

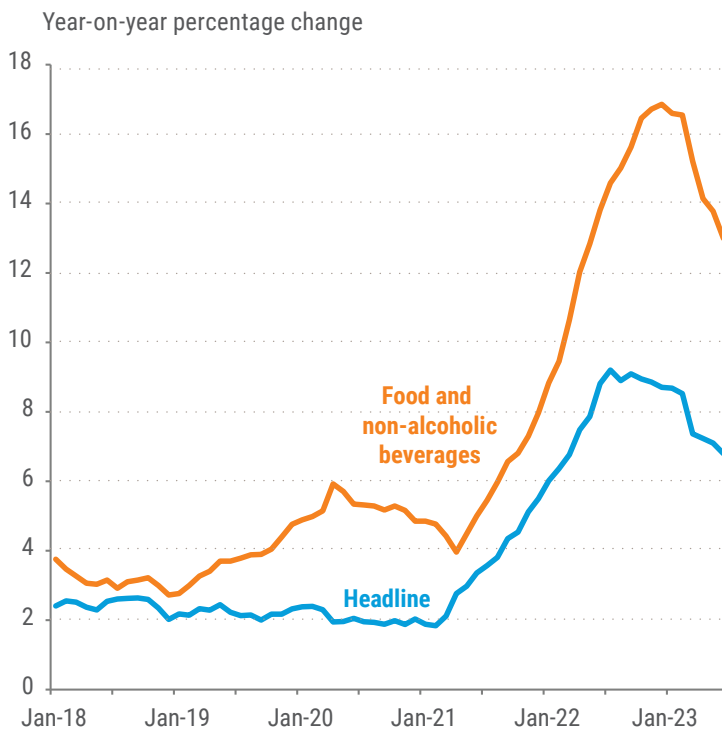
What is driving domestic food prices worldwide?

RECENT TRENDS IN DOMESTIC FOOD PRICES

Food prices surged over the past few years owing to multiple shocks. Between 2019 and 2021, extreme weather events and supply chain disruptions derived from the pandemic drove up domestic food price inflation (measured as a component of the Consumer Price Index) in many countries.¹ In 2022 domestic food inflation became more common across the world, reaching multi-decade highs in several countries amid the spillover effects of the war in Ukraine, higher international commodity prices and a surging US dollar.

Figure 1

Global food price and headline inflation



Source: UN DESA, based on data from CEIC and Ha, Kose and Ohnsorge (2021), "One-stop source: A global database of inflation", Policy Research Working Paper, No. 9737, Washington, D.C.: World Bank.

Note: Country group data are 10 per cent trimmed mean, excluding the 10 per cent largest and 10 per cent smallest values from the sample. Includes latest information available for 174 countries.

¹ In mid-2019, the outbreak of African swine fever, coupled with the introduction of Chinese import tariffs on US exports, also impacted food prices.

KEY MESSAGES

- » Domestic food price inflation remains elevated worldwide, even though international food prices have been declining since mid-2022. Rising food prices are eroding households' purchasing power, particularly in developing countries.
- » Multiple factors – varying in impact across countries – continue to drive domestic food price inflation, including limited pass-through of lower international prices to local food prices, high fertilizer prices, rising labour costs and the intensification of climate change.
- » Higher domestic food prices are a major driver of food insecurity, especially for poor households whose incomes are stagnant or declining. Countries that already faced protracted food crises before the COVID-19 pandemic and the war in Ukraine have been the most affected by the recent food price increases.

