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Food price situation in Europe

Food prices in the EU have risen dramatically in 2022 and the first half of 2023. The drivers of this increase originated in energy cost increases, aggravated by the effects of drought and animal disease outbreaks, but high global market prices in part due to the Russian invasion of Ukraine after February 2022 also helped to pull food prices higher and may have facilitated some element of profit-led inflation. Households have responded by buying less and trading down, with an increasing number turning to food banks to help make ends meet. Some limited steps were taken at EU level to help protect consumers from the effects of higher prices, but the important interventions have been at Member State level. These measures have primarily been focused on energy prices, but several Member States in addition directly tackled food price inflation either by lowering VAT rates on food products, by introducing temporary price controls on a basket of basic food products, or by providing food vouchers. Given the lags in price transmission along the food chain, food prices are likely to remain high for several more months. Lower energy and commodity prices, together with higher interest rates, should be reflected in lower food prices in the second half of 2023, in the absence of further adverse shocks to the food system, but food prices will not return to pre-war levels.

Keywords: food price, inflation, drivers, Europe

JEL classification: Q11

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Received: 19 June 2023, Revised: 5 July 2023, Accepted: 10 July 2023.

The recent experience of food price inflation

Food prices in the EU rose dramatically in 2022 and 2023 (in this article, food prices include non-alcoholic beverages but exclude alcoholic beverages whose prices have risen at a slightly slower rate). In the EU as a whole food prices were 41% higher in May 2023 relative to the price level in 2015, while the overall price level rose by just 26% during this period. The monthly annual rate of food price inflation reached 19.2% in the EU in March 2023, although it has fallen back slightly since then. Even higher rates of food price inflation were recorded in Central and Eastern Europe, with Hungary a particular outlier, recording food price inflation of 46% in February 2023.

It is not only food prices that have been increasing. Energy prices have also soared, while higher interest rates associated with the end of the European Central Bank's easy monetary policy mean that rents and mortgages are also rising. As a result, purse strings are being tightened even more to make ends meet. Many low-income households have faced real difficulties in managing household budgets as a result.

Figure 1 shows food price inflation relative to the other main components in the consumer price index, non-energy industrial goods, energy, and services. The left-hand panel shows the trend in prices for each of these components as well as the trend in the all-items Harmonised Index of Consumer Prices (HICP). In the right-hand panel, the price trends for each of the four components are shown relative to the trend in the all-items HICP.

The dynamics of inflation emerge clearly from these charts. After January 2021 inflation was driven by rising energy prices. Non-energy industrial goods and services helped to moderate the overall rate of inflation, while food prices increased in line with inflation up to early 2022. After

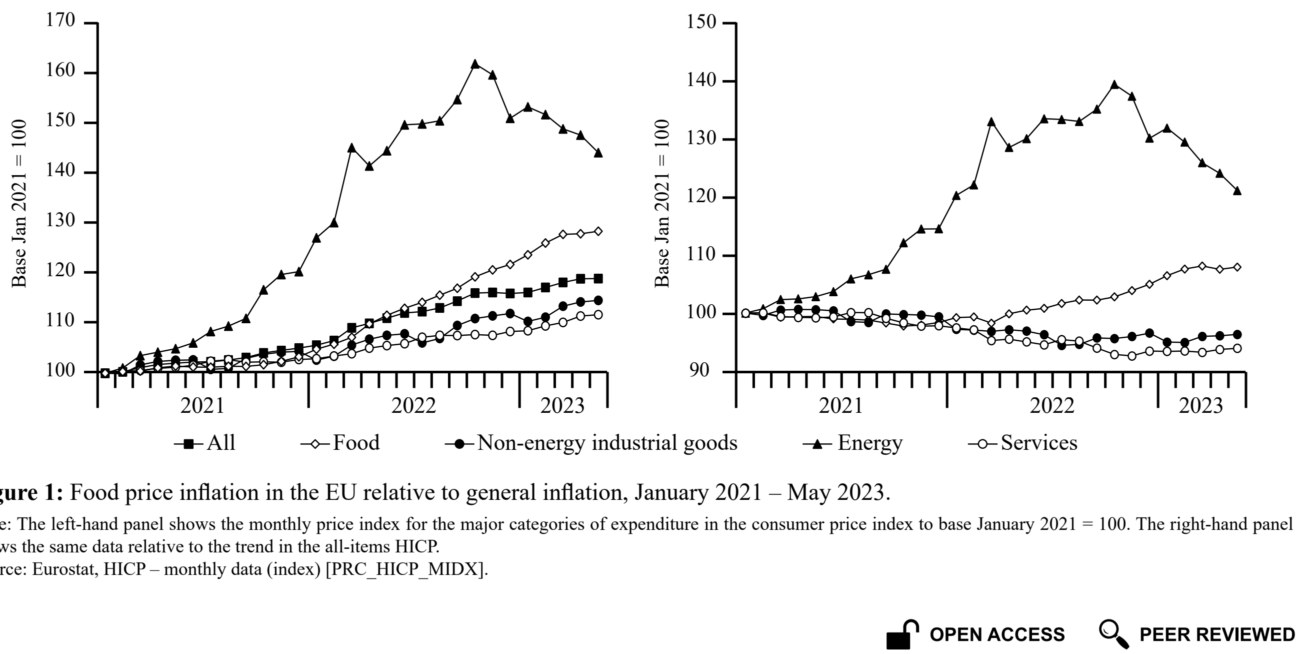

Figure 1: Food price inflation in the EU relative to general inflation, January 2021 – May 2023.

