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Food prices: developments and outlook

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Rationale

Between 2019 Q4 and 2024 Q4 food prices in Spain rose more than those of the other components of the consumption basket. This article looks at food price developments, their main determinants and the outlook for food prices in the future.

Takeaways

- Food prices have surged in recent years because of factors such as rising energy costs and certain extreme weather events, which have affected food commodity prices and production.
- Relative food prices (measured as the ratio of food HICP to core HICP, i.e. headline HICP excluding energy and food) have risen more in Spain than in the euro area: 19% versus 13% in cumulative terms in the period 2019-2024.
- This difference in relative food prices is explained by differences in the composition of the consumption basket, as some of the foodstuffs whose prices have risen the most, such as olive oil, have a greater weight in the Spanish consumption basket.

Keywords

Inflation, food prices, relative prices.

JEL classification

E31, L66.

Authors:

Nicolás Bonino-Gayoso
International Economics and Euro Area Department. Banco de España

Lucía Cuadro-Sáez
International Economics and Euro Area Department. Banco de España

Corinna Ghirelli
International Economics and Euro Area Department. Banco de España

Matías Pacce
Economic Developments Department
Banco de España

Isabel Sánchez
Economic Developments Department
Banco de España

Introduction

Food inflation rose considerably in both the euro area and Spain between mid-2021 and 2023 Q1, when it peaked. From then until 2024 Q4, the rise in food prices moderated gradually.[1]

To gauge the size of the change, we can compare cumulative food inflation and that of the rest of the components of the consumption basket between 2019 Q4 and 2024 Q4. During that period, food prices rose more than those of all the other components except energy in the euro area and more than those of all the other components in Spain (see Chart 1.a). This is not explained by price developments in a small group of foodstuffs, but rather by most food prices rising more than the headline harmonised index of consumer prices (HICP) in the above-mentioned period (see Chart 1.b). In addition, consumer food prices rose sharply across all euro area countries (see Chart 1.c), with prices in Spain rising slightly more than the euro area average.

One way of analysing food price developments is by using the ratio of food HICP to core HICP, i.e. the HICP excluding energy and food.[2]

Over a broader timespan, Chart 2.a shows a steady upward trend in relative food prices between the early 21st century and mid-2022. Consumer prices have historically followed this path in Spain, the euro area and the United States. However, the pattern differs depending on the core HICP sub-group with which the comparison is made. In particular, in the three geographical areas, between 2000 and 2022 food prices and services prices followed a similar pattern (see Chart 2.b), while non-energy industrial goods (NEIG) prices became less expensive than food prices (see Chart 2.c). In other words, the latter development would explain the above-mentioned upward trend in food prices relative to core HICP since 2000.

More recently, relative food prices have risen significantly in both Spain and the euro area since mid-2022, and at end-2024 there were no signs of them reverting to their previous trend (see Chart 2.a).

The following sections analyse food prices throughout the production chain and how differences in the composition of the consumption basket between Spain and the euro area explain most of the differences observed in relative food prices.

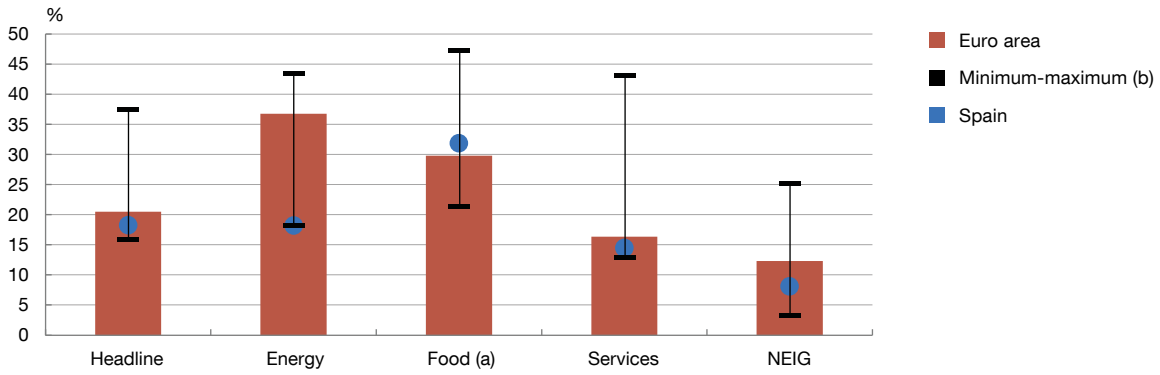
1 "Food" refers to Division 01 (Food and non-alcoholic beverages) of the European Classification of Individual Consumption according to Purpose (ECOICOP).

