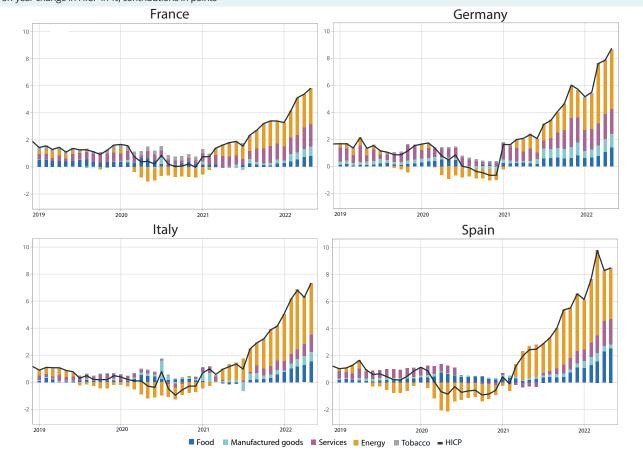
In the main Eurozone economies, energy remains the primary factor of inflation, but with differences between countries

At the beginning of 2022, inflation continued to rise sharply in the main Eurozone economies. In May 2022, the Harmonised Index of Consumer Prices (HICP) thus increased by 8.7% year-on-year in Germany, 8.5% in Spain, 7.3% in Italy and 5.8% in France. In these four countries, the rise in the price of energy remained the main contributing factor, both to the high level of inflation reached in May and to its upward momentum for more than a year. In recent months, however, the momentum of food inflation has also contributed significantly to the rise in headline inflation. There can be several reasons for inflation differentials between countries, for example, the household consumption structure, the way prices are fixed, especially energy prices, the economic policy measures taken to support household purchasing power, etc.

Amplified by the outbreak of war in Ukraine, rising energy prices remain the major contributor to inflation in the main Eurozone economies

The outbreak of war in Ukraine, in late February, resulted in a sharp peak in the contribution of energy to inflation in March, in the four main Eurozone economies (6.3 points in Spain, 4.5 points in Italy, 4.3 points in Germany and 2.8 points in France, Figure 1). Energy inflation then fell back in April then rose again only slightly in May in all four countries, while remaining the main contributor to the year-onyear HICP.

The differences in energy contributions to inflation in the various countries account for a large proportion of the differences in headline inflation. They may result from the different weights of energy in household consumption and the momentum of prices in each of the countries considered.



► 1. Breakdown of year-on-year change in the HICP in the four main Eurozone economies year-on-year change in HICP in %, contributions in points

How to read it: in France, in May 2022, harmonised inflation was 5.8% year-on-year and food contributed 0.8 points. Last point: May 2022. Source: Eurostat, INSEE calculations

International economic outlook

By way of illustration, the structure of consumption of France was used to simulate changes in the HICPs in Germany, Italy and Spain, while maintaining for these countries the price dynamics of the different items at a detailed level (> Box). These differences in weighting, for example, result in a differential of almost one percentage point between Spanish inflation and French inflation, with energy and food accounting for this difference equally.

Within the "energy" sub-sector of the HICP (**Figure 2**), as well as the weightings, recent price dynamics may differ between countries, creating differences that may be due to price fixing methods and household support policies put in place in recent months.

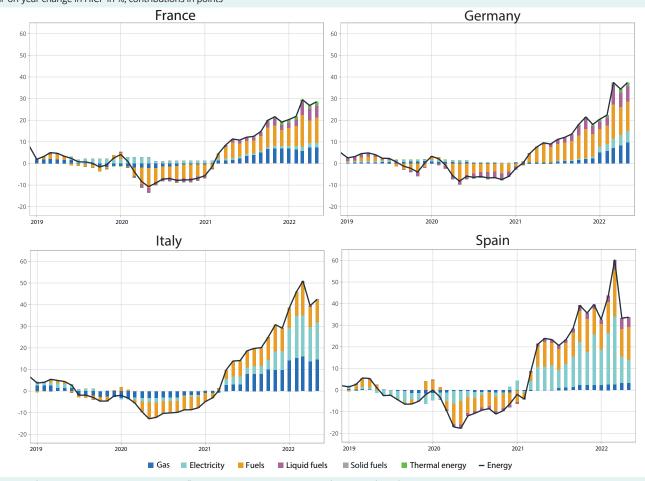
Electricity accounts for a large proportion of the differences in the contribution of energy to inflation in the four countries. The contribution of electricity is smallest in France, because of the introduction of the "tariff shield" last autumn. Conversely, the contributions of electricity are very large in Italy and Spain where tariffs are not capped and are regularly updated. Thus the consumer price of electricity reflects the producer price fairly accurately. The fall in gas prices on the European market in April can therefore be clearly seen in the change in the contribution made by electricity.¹

Concerning fuel, France, Italy and Spain implemented reductions on the price per litre of petrol in April. In Germany, this reduction did not come into force until the beginning of June, which explains the stronger momentum of fuel prices in April and May.