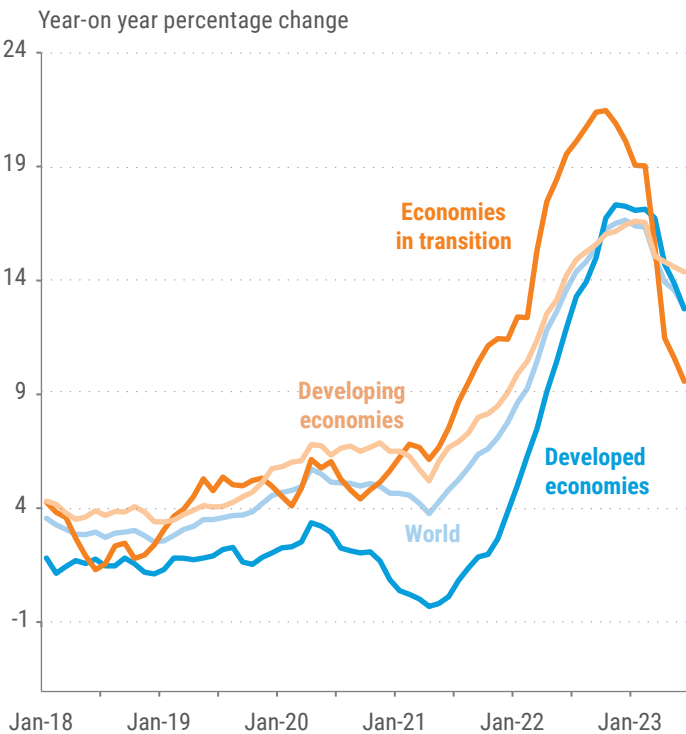
Headline inflation² also rose significantly in most economies, in part due to the importance of food and energy in the consumption basket. While headline inflation started to slow in September 2022, food inflation continued to soar and began to decelerate only in early 2023 (figure 1). Although domestic food inflation rates have fallen sharply in recent months, they remain high and well above the pre-Ukraine war levels in most countries.

Globally, year-on-year domestic food inflation averaged 13.0 per cent in June 2023, down from a peak of 16.9 per cent in December 2022, with significant differences among regions and countries (figure 2). In June 2023, average domestic food prices were 38.3 per cent higher than in January 2019. In developed countries, average domestic food inflation has been slowing since November 2022, after reaching record highs during the year. For instance, in the United States, domestic food inflation has been easing gradually, after peaking at 11.4 per cent in August 2022 (but is still much higher than in the past few decades). In the European Union, average domestic food inflation began to decelerate in early 2023, after reaching historical highs in 2022, while in the United Kingdom food inflation started to slow in April 2023.

² Headline inflation is a measure of the total inflation within an economy, including volatile components such as food and energy prices. It is calculated as the All-Items Consumer Price Index year-on-year percentage change.

Figure 2

Food price inflation by region



Source: UN DESA, based on data from CEIC and Ha, Kose and Ohnsorge (2021), "One-stop source: A global database of inflation", Policy Research Working Paper; No. 9737, Washington, D.C.: World Bank.

Note: Country group data are 10 per cent trimmed mean, excluding the 10 per cent largest and 10 per cent smallest values from the sample.

In developing countries, average domestic food inflation has remained persistently above that in developed countries until recently. The trend has been downward since the beginning of 2023, but inflation is still high, with countries in Africa, South Asia and Western Asia the most affected. In addition, in several countries, including Argentina, Lebanon and Zimbabwe, prices continue to skyrocket, with year-on-year food inflation in June 2023 exceeding 100 per cent. When disaggregated by food groups, the major contributors to domestic food inflation in both developed and developing countries during the first half of 2023 were edible oils and fats, bread and cereals, and dairy and related products (figure 3).³

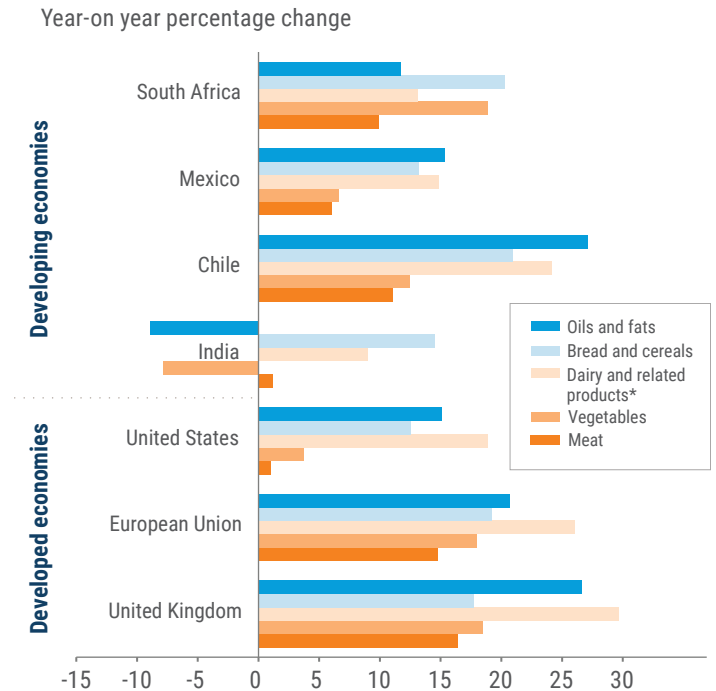
DRIVERS OF FOOD INFLATION

Food prices on international markets started to increase in 2020 amid supply chain disruptions and pandemic-related bottlenecks (figure 4). The war in Ukraine and export bans in several large producer countries added further pressure