2 Alternatively, we can calculate the ratio of food HICP to the HICP excluding just food, i.e. by also including energy in the denominator. However, the energy component has been highly volatile in the recent period, affecting the price ratio analysed.

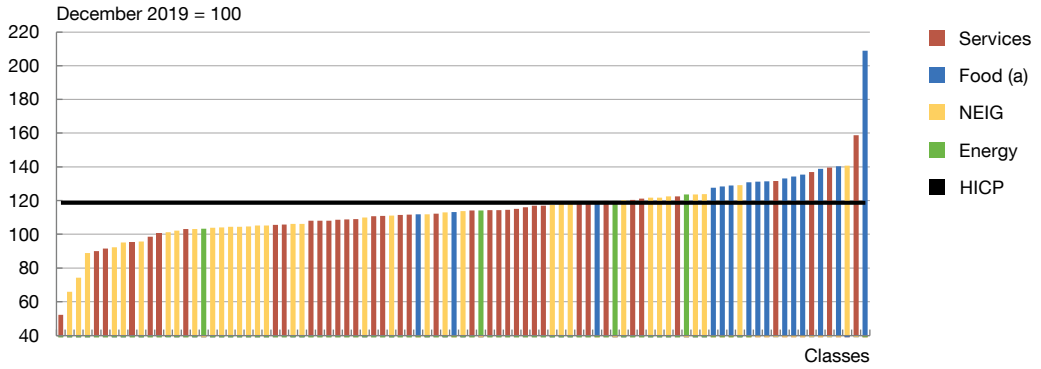
Chart 1

Cumulative increase in prices between 2019 Q4 and 2024 Q4

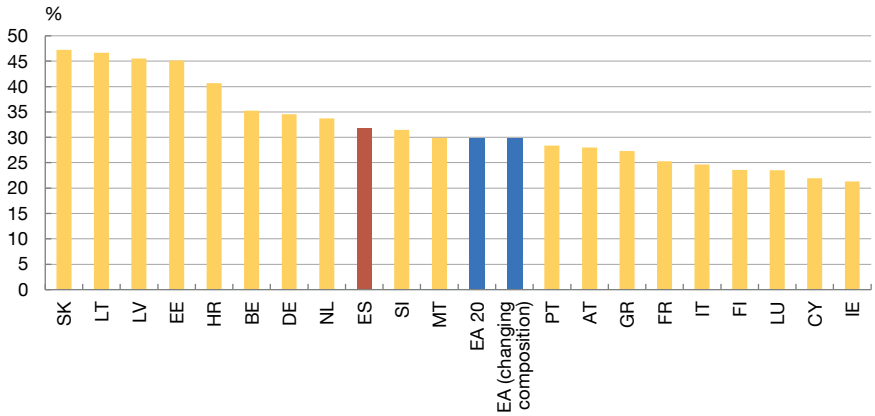
1.a HICP and its main components



1.b Growth of HICP classes in Spain over the last five years (c)



1.c Food (a)



SOURCE: Eurostat. Latest data: 2024 Q4.

a "Food" includes alcohol and tobacco.
b Euro area maximum and minimum.
c Cumulative growth from December 2019 to December 2024 of the HICP (ECOICOP classes of 4 digits).

