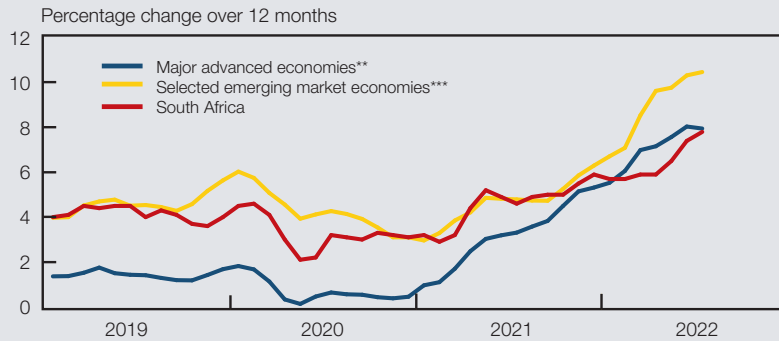


Box 1 Drivers of domestic food price inflation

Global inflationary pressures have increased sharply since early 2021, following the easing of the initial strict coronavirus disease 2019 (COVID-19) lockdowns in the second half of 2020. Consumer price inflation in most countries, including South Africa, was initially driven largely by the significant increase in both international crude oil prices¹ and, to a lesser extent, food prices as well as persistent global supply chain disruptions after the COVID-19 lockdowns. Inflationary pressures were recently exacerbated by Russia's invasion of Ukraine in February 2022, which elevated agricultural commodity prices while adding a substantial risk premium to already high energy prices. Encouragingly, international grain prices have recently receded somewhat, following an agreement between Russia and Ukraine to resume exports.

Consumer prices*



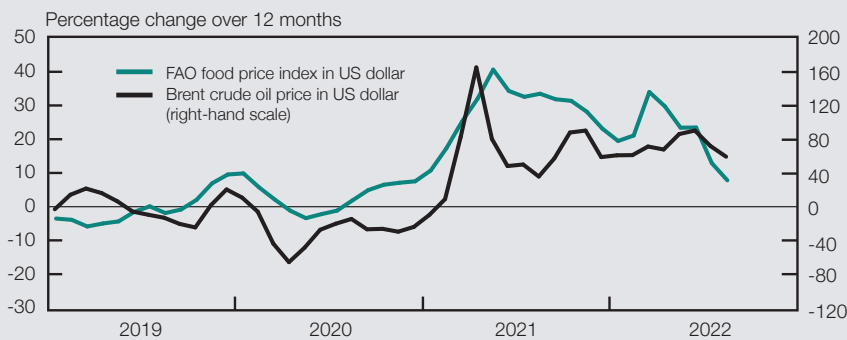
* The advanced and emerging market economy inflation rates were weighted according to purchasing power parity

** Canada, France, Germany, Italy, United Kingdom, United States

*** Chile, China, Egypt, Brazil, India, Indonesia, Malaysia, Mexico, Peru, Philippines, Poland, Russia, Sri Lanka, Thailand, Turkey

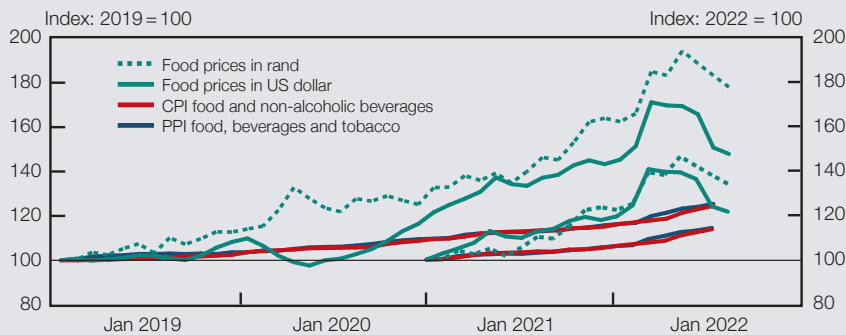
Sources: Haver Analytics, IMF, Stats SA and SARB