³ During the first half of 2023, prices in some food categories in India declined due to a milder rainy season than last year.

Figure 3

Food consumer price subindices in the first half of 2023 for selected countries



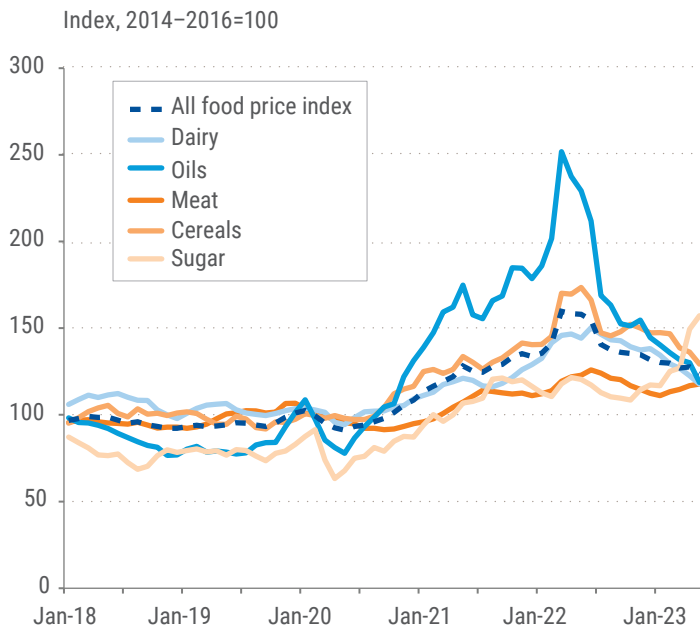
Source: UN DESA, based on data from CEIC, United States Bureau of Labor Statistics, and Eurostat.

* Includes cheese and eggs.

on the prices of agricultural commodities, particularly cereals and oils, driving international food prices to record highs during the first half of 2022. Since mid-2022, however, international food prices have been trending downward as demand growth slowed, amid rising global interest rates, and supply constraints eased owing to the resumption of exports of grain and other food commodities from Ukrainian ports under the Black Sea Grain Initiative. As of June 2023, most international food prices had returned to their pre-Ukraine war levels, though they remained considerably higher than before the pandemic. Sugar prices increased significantly during the first half of 2023 owing to trade restrictions and adverse weather conditions in larger producing countries. Although meat prices remain below their 2022 peaks, they have increased again since February 2023 due to a combination of factors including recent droughts and extreme heat waves that affected livestock. While most commodity prices have been trending downward in recent months, renewed geopolitical concerns pushed up the prices of some agricultural commodities in July 2023, particularly wheat and corn, as the Russian Federation withdrew from the Black Sea Grain Initiative.

Figure 4

International food prices



Source: UN DESA, based on data from the Food and Agriculture Organization of the United Nations (FAO).

The transmission or *pass-through* of international food prices to domestic food prices varies depending on regional or country-specific factors, including openness to foreign trade, the degree of competition in the local market, the reliance on food imports, and the strength of the local currency against the dollar. Currency depreciations, coupled with rising commodity prices, pushed import costs up, fueling inflationary pressures in many economies, especially in those that heavily rely on imports to meet domestic demand for food. During 2022, currencies in many developing countries weakened significantly vis-à-vis the dollar.⁴ Although depreciation pressures have eased over the first half of 2023, many currencies have remained volatile amid tightening global financial conditions. Also, the pass-through to domestic food prices exhibits asymmetries. Multiple studies find that intermediate and consumer prices tend to respond more quickly to increases in input costs than to decreases, indicating asymmetric price transmission in most producer and consumer markets.⁵ At the same time, local prices also respond to local events such as adverse weather that impacts expected crop yields.

