war in Ukraine, and a general wave of early retirement (House of Lords Economic Affairs Committee, 2022). There are a number of points along the food supply chain at which labour and skills shortages have been confirmed repeatedly – from agriculture to processing, distribution and food standards enforcement - with potentially wider systemic impacts as a result. While publication of an updated review of labour shortages in agriculture by Defra is imminent, the most recent government updates on labour shortages in agriculture and the food and drinks sector confirm that these shortages are very likely to persist in 2023 and beyond (UK Government, 2023b).

The harvesting season in 2022 has seen large amounts of produce being wasted due to a lack of seasonal labour and farmers and the horticulture sector have reduced planting for the next season due to uncertainties around availability of harvesting labour. Hence the National Farmers Union has raised several warnings throughout 2022 predicting food shortages in 2023/24 (National Farmers Union, 2022). Also niche seasonal sectors, such as the production of Christmas turkeys were affected in late 2022 (Partridge & Makortoff, 2022). Whether recent measures such as increasing the number of temporary seasonal workers visas will be sufficient to substantially change the situation in 2023/24 remains to be seen, but experts consulted for this study considered shortages of agricultural labour a long-term issue (Perrett, 2023; UK Government, 2023b). Apart from labour shortages in agriculture, shortages in the following areas that may directly impact the FSA remit are expected to persist:

- Abattoir workers
- Butchers
- Veterinarians
- Border Control Point (BCP) staff
- Environmental Health Officers (EHO)
- Trading Standard Officers (TSO).
- Meat Hygiene Inspectors (MHI)
- HGV drivers
- · Warehouse workers

"Availability of labour within the food sector, already at crisis levels, but will be eroded with the ongoing demographics of age and potentially migration policy." Expert, Academia

Key insights

Labour shortages in the above categories may increase a number of risks and food safety issues. For the meat slaughter sector a lack of skilled labour may increase food safety risks including: biological, chemical, food chain verification and documentation issues; meat adulteration and mislabelling; reduced origin tracing; or unlawful slaughter conditions with adverse implications including for animal welfare. Shortages of HGV drivers may lead to delays in food and ingredients distribution or sub-optimal transport conditions, potentially causing food safety risks. A shortage of warehouse workers may lead to prolonged storage of goods under sub-optimal conditions, which may cause food safety and quality issues.

While the causes of shortages in low to medium skilled labour mentioned above and the potential risks they pose to the food system are reasonably well understood and have so far not led to an

increase in reported incidents, it is a shortage of high-skilled labour that has been emphasised by experts consulted for this study as being of high potential impact at present. Their main reason for concern is the imminent requirement for controlling EU borders efficiently, when after a newly negotiated deal with the EU within the Windsor Framework (late February 2023) the practicalities of border enforcement requirements become clearer. Many experts consulted for this study voiced particular concern about a shortage of inspection staff and veterinarians, which is not only already delaying and reducing the meat trade with Europe, but may pose a number of food safety and documentation risks including reduced food safety and animal health and welfare monitoring, increased food documentation fraud, and animal welfare breaches. In previous written evidence to government the British Veterinary Association pointed out a high dependency on EU trained veterinarians (according to FSA estimates 95% of the veterinary workforce in abattoirs graduated overseas, mostly in EU countries (FSA, 2022d)) and the Royal College of Veterinary Surgeons reported a 26% drop in entrants to the profession in 2022 and the highest rate of veterinarians having left the profession in 2020 since 2018. This situation is due to long-term systemic issues and likely to get worse unless significant numbers of veterinarians can be recruited from abroad as soon as possible (British Veterinary Association, 2021; Royal College of Veterinary Surgeons, 2022).

In addition, experts consulted for this study have attributed a shortage of border control point staff, environmental health officers, trading standard officers, meat hygiene inspectors, veterinarians, and food control scientists such as public analysts (toxicologists) to long term and ongoing systemic issues. These include: a decrease in relevant training courses, lack of financial incentivisation, budget pressures of local authorities, lack of visibility and attractiveness of high skilled careers in the food system to young people, lack of technical training facilities, and overreliance on EU testing and training facilities. Specific gaps identified by experts consulted for this study are, a lack of postgraduate training in toxicology (which makes it necessary to obtain a registered toxicologist qualification abroad), a reduction of the number of food safety and food technology courses on offer, abolishment of A levels in food science, and a shortage of professional development training opportunities.