Inflation has also spread to food, manufactured goods and services

In France, Italy and Spain, the HICP for food has been rising steadily since the end of 2021. There was a sharp rise in Italy and Spain, resulting in an increase of +7.3% and +10.7% in food prices year-on-year in May (**> Figure 3**). The situation is more contained in France

1 As a reminder, the price of electricity does not correspond to the average cost of electricity produced in each country but to the variable cost of production of marginal units of the electricity mix for all energy traded between European market players. At the moment it is mainly the price of gas that determines the price of electricity.



▶ 2. Breakdown of changes in the "energy" sub-index in the four main Eurozone economies year-on-year change in HICP in %, contributions in points

How to read it: in France, in May 2022, energy inflation was 28.6% year-on-year and gas contributed 7.3 points. Last point: May 2022. Source: Eurostat, INSEE calculations

International economic outlook

with a year-on-year increase of +4.3%. In Germany, after a substantial rise in H1 2020, food inflation was relatively stable until March² but rose very sharply in April (+7.1%) and May (+9.4%). Food therefore makes an important contribution to the total HICP for May, especially in Italy and Spain where the sharp rise in prices is combined with a greater weight for this aggregate in household consumption (**> Figure 5**).

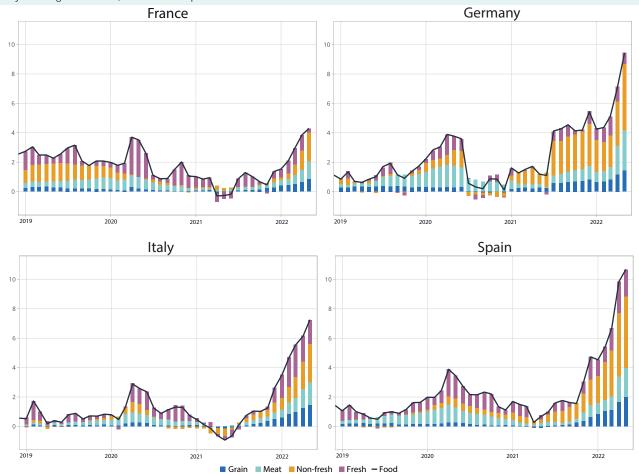
In the four countries considered, cereals and meat were the most dynamic products in terms of price. However, increases in consumer prices of non-fresh food goods remain, at this stage, below the levels of production price increases in the agrifood industry. In April, these agrifood production prices reached +17% year-onyear in Germany, +15% in Spain and +13% in France. The smallest increases were seen in France, which is consistent with a weaker increase in the HICP for nonfresh food. Increases in production prices seem to impact consumer prices more quickly in Spain.

Regarding manufactured goods, they made a sizeable contribution to inflation in May in Germany (+1.0 point), where it was driven by a strong increase in vehicle selling prices (+9% year-on-year). The contribution of these products to headline inflation was less in France (+0.7 points), Italy (+0.7 points) and Spain (+0.3 points).

Finally, changes in the prices of services may seem more moderate in comparison with other products. However, their contribution to inflation in the different countries is of some significance, given their considerable weight in household consumption. It is difficult to find a single allencompassing reason for differences between countries in the contribution of services. This aggregate includes a wide variety of services and the most dynamic subcomponents differ from one country to another.

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2 Apart from the price shocks introduced by the reduction in VAT implemented in July 2020 and abolished in January 2021, of which the effect on year-onyear change in the HICP was felt automatically until January 2022.



► 3. Breakdown of changes in the "food" sub-index in the four main Eurozone economies year-on-year change in HICP in %, contributions in points

How to read it: in France, in May 2022, food inflation was 4.3% year-on-year and cereals contributed 0.8 points. Last point: May 2022 Source: Eurostat, INSEE calculations

Inflation differentials between France and its neighbours are partly the result of the composition of the HICP basket of goods and services

In each country, headline inflation (> Figure 4) results from changes in prices for the different consumer items, but also from the structure of household consumption. This structure can differ from one country to another (> Figure 5).

To assess the impact of the composition of the HICP basket of goods and services on inflation differentials between countries, the year-on-year change in the total HICP was simulated for Germany, Italy and Spain, by replacing for illustrative purposes the consumption structure of each country, at a detailed level, with the French structure.¹ **Figure 6** shows the differences between this simulated inflation with the French consumption basket and the inflation actually measured in each of the three countries considered.

The composition of the HICP basket thus appears to be a relatively important explanatory factor for the inflation gap between France and Spain: with an identical basket of goods and services to France, Spanish inflation in May 2022 would be 0.9 points lower than inflation measured in this country. This represents a third of the inflation gap between the two countries. In particular, almost half of what is accounted for by the consumption structure is due to fuels: the shift in fuel prices was broadly similar in Spain and France, in April 2022, but Spain differs as the weight of fuel in its consumer basket is greater than in France.