Commodity prices



Sources: FAO and Refinitiv

Domestic and global food prices



Sources: FAO, Stats SA and SARB

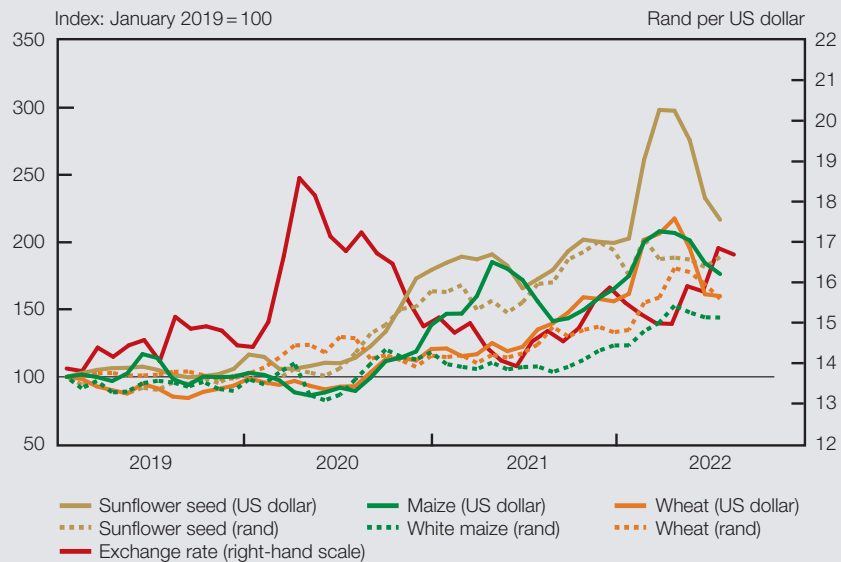
¹ See 'Box 1: International crude oil prices as a driver of domestic consumer price inflation' on page 29 of the June 2022 edition of the *Quarterly Bulletin*, available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/quarterly-bulletins/boxes/2022/June/june-2022---international-crude-oil-prices-as-a-driver-of-domest>



Consumer price inflation in South Africa increased at a slower pace than global inflation, measured on a purchasing power parity (PPP) basis.² This reflected the faster pace of increase in inflation in major advanced economies and an even faster pace of increase in selected emerging markets.

This box focuses on the drivers of food price inflation in South Africa, tracking the price formation process from international agricultural commodity prices and the exchange value of the rand through to domestic producer and consumer food prices, as well as its impact on headline consumer price inflation. Despite the significant increase in global food prices, in particular grains and vegetable oils,³ most of the explanation for the acceleration in South Africa's consumer price inflation rate is to be found in international crude oil prices, as is evident from the different measures of underlying inflation. South Africa's consumer price inflation has so far seemed to be less affected than that of some emerging market peers and advanced economies. However, it has still eroded the purchasing power of the low-income households in particular, given the prominence of food in their consumer baskets.

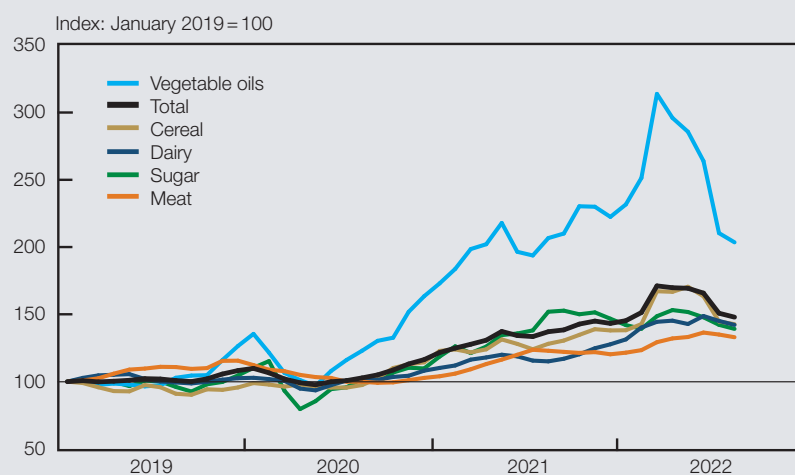
Grain prices



Sources: International Grains Council, JSE and SARB

International food prices have increased notably since mid-2020, as economic activity resumed in most countries following the easing of COVID-19-related lockdown restrictions. Most recently, the international food price index of the United Nations' Food and Agriculture Organization (FAO) increased by 40.6% in May 2021, compared with a year earlier.