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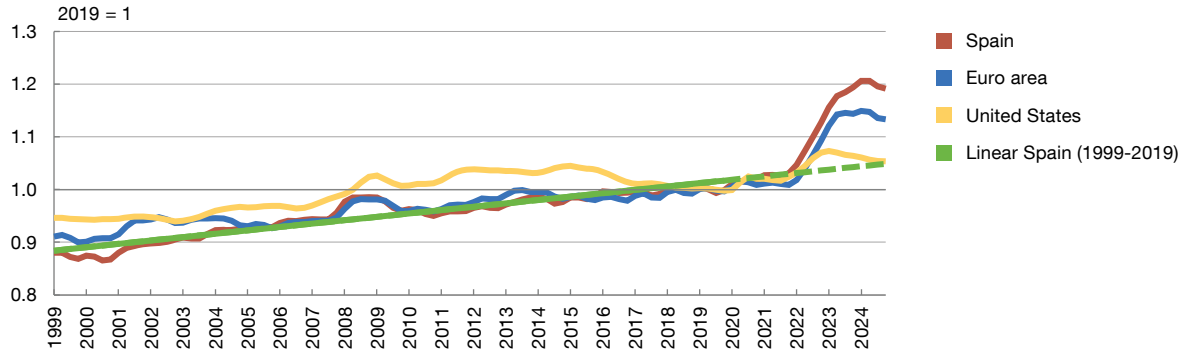
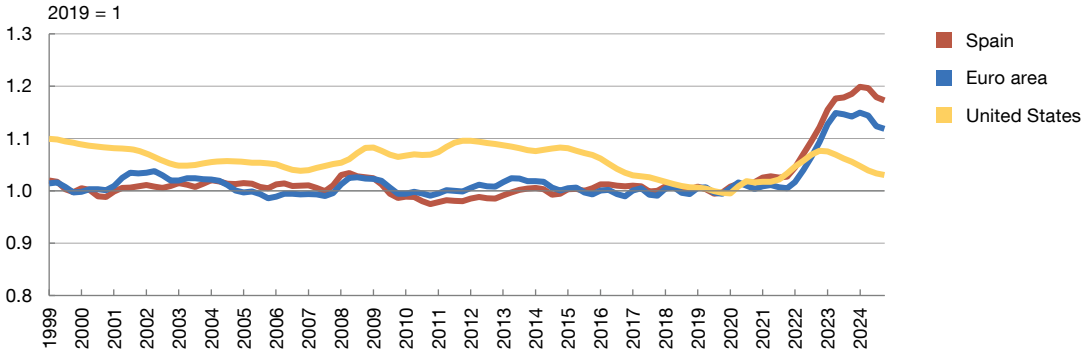
Chart 2

Relative prices across geographical areas

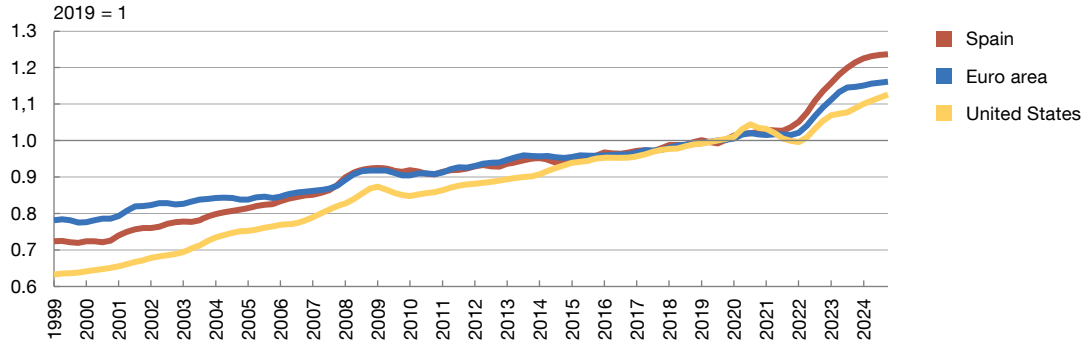
2.a Food HICP relative to core HICP (a) (b)



2.b Food HICP relative to services HICP (a) (b)



2.c Food HICP relative to NEIG HICP (a) (b)



SOURCES: Eurostat, FRED and OECD. Latest data: December 2024. Data for Spain and the euro area are not seasonally adjusted.

a To compute the ratios, the six-month moving average is taken, prior to calculating the quarterly series. Base year: 2019.
b For Spain and the euro area the HICP is considered. For the United States, the seasonally adjusted indices from the CPI for All Urban Consumers.