Note: The left-hand panel shows the monthly price index for the major categories of expenditure in the consumer price index to base January 2021 = 100. The right-hand panel shows the same data relative to the trend in the all-items HICP.

Source: Eurostat, HICP – monthly data (index) [PRC_HICP_MIDX].

March 2022 energy prices continued to rise while food price increases also led general inflation, while non-energy industrial goods and services continued to moderate the overall increase in prices. Since October 2022 however, energy prices have been falling while prices of non-energy industrial goods and prices of services have increased but no faster than the all-items inflation rate. In that period, food emerged as the leading inflationary pressure.

These dynamics are further illustrated by examining the monthly annual rate of change in inflation, shown in Figure 2. Food price inflation rose broadly in line with general inflation until the Russian invasion of Ukraine on 24 February 2022, after which the monthly food price inflation figures have all exceeded the overall inflation rate. The divergence since October 2022 when the overall rate of inflation began to fall while food price inflation gathered pace emerges clearly. The rate of food price inflation peaked in March 2023 but remains at very high levels.

The war in Ukraine increased global prices for various commodities, notably wheat and vegetable oils. Figure 3 shows the monthly annual rate of change in prices for some specific food items. The fact that prices of oils and fats and butter (whose prices are closely linked) and of bread increased more rapidly than general food inflation immediately after the Russian invasion is very clear. However, prices of eggs, fresh milk and particularly sugar also rose more rapidly than overall food price inflation. On the other hand, prices of meat and vegetables rose but not by more than food prices generally, while prices of fruit moderated the overall increase. The increase in butter prices moderated towards the end of 2022, while increases in oils and fats prices have now also fallen below general food inflation. The recent advance in food prices appears to be driven largely by the increases in egg and milk prices and particularly sugar, but it should be noted that the graph only includes a small sub-set of the food items that make up the consumer price index.

Figure 2: Monthly annual rate of change in prices, EU, Jan 2021-May 2023.
Source: Eurostat, HICP – monthly data (annual rate of change) [PRC_HICP_MANR]

Figure 3: Monthly annual rate of change in prices of individual food groups and items between January 2021 and April 2023.
Source: Eurostat, HICP – monthly data (annual rate of change) [PRC_HICP_MANR]

What is particularly striking is the uneven impact of food price inflation across EU Member States. Figure 4 shows that food price inflation has been higher in Central European countries relative to the rest of the EU, with Hungary being an exceptional outlier. In March 2023 (the month when food price inflation in the EU reached its highest level) food price inflation in Hungary was 45% on an annual basis, well ahead of the EU average of 19%. Of the new EU Member States, only Slovenia, Croatia and Cyprus had a lower rate of food price inflation than the EU average in March 2023. Higher rates of food price inflation in Central European countries are even more significant because the populations in these countries spend more on food as a percentage of overall household expenditure than they do in Western Europe.

Drivers of food price inflation

Eurostat has developed a food price monitoring tool which allows one to follow price developments at different stages of the food chain, month by month. Figure 5 shows price developments at the primary producer or farm level (agricultural producer price index), the processor or wholesale level (food industry price index) and at the consumer or retail level (HICP Food).

The chain of disruptions caused by the Covid-19 pandemic, extreme weather events, animal disease outbreaks, tight global markets and the Russian invasion of Ukraine in 2022 have all contributed to higher consumer food prices. However, the Covid impact in early 2020 was relatively short-lived and largely reversed itself as supply chains adjusted to the pandemic lockdowns, whereas the increase in food prices since the Russian invasion of Ukraine has been much more sustained.

Figure 5 shows that prices increased most at the farm level and least at the retail level up to April 2023. But it is also clear from the chart that the price transmission process takes time. Farm prices increased for several months before this was reflected in the sale prices of processing firms, and in turn their prices began to increase several months before this was reflected in retail prices. The implication is that firms at the downstream end of the food chain take time to adjust prices to increased input costs, either because they are locked into fixed price contracts, or because they are uncertain initially about the extent to which they can pass

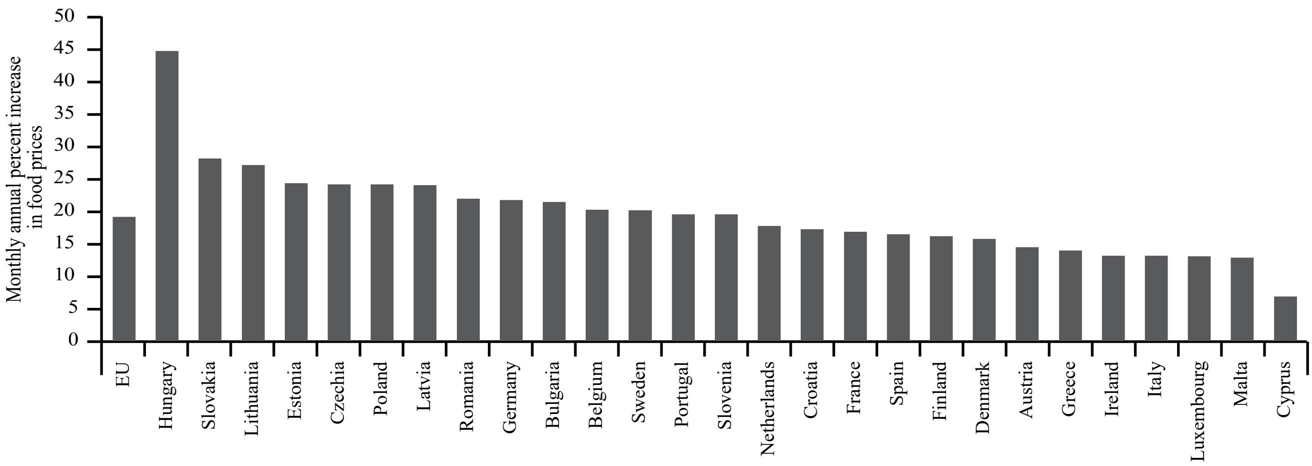

Figure 4: Annual rate of food price inflation in March 2023 by Member State.