International food prices

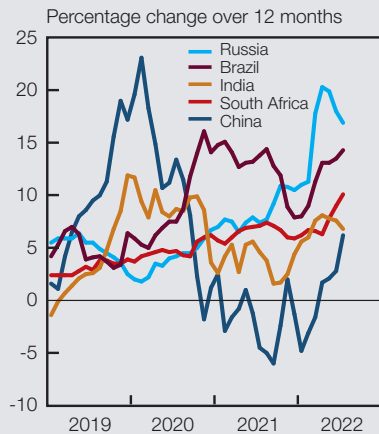


Source: FAO

2 PPP is the measurement of prices in different countries that use the prices of specific goods to compare the absolute purchasing power of the countries' currencies. The advanced and emerging market inflation rates were calculated by weighting the different countries' inflation rates according to their PPP-adjusted gross domestic product.

3 The Food and Agriculture Organization's (FAO) vegetable oil price index is the average of 10 different oils, weighted with the average export trade shares of each oil product for the 2014–2016 period.

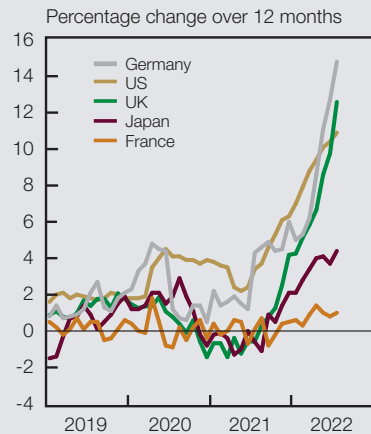
Consumer food* price inflation in selected emerging market economies



* Food includes non-alcoholic beverages for all countries

Sources: Haver Analytics and Stats SA

Consumer food* price inflation in selected advanced economies

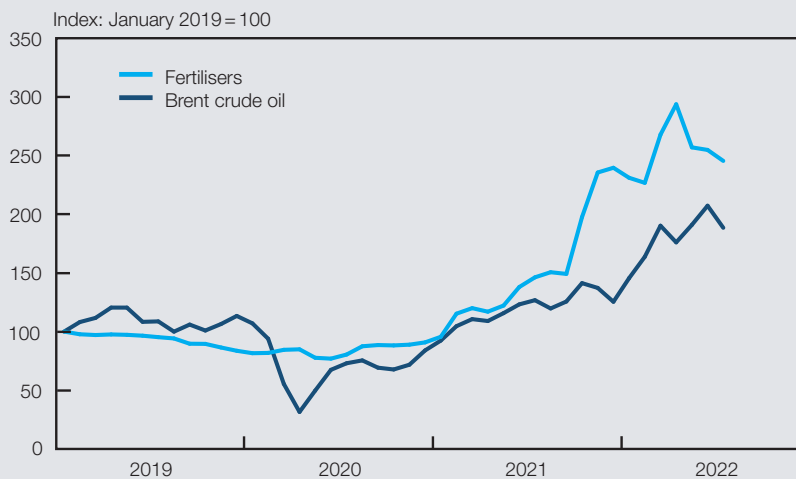


* Food includes non-alcoholic beverages for all countries

Source: Haver Analytics

A return of demand caused supply chain bottlenecks and the shortages of many goods, with the war in Ukraine exacerbating the situation. The sharp rise in key agricultural input prices, notably fuel and fertilisers, as well as the marked increase in global shipping costs exerted further upward pressure on agricultural commodity prices.

Selected input costs driving agricultural commodity prices*



* US dollar prices

Sources: Bloomberg, Refinitiv and World Bank

Although the increase in international food prices was broad-based, it has largely been driven by higher cereals prices, especially wheat and maize, which are staple foods in many countries. International vegetable oil prices have also increased significantly over the past two years. With Russia and Ukraine both being major global producers of wheat, maize and sunflower seed, and with the blockage of Ukraine's Black Sea ports, the prices of these commodities have increased significantly. Fears of global shortages in certain oil seeds have led to export bans by some countries, which caused a further surge in vegetable oil prices. International food price inflation has since slowed to pre-war rates as it decelerated to 7.8% in August 2022 following improved production prospects and the resumption of grain exports from Ukraine.