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Food prices throughout the production chain

The significant rise in consumer food prices in recent years reflects developments in food commodity and producer prices. Against this background, food commodity prices have risen sharply because of various shocks that have affected agricultural supply, including higher energy costs,[3] extreme weather events connected to climate change[4] and the implementation of export restrictions on certain products in some countries, which has driven up prices globally.[5] Energy plays a fundamental role in food systems. It is consumed not only in primary production, but also in secondary activities, such as drying, cooling, storage, transport and distribution. It is needed at all steps along the agri-food chain, both directly (for production, processing and transport) and indirectly (for manufacturing of fertilisers, agro-chemicals and machinery). According to the International Renewable Energy Agency and the Food and Agriculture Organization of the United Nations (IRENA and FAO, 2021), agri-food systems are responsible for about 30% of the world's total energy consumption.

The above-mentioned shocks caused a considerable cumulative increase in food commodity prices between 2019 Q4 and 2024 Q4, both in the euro area and on international markets (see Chart 3.a).[6] However, food commodity prices in the European Union (EU) may be different from those traded on international markets, mainly because the EU's role in international trade differs depending on the food group. For example, the EU does not produce coffee or cocoa and sources them on the international markets. Therefore, the prices of these products within the EU move almost in step with international prices. By contrast, the EU produces foods such as cereals, dairy products, meat and olive oil in larger quantities than it can consume internally, which can cause differences between the prices of these products in the EU and their international prices, although they are strongly correlated amid global competition in exporting surpluses.[7] Chart 3.a shows that for many food commodities prices have grown more in the EU than on international markets. This could be explained by high energy costs in the EU, which influence, for example, fertiliser prices, and by different food production regulations.[8]

Higher costs in food commodities have been passed through to food producer prices, which soared between 2019 Q4 and 2024 Q4. By geographical area, these increases were greater in

3 Associated with rising oil, gas and fertiliser prices since the onset of the war in Ukraine.

4 By way of example, Spain and most of Europe experienced severe droughts in 2022 and 2023. Water shortages appear to have severely affected agricultural output and, therefore, food supply in those years (Molina and Pacce, 2025).

5 According to the World Trade Organization (2023), 2022 saw an increase in the number of countries that implemented restrictions on food and fertiliser exports in response to the rising prices of certain foodstuffs so as to ensure domestic supply and to contain inflationary pressures. These measures reduced global supply and drove up international prices.

6 By way of example, the rise in coffee and cocoa prices is closely linked to the fall in production due to droughts and pests (World Bank, 2024). In the case of coffee, there were also logistical issues, which raise transport costs and impact final prices (International Coffee Organization, 2024).

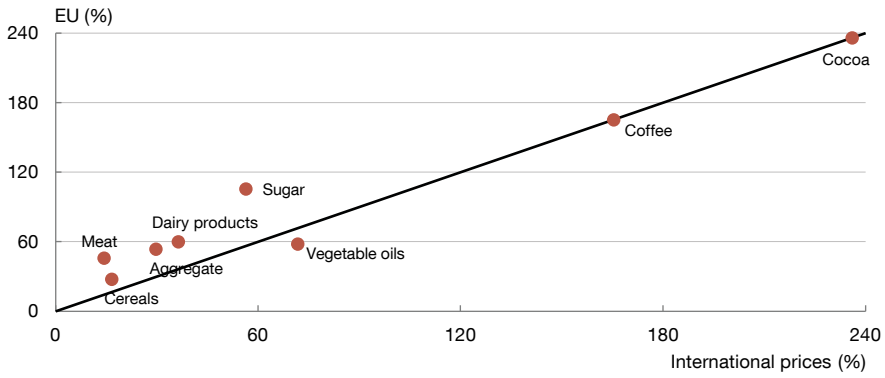
7 For a wider picture of the role of production and imports on food supply in the EU and Spain, see Cuadro-Sáez, Pérez and Viani (2025).

8 For example, the environmental standards of the European Green Deal of 2020, with regard to reducing the use of pesticides and promoting sustainable agricultural practices, could be a factor. In this regard, according to European Commission (2024), the EU's agricultural production is expected to grow more slowly than in the past and even decline for most animal products because of compliance with environmental and climate regulatory requirements, in addition to other factors such as the climate, access to finance and potential labour shortages.