Note: Data are shown for March 2023 as this is the month with the highest annual rate of food price inflation across the entire EU.
Source: Eurostat, HICP – monthly data (annual rate of change) [PRC_HICP_MANR]

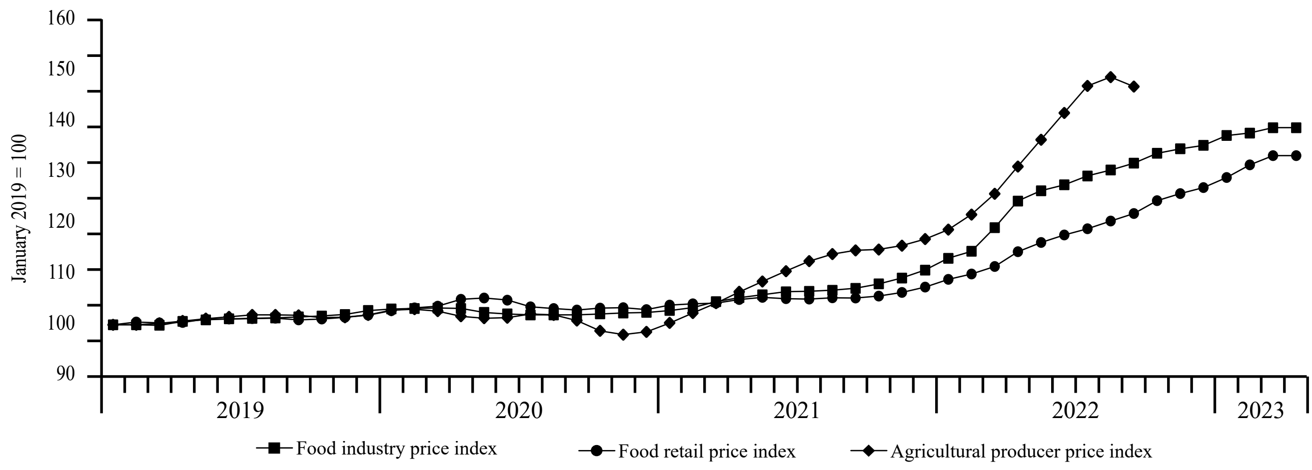

Figure 5: Price movements in the EU food chain, Jan 2019 to April 2023.

Source: Eurostat, Food Prices Monitoring Tool PRC_FSC_IDX the higher costs on in the form of higher prices due to competitive pressures.

There is thus a type of domino effect as it takes time for price changes at the upstream end to cascade through the food supply chain. Dairy products are an example. High gas prices in Europe drove increased prices for fertiliser. This in turn drove up production costs for animal feed and raised input costs for milk production. Milk processing is also an energy-intensive activity requiring an increase in dairy product prices to cover costs. Similar cascade effects can be seen in other food supply chains. As contracts are renewed and firms become more confident in their ability to recoup their higher costs from downstream actors including consumers, we see downstream prices also begin to increase but with a lag.

Still, the observed price increases cannot be fully explained by supply-side cost pressures. Higher world market prices in response to the Ukraine war also helped to pull EU market prices higher. Despite the substantial increases in costs faced by EU farmers in 2022, the year as a whole was a record year for farm incomes, even if not all countries and sectors shared in this income growth, indicating that rising prices more than compensated for the increase in costs.[1] Similarly, there has been debate about the extent to which rising profit margins at the input, processing and retail levels may also have contributed to food price inflation, a phenomenon dubbed 'greedflation'.[2]

At the input level, the top global fertiliser companies saw record profits in 2022 despite increases in their energy costs as they increased prices faster than production costs.[3] Oxfam put the spotlight on the contribution of profit margin increases to food price inflation when it claimed that corporate price profiteering was driving at least 50% of inflation in Australia, the US and Europe (Oxfam International, 2023). Its claim is supported by analysis undertaken by the European Central Bank for inflation generally,[4] and by UBS[5] and Allianz Research[6] specifically for food price inflation. The UBS report quotes an example of profit-led inflation in the UK milk market. For almost two decades, the UK retail price for milk added a markup of around 25 pence to 30 pence to the farm-gate price. By March 2023, the retail price was adding 41 pence, with all this abnormal markup increase taking place in the early months of 2023.

Allianz argues that the source of the pressure has been packaged food companies rather than retailers. It notes that retailers have only passed some of their increased costs on to consumers and that gross margins of listed retailers shrank in 2022 and fell below their pre-pandemic levels. Data presented by McKinsey-Eurocommerce yields a slightly different picture. They concluded that margins decreased for both grocery retailers and food processors (consumer–packaged–goods companies) between 2019 and 2022. The EBITDA margins of grocery retailers (sample of 12 European grocery retailers) decreased by 1.0 percentage point, while the EBITDA margins of food processors (sample of top-7 consumer packaged goods companies) decreased by 0.8 points (McKinsey & Company and Eurocommerce 2023). One way to reconcile these narratives is to note the importance of timing in determining these trends. Profit margins may have been squeezed in the first half of 2022 but may have grown strongly in the second half of the year and into the first half of 2023. Allianz reports that since mid-2022 about 10% of the change in food prices cannot be explained by increases in producer and energy prices. Taking account of timing might explain not only the reduced overall margin in 2022 as a whole, but also the existence of profit-led inflation in the more recent period.