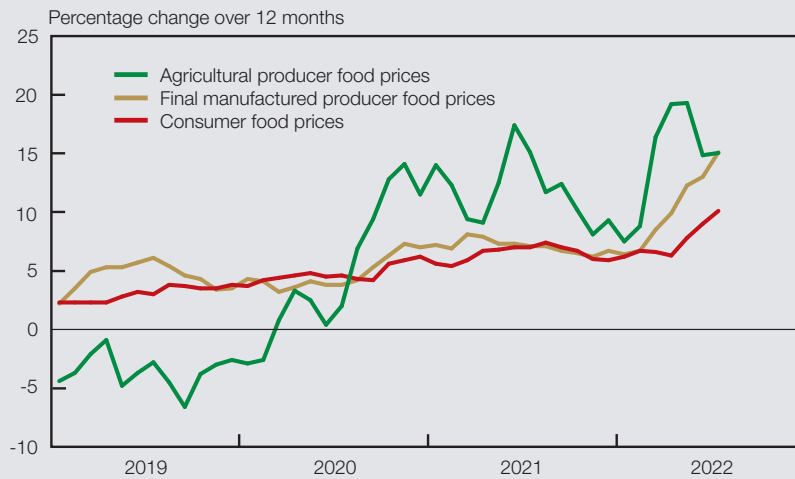
The sharp increases in the international prices of maize, wheat and sunflower seed spilled over to the domestic producer prices of these commodities, which is reflective of export and import parity pricing and the movements in the exchange value of the rand. Although South Africa's expected maize harvest of 15.0 million tons for 2022 is less than the record crop of 2021, it should still be well above domestic consumption, enabling net exports of maize. However, since South Africa's wheat consumption exceeds domestic production, the country should remain a net importer of wheat, despite domestic wheat farmers' intentions to plant 7.0% more hectares of wheat in 2022 than in the 2021 record-production season. The domestic spot price of wheat increased by 55.4% to a high average of R8 023 per ton in May 2022, from R5 163 per ton a year earlier.



Similarly, the spot price of white maize increased by 47.6% from September 2021 to May 2022, while that of sunflower seed surged by a further 37.4% from June 2021 to a recent high of R11 487 per ton in March 2022. Both domestic maize and wheat prices have since receded somewhat following lower international prices.

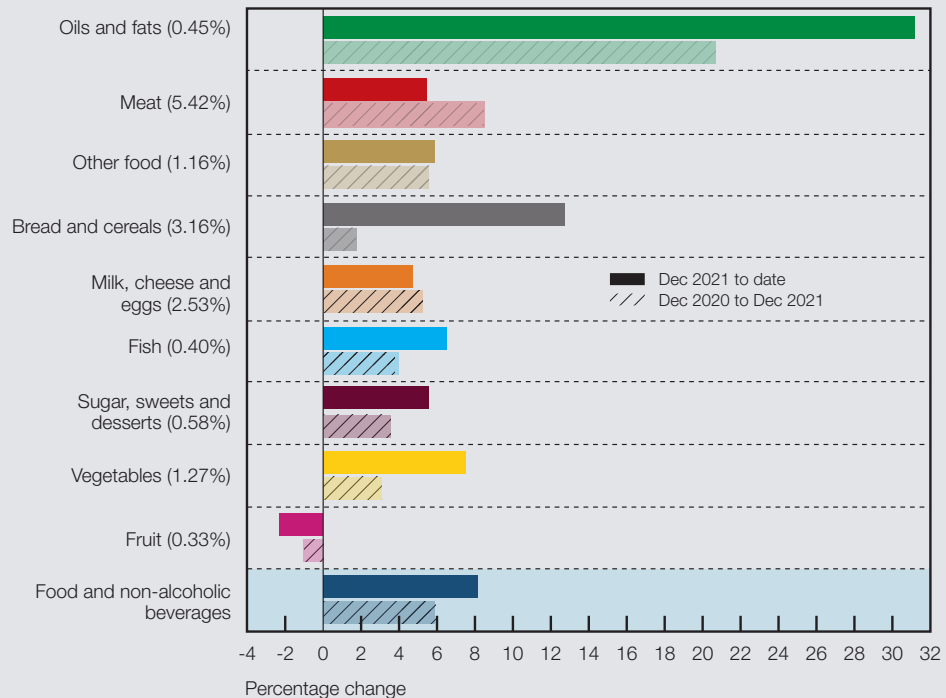
The increases in international and domestic grain prices were reflected in the agricultural producer price index (PPI), which increased at double-digit rates for most of 2021, and accelerated sharply to 19.3% in May 2022. The contribution of grain prices to agricultural producer price inflation has increased significantly from November 2021, as price inflation of cereals and other crops accelerated sharply from 0.6% in October 2021 to 33.4% in June 2022, before moderating to 27% in July. The increase in grain prices also impacted live animal prices as grain is used as animal feed, particularly for poultry. Similarly, broad-based price increases resulted in an acceleration in final manufactured producer food price inflation, from 6.4% in January 2022 to 15.1% in July.