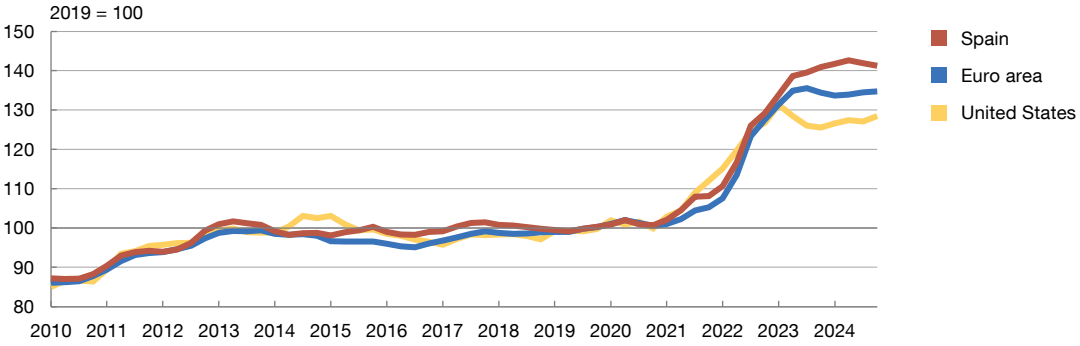
Chart 3

Food commodity prices, producer prices and consumer prices across geographical areas

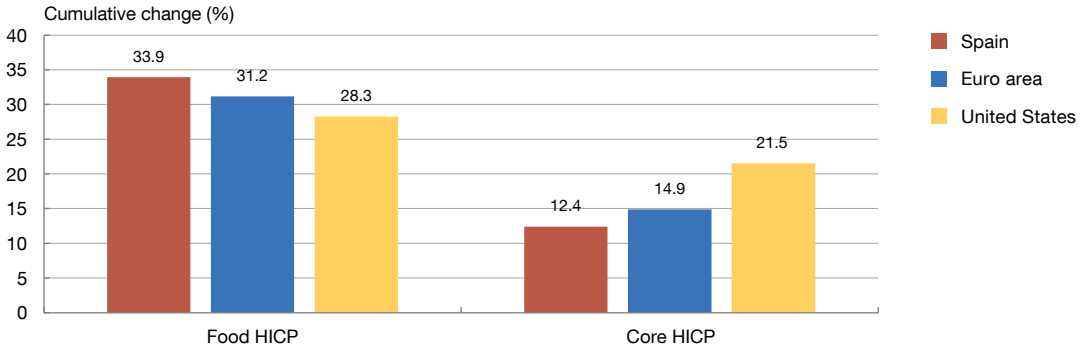
3.a Food commodity prices. Cumulative increase between 2019 Q4 and 2024 Q4 (a)



3.b Producer price index: food manufacturing



3.c Rise in food and non-food consumer prices between 2019 Q4 and 2024 Q4



SOURCES: Eurostat, FAO, World Bank, INE and Banco de España. Latest data: December 2024.

a See Cuadro-Sáez, Pérez and Viani (2025).

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Spain (40.9%) than in the euro area (34.5%) and the United States (28.9%) (see Chart 3.b). Various factors may be behind the differences between the euro area and the United States, including the above-mentioned divergence in food commodity prices and, mainly, the higher energy costs in the euro area that have hit the European industry harder. For example, while natural gas prices in the United States rose by 1.5% between 2019 Q4 and 2024 Q4, in Europe they rose by a cumulative

174%. Meanwhile, up to end-2024 the cumulative increase in fertiliser producer prices was smaller in the EU (45%) than in the United States (54%), although in the EU prices rose more sharply up to end-2022, when the cumulative increase amounted to 143% versus 103% in the United States.

Differences in the composition of the HICP basket of goods between Spain and the euro area

The increase in food production costs has affected food consumer prices, rising by 33.9% in Spain, 31.2% in the euro area and 28.3% in the United States between 2019 Q4 and 2024 Q4 (see Chart 3.c). In parallel, the cumulative increase in core HICP was considerable but not as sizeable as in the case of food. The order is also inverted (21.5% in the United States, followed by 14.9% in the euro area and 12.4% in Spain). This uneven behaviour is reflected in the notable increase in food prices relative to core HICP discussed earlier (see Chart 2.a).