The response of households

The response of households to the food price inflation 2022-2023 was quite different to their response to the Covid-19 pandemic in 2020-2021. Changes in consumption patterns during Covid were triggered by the closure of physical workplaces, canteens, cafés and restaurants, schools, and childcare institutions, changes in households' grocery shopping frequency, a switch to online shopping, and income losses due to the pandemic. In some countries, there was an overall reduction in the consumption of fresh foods but an increase in the consumption of food with a longer shelf life (Janssen *et al.,* 2021). Other studies reported a substitution of fish and red meat consumption by increases in fruit and vegetables, legumes and cereals, but overall an increase in food intake (Mignogna *et al.,* 2022), and also an increase in organic food sales (USDA, 2023).

The impact of food price inflation on household behaviour has been very different. The big story has been that consumers bought less and traded down. The McKinsey-Eurocommerce survey of European grocery trade estimated that overall grocery sales in Europe grew by 2.9% in 2022 compared with 2021. This growth was the result of 10.7% higher prices, a decrease of 3.6% in volume sold, and a downtrading effect of 3.6%. Across Europe, consumer downtrading has led to substantial growth for private labels. Discounters gained 1.4% in market share in Europe relative to 2021. Consumers increasingly prioritised price while healthy and sustainable products became less of a priority (McKinsey & Company and Eurocommerce, 2023). The USDA is projected a 5% decline in organic food sales in current prices in Europe in 2022, implying an even larger volume drop (USDA, 2023).

Although all households are affected by rising food prices, inflation impacts are asymmetric across the income distribution. Poorer households spending a higher share of their income on food are more adversely affected (World Bank, 2023, 37–43). For low-income households, where food budgets were already squeezed and the scope for trading down more limited, food insecurity has increased.[7] There has been a surge in demand in the use of food banks, leading many of these voluntary organisations to turn away new applicants.[8] In Belgium, the number of people applying for

[1] Matthews, A., 2022: a record year for farm income, capreform.eu, 6 January 2023.

[2] Chassany, A.-S., Greedflation': profit-boosting mark-ups attract an inevitable backlash, Financial Times 31 March 2023.

[3] Grain and IATP, 'A corporate cartel fertilises food price inflation', May 2023.

[4] Arce, O., Hahn, E. and Koester, G., How tit-for-tat inflation can make everyone poorer, ECB blog 30 March 2023.

[5] Donovan, P., What is profit-led inflation, UBS Chief Economist's Comment 16 March 2023.

[6] Allianz Research, European food inflation – hungry for profits?, 14 April 2023.

[7] The European Commission has created a new Food Security section on its agri-food data portal providing the latest data on food price inflation, household spending, and inability to afford a meal.

[8] Financial Times, On the breadline: inflation overwhelms Europe's food banks, 2 December 2022.

aid from food banks increased by 18% in 2022, yet the volume of food that was distributed barely grew, resulting in a fall in the average amount of food donated per person.[9] Eurostat publishes an indicator of food insecurity based on the proportion of households that are unable to afford a meal with meat, chicken, fish (or vegetarian equivalent) every second day (online data code: ILC_MDES03). Overall, there was an increase in the proportion of the EU population in this category from 7.3% to 8.3% between 2021 and 2022, with larger percentage point increase in several Central European countries but also France.

However, concerns about the cost of living are much more widely shared. The most recent Eurobarometer published in January 2023 and based on survey responses between mid-October and early November 2022 found that the rising cost of living was the most pressing worry for 93% of Europeans. The second most mentioned worry with 82% was the threat of poverty and social exclusion, followed by climate change and the spread of the war in Ukraine to other countries equal in third place with 81%. Only a third of Europeans express satisfaction with measures taken by their national governments or the EU to tackle the rising cost of living.[10] The following section examines the responses that governments have made to address food price inflation specifically.

The response of governments

In the second half of 2021, the EU saw a significant increase in wholesale energy prices, due to a combination of the recovery in demand after the Covid-19 lockdowns, tighter supplies particularly of liquified natural gas imports, a longer heating 2021-22 season and unfavourable weather conditions to produce renewable energy.[11] The focus of EU action at this time was to protect vulnerable consumers against the impacts of high energy prices, which led to the publication of a Commission Communication 'Tackling rising energy prices: a toolbox for action and support' on 13 October 2021 (European Commission, 2021). This set out a range of short- and medium-term measures that EU countries could take under the existing legislative framework as well as other potential measures under the Commission's remit.

The surge in food prices that followed the Russian invasion of Ukraine (see Figure 1) led to additional policy focus on this domain. Following the Russian invasion, EU leaders held an informal meeting on 10-11 March 2022 at Versailles, France. In the Versailles Declaration, the Heads of State or Government invited the Commission 'to present options to address the rising food prices and the issue of global food security as soon as possible' (European Council, 2022). At the same time, the Declaration called for reduced dependence on key imported agricultural products and inputs, particularly by increasing the EU production of plant-based proteins.