The effect of the consumption structure is zero overall for Italy compared to France. In Germany, the composition of the basket contributes moderately to the inflation differentials with France: the simulation with the French basket gives an inflation 0.2 points lower than its true value. Nevertheless, at a more detailed level, the contrasts can be even greater. In particular, German inflation would be 0.8 points lower if the composition of Germany's energy basket alone were identical to that of France: the reason is the greater weight of gas and fuel oil in the German basket.

▶ 4. Headline inflation (annual change in HICP) in the four main Eurozone economies in April 2022 and contributions by consumption item year-on-year change in HICP in %, contributions in points

	France		Germany		Italy		Spain	
	y-o-y change (%)	Contribution (in points)						
Food	4.3	0.8	9.4	1.4	7.3	1.5	10.7	2.5
of which fresh	1.9	0.1	5.1	0.1	8.5	0.3	8.9	0.4
of which non-fresh (including meat,cereals)	4.0	0.4	8.2	0.7	6.0	0.6	11.4	1.1
Tobacco	-0.1	0.0	4.3	0.1	0.2	0.0	2.3	0.0
Manufactured products	4.2	0.7	5.6	1.0	3.3	0.7	1.5	0.3
of which sale of vehicles	4.8	0.2	9.1	0.4	4.4	0.2	6.5	0.2
Energy	28.6	2.7	37.4	4.3	42.5	3.8	33.7	3.8
of which gas	49.2	0.7	38.7	1.1	62.3	1.3	23.0	0.3
of which electricity	6.5	0.2	21.5	0.6	73.4	1.5	30.2	1.4
of which fuels	29.6	1.1	40.6	1.6	20.4	0.9	29.2	1.6
Services	3.1	1.7	3.4	1.8	2.8	1.3	4.1	1.9
of which housing (including rents)	1.6	0.2	2.7	0.5	1.5	0.1	2.1	0.2
of which transport	9.5	0.2	3.6	0.1	14.1	0.2	2.0	0.0
of which recreation and culture	2.8	0.2	4.8	0.5	1.0	0.1	3.0	0.2
of which communications	0.4	0.0	0.3	0.0	-3.6	-0.1	-0.2	0.0
of which restaurants and hotels	5.1	0.4	7.1	0.3	6.1	0.6	7.9	1.1
Total inflation (in %)	5.8		8.7		7.3		8.5	

How to read it: in France, in May 2022, food inflation was 4.3% year-on-year and the contribution of food to harmonised inflation was 0.8 points. Source: Eurostat, INSEE calculations

1 If an HICP item is present in the French basket of goods and services but not in that of another country, it is assigned a price change of 0% and its contribution is therefore zero.

► 5. Weight in the HICP of the different aggregates and some of their components in the four main Eurozone economies in 2022 weight in %

19	15		
	15	21	23
3	2	4	5
16	13	17	18
2	2	2	2
16	18	23	18
4	4	4	3
10	12	10	12
2	3	2	2
3	3	2	4
4	4	5	6
53	53	45	46
11	17	7	8
2	2	2	1
8	10	6	5
3	3	3	3
7	4	10	14
100	100	100	100
	16 2 16 4 10 2 3 4 53 53 11 2 8 3 3 7	161322161844101223334453531117228103374	1613172221618234441012102323324455353451117722281063337410

Source: Eurostat, INSEE calculations

► 6. Difference between inflation simulated in Germany, Italy and Spain by applying an identical consumer basket to that of France, and the inflation actually measured in these countries in April 2022 Contribution differential (in points)

	Difference in contribution (in points)			
	Germany	Italy	Spain	
Food	0.4	-0.2	-0.5	
of which fresh	0.1	-0.1	-0.1	
of which non-fresh (including meat,cereals)	0.1	-0.1	-0.2	
Tobacco	0.0	0.0	0.1	
Manufactured products	-0.1	-0.2	0.2	
of which sale of vehicles	-0.1	0.0	0.0	
Energy	-0.8	0.3	-0.4	
of which gas	-0.4	-0.4	0.1	
of which electricity	0.1	0.6	-0.1	
of which fuels	-0.1	-0.2	-0.5	
Services	0.3	0.0	-0.2	
of which housing (including rents)	-0.1	0.1	0.1	
of which transport	0.0	0.1	0.0	
of which recreation and culture	-0.1	0.0	0.0	
of which communications	0.0	0.0	0.0	
of which restaurants and hotels	0.2	-0.2	-0.5	
Difference inflation (in point)	-0.2	0.0	-0.9	

How to read it: in May 2022, in Germany, the year-on-year change in HICP would have been 0.2 points lower if the German consumer basket had been identical to the French basket. The contribution of energy inflation to headline inflation would have been 0.8 points lower. *Source: Eurostat, INSEE calculations*