Domestic food prices



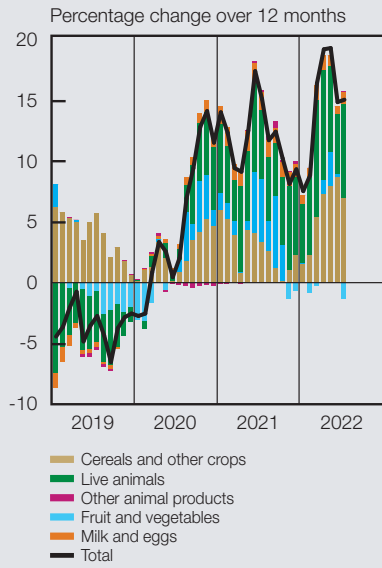
Source: Stats SA

Consumer food price categories

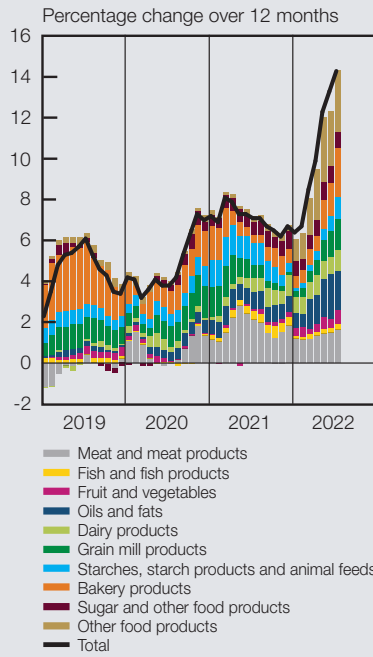


Source: Stats SA

Contributions to the domestic agricultural producer price index

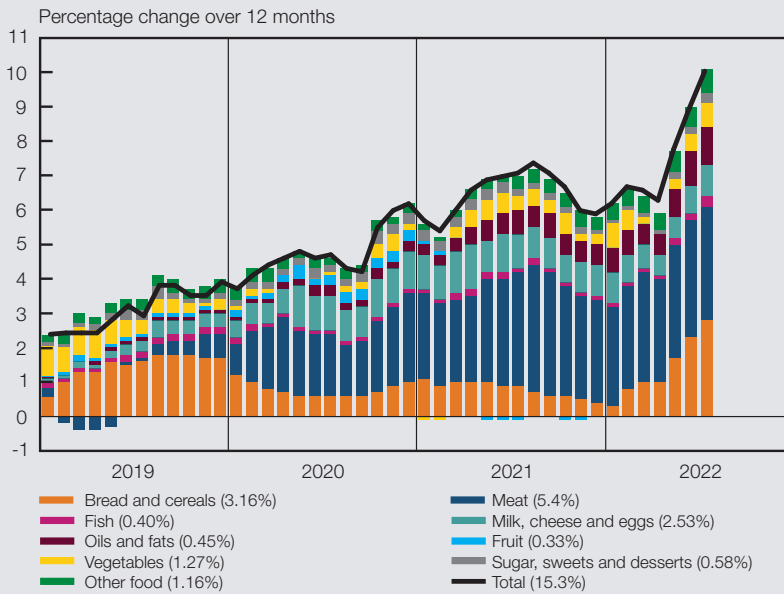


Contributions to the domestic manufactured producer food price index



Source: Stats SA

Contributions to domestic consumer food prices

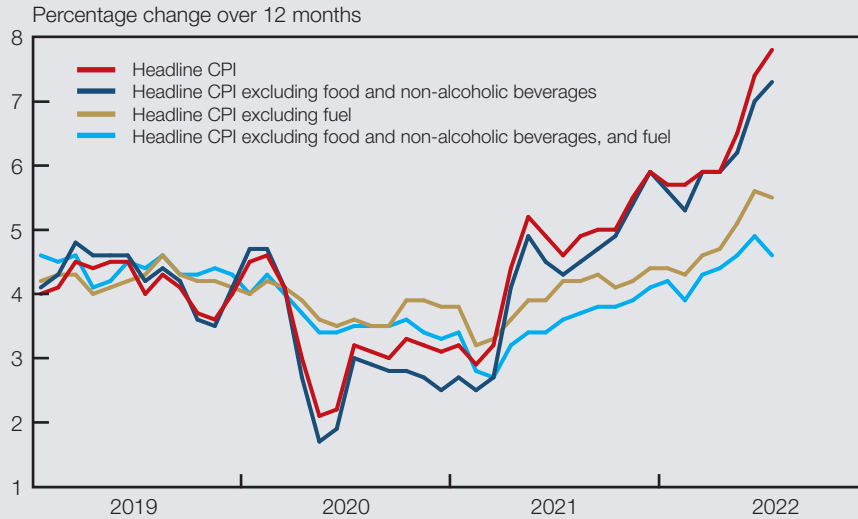


Numbers in brackets indicate weights in the consumer price index

Source: Stats SA



Headline and underlying measures of consumer prices



The acceleration in producer food price inflation is also reflected in the rise in consumer food price inflation from 6.3% in April 2022 to 10.1% in July, with the increase in food prices continuing to outpace the increase in the overall consumer price index (CPI). The price increases in the consumer food categories since December 2020 were broad-based, with much of it already evident in 2021. In the case of bread and cereals, the increase in 2022 to date was larger than in 2021, with oils and fats increasing the most and almost to the same extent over the two periods.

Consumer food price inflation in 2022

	Weight in total CPI (per cent)	Weight in food price index (per cent)	Jan	Feb	Mar	Apr	May	Jun	Jul
Bread and cereals.....	3.16	20.65	1.5	3.7	4.7	4.8	8.4	11.2	13.7
Meat.....	5.42	35.42	8.2	8.6	9.0	8.5	9.4	9.5	9.4
Fish.....	0.40	2.61	4.6	5.3	4.6	4.8	6.2	6.7	9.7
Milk, cheese and eggs.....	2.53	16.54	5.2	4.7	4.1	3.7	3.8	4.7	5.5
Oils and fats.....	0.45	2.94	22.9	22.7	19.8	21.2	26.9	32.5	36.2
Fruit.....	0.33	2.16	-2.0	-1.6	-0.7	-0.7	2.1	0.3	-1.4
Vegetables.....	1.27	8.30	8.6	7.7	2.8	0.2	3.5	5.6	8.3
Sugar, sweets and desserts	0.58	3.79	2.9	1.8	3.4	3.5	4.0	5.7	7.5
Other food.....	1.16	7.58	6.1	7.2	6.5	7.1	8.2	7.7	9.0
All food products.....	15.30	100.00	6.2	6.7	6.6	6.3	7.8	9.0	10.1

Red = acceleration Green = deceleration