Following the Versailles Declaration, in March 2022 the European Commission adopted a series of measures aimed at supporting Ukraine's agricultural production, safeguarding food security, strengthening the resilience of the EU's food system, and mitigating the surge in food prices for European consumers (European Commission, 2022). The package included financial assistance for farmers and the temporary relaxation of ecological conditions for the receipt of farm direct payments to encourage increased production for food and feed purposes. The Communication recognised that food availability was not an issue in the EU but that food affordability for low-income consumers was. It advised that "In a context of rising food prices, social policy measures are important to both protect the most vulnerable citizens from food insecurity and to ensure everyone can afford sufficient amounts of healthy and nutritious food, especially vulnerable groups such as families with children, elderly and low-income persons."

Specifically, the Communication pointed to two measures that Member States could take to alleviate the pressures of higher food prices. It highlighted that Member States could make use of the Fund for European Aid to the Most Deprived (FEAD) which supports EU countries' actions to provide food and/or basic material assistance to the most deprived, reaching over 15 million people with food aid. Member States could add to the resources to fund additional support under this measure by mobilising the Recovery Assistance for Cohesion and the Territories of Europe (REACT-EU)[12] as well as making use of the additional flexibilities to fund their FEAD programmes provided by the Cohesion's Action for Refugees in Europe (CARE).

The Communication also recalled that Member States could implement reduced rates of Value Added Tax (VAT) and could encourage economic operators to reduce prices for consumers. In December 2021, the Council agreed on a reform of VAT rates at EU level, which enabled Member States to further reduce their rates, down to 0%, on certain goods and services which address basic needs, notably food.

The Communication was a recognition that the ability at EU level to protect low-income households from the impact of higher food prices was limited. It was ultimately up to Member States whether to prioritise such measures or not, at a time when they were heavily engaged in protecting their consumers against higher energy prices. No comprehensive overview exists of Member State responses to shield consumers from higher food prices, as exists for measures to protect consumers from higher energy prices.[13] In general, countries fall into two camps. In one camp are those countries that have introduced general support packages for households, principally focused on reducing energy costs or providing additional targeted income supports, but not containing any measures specific to food prices. Countries in this category include Germany, Italy, Austria, Ireland, and the Czech Republic. In the other camp are those countries that have, in addition, introduced specific measures to address food

[9] The Brussels Times, Demand for food banks rose by one-fifth in 2022, 14 Feb 2022.
[10] Eurobarometer, EP Autumn 2022 Survey: Parlemeter, accessed 8 May 2023.
[11] European Commission, Action and measures on energy prices, accessed 8 May 2023.

[12] The Recovery Assistance for Cohesion and the Territories of Europe (REACT-EU) is an initiative that continues and extends the crisis response and crisis repair measures delivered through the Coronavirus Response Investment Initiative and the Coronavirus Response Investment Initiative Plus. REACT-EU provided a €50.6bn additional investment under the investment for growth and jobs goal. €39.6bn was allocated in 2021 with €11bn allocated in 2022. Member States could use the REACT-EU budget for the European Social Fund, the European Regional Development Fund, the Fund for European Aid to the Most Deprived (FEAD), and the Youth Employment Initiative.
[13] The Brussels think tank Brueghel has maintained a dataset of all national measures to shield consumers from rising energy costs. As of 24 March 2023, €758 billion has been allocated and earmarked across European countries for this purpose. See Brueghel, National fiscal policy responses to the energy crisis, accessed 8 May 2023.

price inflation following the Commission's recommendations, either reducing VAT rates on food, introducing price controls on foodstuffs, introducing food vouchers, or taxing the excess profits of food retailers. Countries in this camp include Spain, France, Poland, Romania, Greece, Portugal, Hungary and to some extent, Bulgaria.

The following examples illustrate the range of interventions undertaken.

- **Spain**. Spain was already experiencing rocketing energy prices prior to food price inflation beginning to take hold from January 2022 onwards. The government reacted by imposing an excess profits tax on energy companies and financial institutions, while using the proceeds to increase social supports. In addition to petrol subsidies, a rent cap and lowering VAT on electricity from 21% to 5%, the government made a one-off payment of €200 to all individuals, families, and the self-employed with a household income less than €27,000 per year and increased non-contributory pensions (widows, orphans, invalids, social pensions, etc.) by 15%.[14] Temporary VAT reductions on so-called basic products (such as milk, fruit, vegetables or bread) from 4% to 0% and on pasta and oils (from 10% to 5%) were introduced on 1 January until the end of June or until inflation fell below 5.5%. These VAT reductions on food were subsequently extended into the first half of 2023.[15]
- **France**. France decided not to follow its southern neighbour by cutting VAT on food, arguing that this would likely mostly benefit the margins of the large supermarket chains. Instead, the government focused its efforts on arm-twisting the supermarket chains to offer a basket of 20 everyday items including food at fixed or reduced prices. First broached in January 2023 and branded as an 'anti-inflation quarter' (*'trimestre anti-inflation'*), the government announced in March 2023 that it had reached agreement with several supermarkets to launch the initiative for a three-month period. The government's original idea had been to have a harmonised basket of everyday items, but the supermarkets held out that they should be the ones to decide the selection of products. In early March, Carrefour, Europe's largest retailer, preempted the government announcement by saying it would offer its own selection of 200 low-cost items whose prices would be frozen between March 15 and June 15. Another rival, Casino, also said it would offer a selection of 500 low-cost items at less than one euro from March 15 with prices frozen for three months.[16]