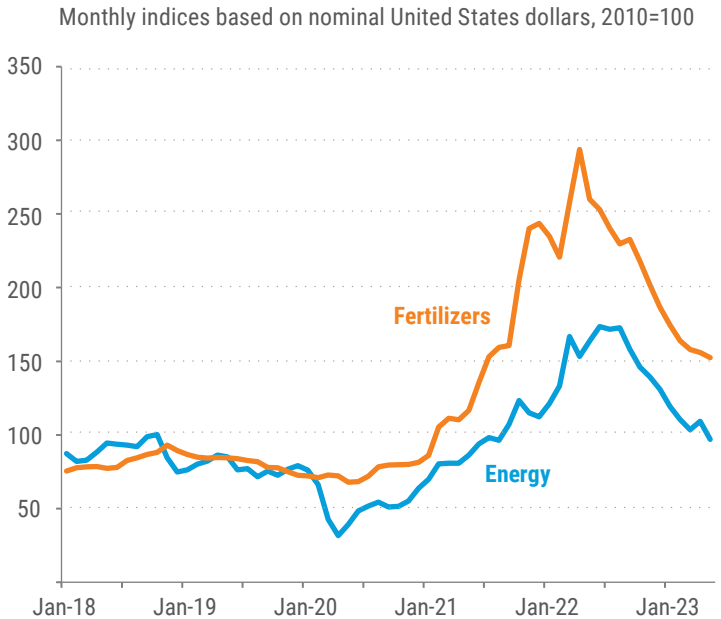
Fertilizer prices have been a major driver of food inflation, given their important role in agricultural production. Fertilizer prices started to rise in late 2020 due to a

⁴ For instance, between January and December 2022, the exchange rate depreciated by about 11 per cent in India, 9 per cent in the Philippines and 7 per cent in South Africa.

⁵ Osbat, Sun and Wagner (2021), "Sectoral exchange rate pass-through in the euro area", No. 2634/December.

Figure 5

Fertilizers and energy prices



Source: UN DESA, based on data from World Bank, Commodity Price data.

combination of factors, including increases in energy prices, an increase in global fertilizer consumption (nitrogen, phosphorus and potassium) and bottlenecks in global supply chains.⁶

The spillover effects of the war in Ukraine pushed fertilizer prices to historical highs in early 2022, especially for nitrogen-based fertilizers. Although prices have retreated significantly since the third quarter of 2022 amid falling energy prices, they remain higher than before the pandemic due to the lingering effects of the war in Ukraine and the associated trade restrictions (figure 5).⁷

Surging labor costs are another factor contributing to the rise in domestic food prices, particularly in developed countries. Tight labor markets have resulted in strong nominal wage increases in sectors linked to food production and distribution.⁸ According to recent estimates, salaries and benefits constitute approximately 40 per cent of the overall input cost for most food items, thus exerting a

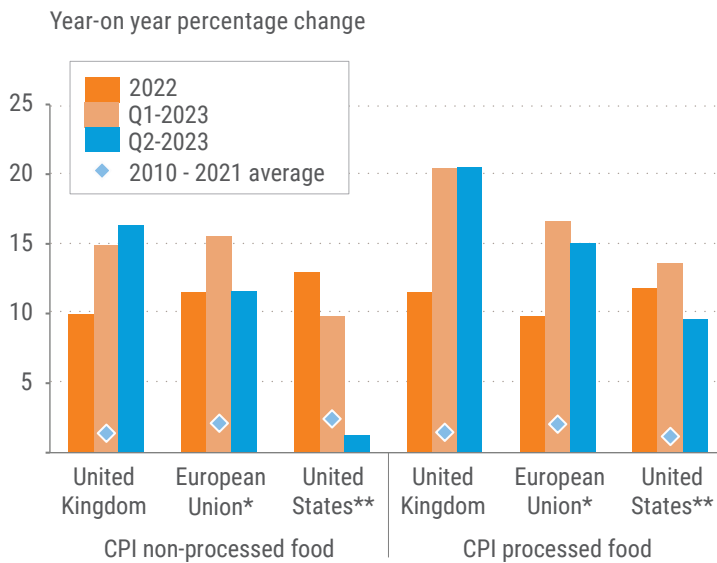
⁶ The global fertilizer market is especially vulnerable to disruptions because there are few exporters. The Russian Federation, Canada, the European Union, China, and Belarus export more than 60 per cent of all fertilizers.