To explain the differing size of the increase in relative food prices between the euro area and Spain, the differences arising from the composition effect in the consumption baskets between both areas can be analysed.[9] For instance, the prices of a component of the food basket may have grown similarly in the euro area and Spain, but the impact on the food price index will depend on the weight of that component in the food consumption basket. As an example, between 2019 Q4 and 2024 Q4 olive oil prices grew by 139% in Spain and by 102% in the euro area, but olive oil's weight in Spain's consumption basket is three times greater than in that of the euro area (0.6% versus 0.2%). Thus, the contribution of olive oil to cumulative inflation during that period was 0.8 percentage points (pp) in Spain and 0.2 pp in the euro area. To isolate these composition effects, we can calculate Spain's counterfactual food HICP and core HICP under the assumption that the weights of the food sub-groups in Spain's consumption basket were the same as in the euro area's. Based on this exercise, the difference in relative food prices between Spain and the euro area since mid-2022 would decrease to a practically negligible level (see Chart 4). In summary, the difference in the composition of the consumption basket between Spain and the euro area explains most of the differences observed in relative food prices.

Conclusions

In recent years the increase in food prices has been highly persistent and has, overall, been greater than that seen in other goods in the consumption basket. Several factors point to food prices potentially remaining high in the medium term. In their warnings, the FAO and the World Bank have linked such increases to climate-related factors,[10] geopolitical tensions and trade policies.[11] These factors may alter global supply and demand, affecting food security.

9 For a detailed explanation of the composition effect, see Borrallo, Cuadro-Sáez, Pacce and Sánchez (2023).

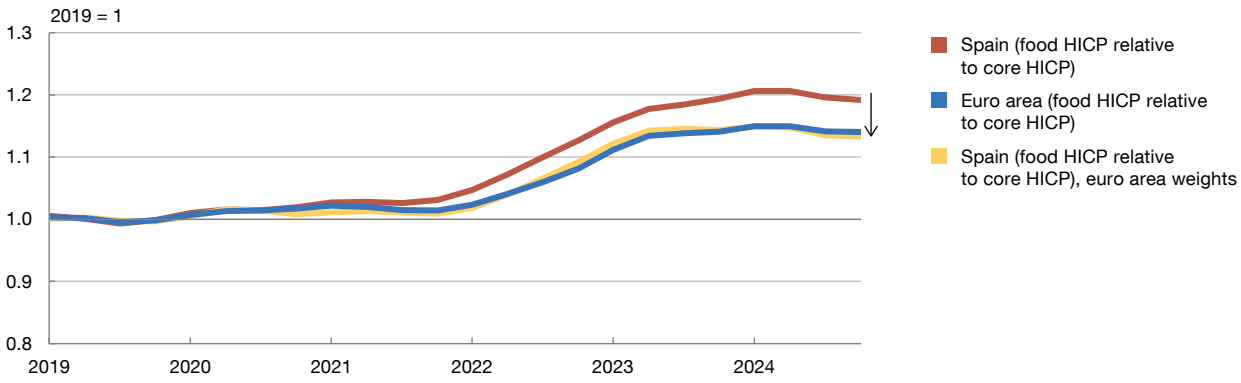
10 Certain factors, such as climate-related ones, may have a temporary impact on inflation. However, the evidence suggests that food commodity price shocks are transmitted asymmetrically, with more significant effects when prices rise than when they fall (Ferrucci, Jiménez-Rodríguez and Onorante, 2012).

11 World Bank (2024) and FAO (2024).

Chart 4

Explanation of the difference in the size of the increase in relative food prices between the euro area and Spain

4.a Food HICP relative to core HICP: composition effect (a)



SOURCE: Banco de España. Latest data: 2024 Q4.

a "Food" refers to ECOICOP Division 01. Core HICP is defined as headline HICP excluding energy and food. Six-month moving average. Base year: 2019.

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The increase in relative food prices leads to a shift in household spending from other items to food. This generates more adverse effects for lower-income households, which spend proportionally more on food than other households in comparative terms.[12] This effect would be compounded by higher relative food prices persisting over a prolonged period.

Monitoring food price developments is essential for monetary policy, as this component is key to the formation of household inflation expectations, due to the high frequency of food spending[13] and food's significant weight in the consumption basket.

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12 Basso, Dimakou and Pidkuyko (2022).

13 Cavallo, Cruces and Perez-Truglia (2017) find evidence that agents attach considerable importance to supermarket prices when forming their inflation expectations, even when information on inflation statistics is available.

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