  Ministers have also discussed the idea of a 'food cheque (chèque alimentaire)', to help the lowest-income households with food costs. This idea had been floated previously in 2020 by the Citizens' Climate Convention and the principle had been included in the framework of the Climate and Resilience Law but never introduced. It was subsequently substituted by the idea of the 'anti-inflation quarter'. However, the government resurrected the idea at the time of the March 2023 announcement in the form of a possible experiment, possibly at the scale of a department, with the food cheque limited to low-income households and only to be used to purchase certain products, depending on their origin and method of production. The intention would be both to protect the purchasing power of the poorest while also providing support to specific agricultural sectors.[17]
- **Germany**. As in other EU countries, high energy and food prices have eroded the purchasing power of households. The government introduced several relief packages, including tax breaks, a cap on energy prices, subsidised transport, and higher social welfare payments. The German government is a coalition of Social Democrats, Liberals, and the Greens. Several voices among the Greens as well as The Left party called for the government to take advantage of the greater flexibility to reduce VAT rates introduced at EU level by reducing the VAT rate on fruits, vegetables, and legumes to 0%. However, this was opposed by the Liberals who hold the Finance Ministry on the grounds that this would not be a targeted measure (it would benefit all households regardless of income).[18] The three relief packages introduced by the German government up to September 2022 to help households deal with inflation generally are worth a total of €95 billion.[19]
- **Poland**. At the beginning of 2022, the Polish government introduced the so-called 'Anti-inflationary Shield', consisting of a reduction in VAT on the most key products and utilities, for example, electricity, fuel, and food. Only the full reduction in VAT on food is still in force in 2023, where the exemption has been extended until 30 June 2023.[20]
- **Romania**. Romania opted not to reduce VAT rates on food which already benefits from a lower rate. Instead, as part of its 'Support for Romania' programme, it has handed out electronic meal vouchers to around 3 million Romanians at risk of poverty. These vouchers (essentially electronic cards that can be used in shops equipped with cash registers) are worth RON 250 (EUR 50) and will be distributed bimonthly until January 2023. Half of their total cost, of around €620 million, will come from non-repayable European funds and the rest from the state budget.[21]
- **Bulgaria**. Bulgaria is the EU Member State with the lowest income per capita. Not only has it experienced an above-average rate of food inflation, but low levels of income also mean that households are most vul-

[14] Euractiv, Agrifood Special CAPitals Brief: Controlling food prices, 27 Jan 2023; IPS Journal, How European countries are dealing with rising inflation and energy prices, 3 Aug 2022.

[15] Spain in English, Spain announces another €10 billion of state aid to ease inflation pain in 2023, 27 Dec 2022.

[16] The Connexion, Major French supermarkets agree to keep essential food prices down, 7 March 2023; Reuters, French government says has deal on anti-inflation shopping basket, 6 March 2023.

[17] Journal du Net, Chèque alimentaire 2023 : qui pourra en bénéficier ?, 9 March 2023.

[18] Euractiv, Agrifood Special CAPitals Brief: Controlling food prices, 27 Jan 2023.

[19] German Federal Government, Fighting price increases together, 15 September 2022.

[20] Euractiv, Agrifood Special CAPitals Brief: Controlling food prices, 27 Jan 2023.

[21] Radio Romania International, Vouchers for vulnerable people, 10 May 2022; Romania-Insider.com, Govt. hands out electronic meal vouchers to 2.5 million Romanians at risk of poverty, 2 June 2022.

nerable to higher food prices. The government has introduced some general income support measures for vulnerable families (for example, there has been a significant increase in pension rates) and some measures to compensate for higher fuel prices. As regards food, the government reduced the VAT rate on bread from 20% to 0% although there are mixed views on the extent to which the benefit of this has been passed on to consumers.[22] The caretaker Prime Minister in February 2023 following inconclusive elections in October 2022 called for a regular monitoring and control mechanism of food prices focused on apparent significant disparities between the (higher) prices paid by Bulgarian consumers for the same products sold in neighbouring countries.[23] Some evidence suggests that large retail chains are putting an 80-90% markup on food products and the caretaker cabinet proposes to introduce a ceiling on the trade markup of up to 20 or 25% with a view to reducing prices by 20-30%. Retailers charging a larger margin will be obliged to declare it to the Consumer Protection Commission, which will check the formation of the price.[24]