⁷ Higher energy costs also push up food inflation by increasing costs in other stages of the production chain, including processing, packaging and transportation.

⁸ For instance, in the United States, the mean hourly wage in the Food Manufacturing Industry increased on average by 7 per cent year-on-year in May 2022, with differences among categories.

Figure 6

Labor-intensive processed vs unprocessed food inflation in selected countries



Source: UN DESA, based on data from CEIC, United States Bureau of Labor Statistics, and Eurostat.

* Unprocessed and processed food for European Union (27 countries from 2020).

** Processed food includes cereal and baked goods, cheese, ice cream, other dairy products, processed fruit and vegetables, beverages, and other food at home.

significant impact on consumer prices.⁹ These cost pressures are most pronounced in the case of food items that heavily involve labor-intensive processes in the supply chain, such as processing, wholesaling, and retailing. Data from selected developed countries indicate that recent price increases may be driven by surging prices of labor-intensive processed foods (figure 6). In addition, rising wages are also likely to contribute to higher prices by boosting the demand for certain food products at local stores.

The contribution of market power in recent inflation trends has been debated during the last months. Several studies document that corporate market power—measured by markups, profitability and industry concentration—has risen significantly in recent decades among developed economies.¹⁰ In the case of the United States, new evidence suggests that during the last quarter of 2022, more than half of domestic price pressures were driven by higher profits.¹¹ A similar trend has been observed in the European Union, with rising corporate profits estimated to account for

⁹ Scott, Cowley and Kreitman (2023), “Tight labor markets have been a key contributor to high food inflation”, Federal Reserve Bank of Kansas City, 19 April.

¹⁰ See for example, Akcigit et. al. (2021), «Rising corporate market power: Emerging policy issues», IMF Staff Discussion Note. Unlike in developed economies, market power is estimated to have increased only marginally in emerging market economies.

¹¹ Glover, Mustre-del-Río and Von Ende-Becker (2023), “How much have record corporate profits contributed to recent inflation?”, Federal Reserve Bank of Kansas City, 12 January.

almost half of the increase in inflation during the past two years.¹² Similar to other industries, the United States food retail industry has become increasingly concentrated in the past three decades.¹³ As a consequence, firms have been experiencing significant profit growth, with retail prices rising even as wholesale prices decrease and input costs fall. According to recent studies, multiple factors have made it easier for firms to raise their prices over the last year, including increased market power, the input price dynamics in the current context and the fact that demand has been outpacing supply in many sectors.¹⁴

Climate hazards have also increasingly been impacting food prices. The rapid intensification of climate change puts immense pressure on food systems, rural livelihoods, and ecosystems in many countries, particularly in those highly vulnerable to climate threats. Changing weather patterns and advancing desertification have already caused a significant decline in agricultural productivity.¹⁵ Climate change also leads to more frequent and severe extreme weather events, resulting in devastating consequences for food systems and human lives. In terms of the impacts of climate change on domestic inflation, several studies indicate that higher temperatures and changing climate patterns have contributed significantly to the recent price increases, particularly in climate-vulnerable developing countries.¹⁶ For instance, during 2022, droughts in the Horn of Africa and floodings in Pakistan significantly impacted livestock and agricultural crops, adding pressure on food prices.

IMPLICATIONS OF SURGING DOMESTIC FOOD PRICES FOR FOOD SECURITY

Higher food prices can be an important driver of food insecurity, although the impact varies depending on local conditions and existing vulnerabilities. Countries that were already grappling with food crises before the pandemic and the war in Ukraine have been hit hardest by the recent surge in food prices. According to World Food Programme estimates, over 345 million people are facing high levels of food insecurity in 2023, more than double the number in

¹² Hansen, Toscani and Zhou (2023), “Euro area wages after the pandemic and energy shock. Import prices, profits and wages”, International Monetary Fund, Working Paper 23/131, June.

¹³ Zeballos, Dong and Islamaj (2023), “A disaggregated view of market concentration in the food and retail industry”, US Department of Agriculture, Economic Research Report No. ERR-314.