Although the consumer prices of oils and fats increased markedly at a year-on-year rate of 36.2% in July 2022, this component only comprises 2.9% of the consumer food price basket. The sharp increases in grain prices resulted in a significant acceleration in bread and cereals price inflation, from a mere 1.5% in January 2022 to 13.7% in July. Meat price inflation has accelerated since 2020, and remained elevated, quickening from 8.2% in January 2022 to 9.5% in June, before moderating slightly to 9.4% in July. Bread and cereals as well as meat have a combined weight of 56.1% in the consumer food basket and thus contributed the most to the recent acceleration in consumer food price inflation. These two components contributed 61% to the year-on-year increase in overall food prices in July 2022, almost double their contribution of 35% in January 2019.

The recent acceleration in consumer bread and cereals price inflation was driven largely by bread, pasta, cakes and other cereals, reflecting the notable increases in wheat and maize prices. By contrast, rice price inflation has slowed over the past year. Meat price inflation has remained elevated, as beef, lamb and especially poultry prices (with the largest weight in the meat price basket) increased notably, reflecting the impact of the higher grain prices on animal feeds.

Given food's weight of 15.3% in the total CPI, it has been one of the main contributors, along with fuel prices, to the recent acceleration in headline CPI inflation. When excluding the impact of food and non-alcoholic beverages from headline CPI inflation, the resultant inflation measure accelerated to 7.3% in July 2022, compared with 7.8% for headline CPI inflation. When only excluding fuel prices from headline CPI, it increased at a much lower year-on-year rate of 5.5% in July 2022, indicating that fuel prices have been the main driver of the recent surge in headline CPI inflation. However, when excluding both food and non-alcoholic beverages and fuel from headline CPI, the resultant measure of underlying inflation accelerated from 3.9% in February 2022 to 4.6% in July, suggesting that inflationary pressures have recently become somewhat more broad-based.