- **Greece**. Greece ruled out the option of a lower VAT rate on food because it would lead to a loss of government revenue. Instead, it opted both to try to control prices in supermarkets and to provide targeted income support for food purchases to households. In November 2022, the government launched a "basket" allowing all households to find one product in 31 categories (bread, milk, pasta, rice, meat, etc.) at a discounted price in supermarkets making more than €90 million in turnover per year. All large chains must provide one product for each category at a low price and advertise it on the internet or in advertising brochures. Those who fail to do so risk a fine of €5,000 per day of delay. This measure, which came into effect on November 2, should last at least until the end of March 2023. From February 2023 the Greek government will cover 10% of its citizens' food bills, in a bid to lessen the burden of inflation. The scheme was intended to run initially for six months, and individuals receive a maximum pay-out of €220 per month. For large families with several beneficiaries, this limit is increased by €100 per person up to a cap of €1,000.[25]
- **Portugal**. Portugal introduced a windfall tax on both energy companies and major food retailers, including supermarket and hypermarket chains, in line with that approved by the European Union for the energy sector. The 33% tax is applied to profits that are at least 20% higher than the average of the previous four years. The new rate applies in 2022 and 2023. Revenue raised goes to welfare programs and to help small food retailers.[26]
- **Hungary**. Hungary has experienced the highest rate of food price inflation in the EU which has also led to efforts to control those prices. Apart from the impact of higher energy costs and global food prices, a specific contributory cause to high food inflation in Hungary has been the rapid depreciation of the forint, because of a widening balance of payments deficit due to energy imports as well as fiscal stimulus in the run up to the April 2022 election.[27] In January 2022, the government announced that it decided from 1 February to freeze at their October 2021 level the prices of six commodities - granulated sugar, wheat flour, sunflower oil, pork thighs, chicken breast and 2.8% milk - as a measure to combat inflation. In November, the list was expanded with eggs and potatoes, the prices of which cannot be higher than their levels registered on Sept. 30, 2022, and the price controls were successively extended until June 30, 2023. Retailers are required to sell at least the average daily volume for that day of the week in 2021 to avoid that stores simply avoid stocking the price-capped products.
  The measure did not have a discernible impact on the rate of food price inflation. Indeed, the Hungarian central bank governor warned that the price caps increase the inflation rate by 3 to 4%, as stores make up for their losses on staple food by increasing the prices of other products. In April 2023, the government announced a further two measures. One is a system of mandatory promotions in larger retail chains with annual net sales exceeding HUF 100 billion which came into force on 1 June 2023. The essence of the scheme is that one product in 20 product ranges must be sold 10% cheaper than the lowest price of the last 30 days for one week, with the products changing on a regular basis. To monitor the scheme, retailers will be required daily to upload the prices of specific product groups and products – 62 in all - to a website operated by the Economic Competition Authority. Early indications are that supermarkets are voluntarily offering larger discounts on a wider range of products as they compete in a context of moderating inflation. Increasing price comparability and price transparency may have the effect of further increasing competition. Whether and when the price caps will be removed will depend on the evolution of food price inflation.

To summarise, households' purchasing power in the EU has been dramatically reduced by high inflation particularly in energy and food prices. All EU Member States have responded by introducing measures to protect households and particularly low-income households. These initiatives

[22] China-CEE Institute, Bulgaria social Weekly Briefing: Bulgarian Government Adopted a large Package of Anti-Crisis Social Measures, 27 May 2022
[23] The Sofia Globe, Bulgaria's caretaker government to introduce daily food price monitoring, 7 Feb 2023.
[24] Bulgarian National Radio, Bulgaria's government wants to reduce food prices by at least 20 percent, 7 March 2023.
[25] Euractiv, Agrifood Special CAPitals Brief: Controlling food prices, 27 Jan 2023; Food Matters Live, Greek government to help citizens pay for their food bills amid high inflation, 19 Dec 2022; Le Monde, To combat inflation, Greek government forces supermarkets to reduce prices on basic products, 3 Nov 2022.
[26] Reuters, Portugal approves windfall tax on energy firms, food retailers, 21 December 2022.
[27] Information on the Hungarian response has been gathered from Cohn Bech E., Foda, K. and Roitman A., *Drivers of Inflation: Hungary*, Selected Issues Paper SIP/2023/004, International Monetary Fund; Hungary Today, Supermarket chains in a rush to cut prices, 29 March 2023; Bloomberg, Hungary to Push Retailers to Cut Food Prices to Slow Inflation; Hungary Today, Mandatory Promotions in Supermarkets Seem to be Effective, 5 June 2023.

have been dominated by measures to address rising energy costs, either directly by attempting to compensate for higher energy costs by reducing government taxes, or indirectly by increasing social welfare payments or by providing 'inflation cheques' to households to help them to pay for the higher bills. These latter measures also help households to cope with higher food prices. In addition, some but not all Member States have directly tackled food price inflation either by lowering VAT rates on food products, by introducing temporary price controls on a basket of basic food products, or by providing food vouchers.

The reduction of VAT on food has been particularly contentious. It has been introduced in some countries such as Spain and Poland, but calls from left-wing parties, for example, in Germany and Greece, to follow these examples have been rejected. Three arguments have been used to argue against VAT reductions. The first is that a reduction in VAT rates is not targeted on low-income households and much of the benefit therefore accrues to households higher up the income scale. The second follows from this, namely, that it can result in a significant loss of government revenue while providing a limited support to households at risk of poverty. The third argument is that the impact of a reduction in VAT rates is not transparent, with a significant risk that the benefit is absorbed by the food supply chain rather than being passed on to consumers. It is, of course, the wide impact of a reduction in VAT on food that makes it politically popular and appealing.

Future prospects for food price inflation

At the time of writing, overall inflation in the EU shows some signs of moderating in the latest figures for the Harmonised Index of Consumer Prices (HICP) from Eurostat. From a peak monthly annual rate of inflation of 11.5% in October 2022, the annual rate fell to 7.1% in May 2023. This is entirely due to a fall in energy costs which also reached their peak in October 2022. Food price inflation increased further to an unheard-of annual rate in recent decades of 19.2% in March 2023 but has subsequently abated somewhat to an annual rate of 15.0% in May 2023. While there can be EU-specific explanations in particular cases (for example, severe outbreaks of avian flu have contributed to rising egg prices), the explanation for the continuing rise in food price inflation is mostly likely down to the lags in transmitting price changes through the food price chain although, as noted previously, there may also be an element of profit-led inflation in the most recent figures.