¹⁴ Hahn (2023), “How have unit profits contributed to the recent strengthening of euro area domestic price pressures?”, Published as part of the ECB Economic Bulletin, Issue 4/2023.

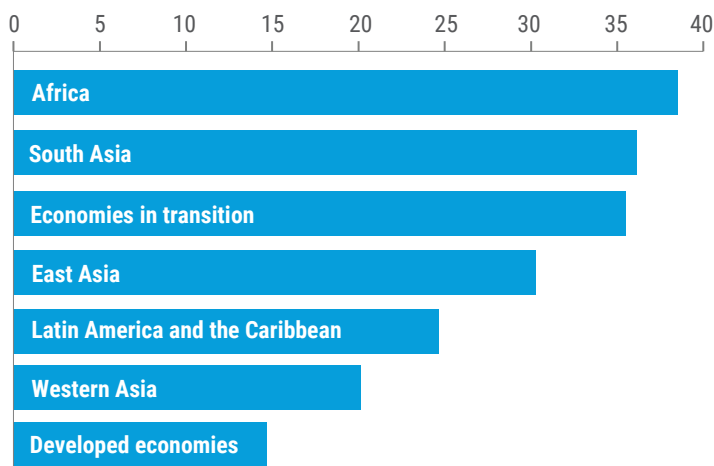
¹⁵ Ortiz-Bobea and others (2021), “Anthropogenic climate change has slowed global agricultural productivity growth”, Nature Climate Change, 11, 306–312.

¹⁶ Faccia, Parker and Stracca (2021), “Feeling the heat: extreme temperatures and price stability”, ECB working paper Series No. 2626/ December.

Figure 7

Food expenditure as share of total consumer expenditure by region and country grouping in 2021*

Percentage



Source: UN DESA, based on Economic Research Service of the United States Department of Agriculture and Our World in Data figures.

* Includes food eaten at home. Alcoholic beverages and tobacco are not included.

2020. Rapidly rising food prices have driven up the cost of living for households, thus reducing their real incomes, especially in developing countries and economies in transition where the share of total consumer expenditure allocated to food is higher than in developed economies (figure 7). Within countries, the impact is most severely felt by the poorest households, which spend the largest share of their income on food.

In addition, the food price shock affects women, men, boys and girls in different ways. Higher food prices have disproportionately harmed women as adverse shocks tend to reduce women's access to food and dietary diversity. Data from African countries show that a higher percentage of women than men were significantly affected by food price shocks during the COVID-19 pandemic, primarily because women spend a higher share of income on food.¹⁷ These disparities arise from differences in income, access to employment or means of production, gender roles, and cultural practices that disadvantage women in times of food scarcity. For example, in times of crisis, women may cut their own food intake rather than their children's. Rising food prices coupled with conflict and climate related issues continue to drive up children's food and nutrition insecurity worldwide. According to UNICEF estimates,¹⁸ in 2022, the escalating global food crisis has forced an additional

¹⁷ International Food Policy Research Institute (2023). "Global Food Policy Report: Rethinking Food Crisis responses", Global Food Policy Report.

¹⁸ UNICEF (2022), "Global hunger crisis pushing one child into severe malnutrition every minute in 15 crisis-hit countries", Press release, 22 June.

260,000 children to suffer from severe wasting in the most affected countries and regions,¹⁹ including in the Horn of Africa and the Central Sahel.

Notably, rising food inflation has exacerbated the reversals in poverty reduction caused by the COVID-19 pandemic. According to World Bank estimates, the combined effects of the pandemic, the war in Ukraine and the recent global price shock pushed an additional 75 million to 95 million people into extreme poverty in 2022, compared to pre-pandemic forecasts.²⁰ While policy responses can help mitigate the impacts of the price shock, the relatively fragile economic recovery and limited macroeconomic policy space have constrained the capacity to respond, particularly in developing countries. The prospects of achieving the Sustainable Development Goal of eradicating poverty by 2030 are thus becoming increasingly remote.

¹⁹ The most affected countries are Afghanistan, Burkina Faso, Chad, Democratic Republic of the Congo, Ethiopia, Haiti, Kenya, Madagascar, Mali, Niger, Nigeria, Somalia, South Sudan, Sudan, and Yemen.

²⁰ Gerzson and others (2023), "Pandemic, prices and poverty", World Bank Blogs, 13 April.