Looking to the future, the European Central Bank has raised its key interest rate (its rate on refinancing operations) in the euro area from the 0.0% level maintained for several years until July 2022 in seven successive steps to 3.75% in May 2023, with further increases expected. Global food prices have been falling now for thirteen consecutive months to May 2023 (Figure 6). Also here, there is evidence that the transmission to EU farm prices takes place with a lag. Reweighting the FAO food price sub-indices to reflect the composition of EU production shows that EU farm prices only reacted after several months to the increase in global prices, and there has been a similar delay in responding to the fall in global prices. However, it now appears that EU farm prices have also peaked. The latest monthly data from Eurostat at the time of writing for agricultural producer prices is only for October 2022 and shows a small dip in farm level prices. Further falls will be expected in the coming months in line with the fall in global prices that has already occurred.

Given the lags in price transmission, these falls in producer and energy prices may not be reflected in processor and particularly retail prices for several months more. Food price increases in the past year, though very high, have not fully reflected the increases in prices at primary producer level. As food manufacturers and retailers continue to adjust their prices to these higher input costs, food price inflation is likely to continue at a high level. However, leaving aside the possibility of some further adverse shock to food markets (such as an extension of the Ukraine war, or drought conditions this summer in Europe), EU consumers can expect some relief from high food prices in the second half of 2023, although prices cannot be expected to fall back entirely to pre-war levels.

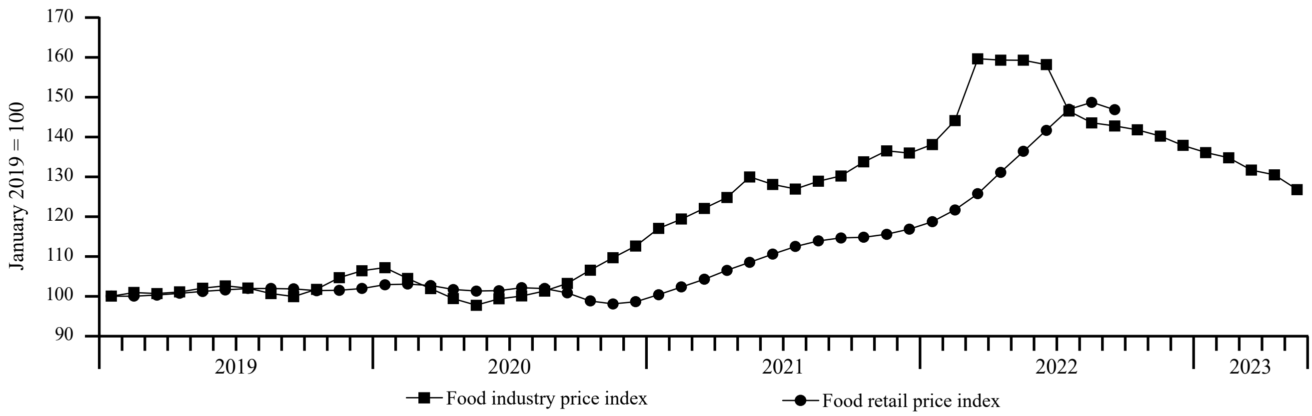

Figure 6: EU vs. global agricultural prices, base Jan 2019=100.

Note: The FAO global food price index is divided into five sub-indices, meat, dairy, cereals, oils, and sugar. These five sub-indices have been weighted by the relative importance of these commodities in EU production, rather than by global export shares in 2014-2016 as is done by the FAO in constructing their global index. These five commodity groups account for 57% of the value of EU production in 2022, as major sectors including fruits and vegetables, wine and olive oil are not covered.

Source: FAO Global Food Price Index; EU agricultural producer price index from Eurostat, Food Prices Monitoring Tool PRC_FSC_IDX.

References

European Commission (2021): Tackling Rising Energy Prices: A Toolbox for Action and Support. COM(2021) 660. Brussels.

European Commission (2022): Safeguarding Food Security and Reinforcing the Resilience of Food Systems. COM(2022) 133. Brussels.

European Council (2022): Versailles Declaration, Informal Meeting of Heads of State or Government, Versailles, 10-11 March 2022.

Janssen, M., Chang, B.P.I., Hristov, H., Pravst, I., Profeta, A. and Millard, J. (2021): Changes in Food Consumption During the COVID-19 Pandemic: Analysis of Consumer Survey Data From the First Lockdown Period in Denmark, Germany, and Slovenia. Frontiers in Nutrition, **8,** 635859. https://doi.org/10.3389/fnut.2021.635859

McKinsey & Company and Eurocommerce (2023): The State of Grocery Retail - Europe 2023. Copenhagen.

Mignogna, C., Costanzo, S., Ghulam, A., Cerletti, C., Donati, M.B., de Gaetano, G., Iacoviello, L. and Bonaccio, M. (2022): Impact of Nationwide Lockdowns Resulting from the First Wave of the COVID-19 Pandemic on Food Intake, Eating Behaviors, and Diet Quality: A Systematic Review. Advances in Nutrition, **13** (2), 388–423. https://doi.org/10.1093/advances/nmab130.

Oxfam International (2023): Survival of the Richest: How We Must Tax the Super-Rich Now to Fight Inequality. Oxford, UK: Oxfam GB on behalf of Oxfam International.

USDA (2023): EU Consumers Save on Food and Buy Less Organic in 2022. GAIN Report Number E42023-0005. Berlin.

World Bank (2023): Energizing Europe: Part 1 Inclusive Growth: Inflation Chipping Away Income Gains. EU Regular Economic Report 9. Washington, D.C: International Bank for Reconstruction and Development / The World Bank.