

3.2. Food and energy household expenditures in Greece: General price trends and their relative weight on household budgets

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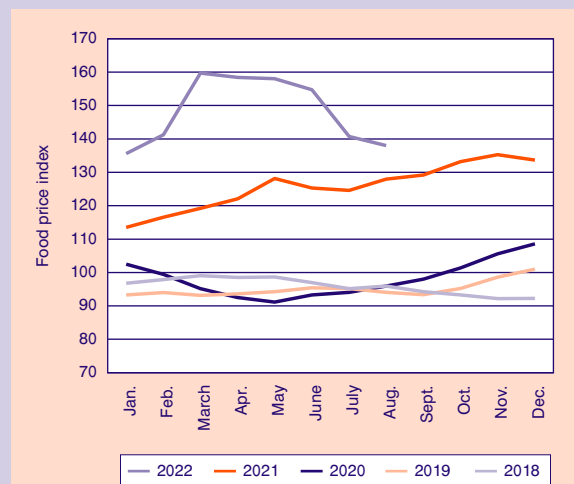
Global commodity price hikes that have been documented during 2022¹ have mostly affected a series of basic categories which concern products included in the daily consumption bundle that are necessary for the maintenance of minimum living standards. Among them, the cost of food and that of energy (household heating and lighting) are considered of utmost importance. The government measures of social distancing and the lockdowns authorized against the spread of COVID-19 did not go without problems. International supply chains were disrupted, causing the cost of international transportation to rise significantly, whereas a new series of price increases began immediately after the start of the war in Ukraine. The effects of such a sequence of overlapping events (economic crisis, pandemic and geopolitical tension) on the cost of living are more than apparent, not only in Greece, but also in the rest of the European Union.

A complete evaluation of the relative shares of contribution concerning the parameters causing inflationary pressures on consumer prices is a complex issue that requires the examination of a wide range of heterogeneous factors.² For example, the Food and Agriculture Organization (FAO) of the United Nations has warned of the multiple risks that emerge from the widespread droughts and the consequent limitation of arable lands, in contradistinction with the rising needs in food supplies.³ Among others, the FAO has reported on the

pre-War in Ukraine tendency of the cost of food to rise. Moreover, the close production linkages between the food and energy sectors (the products of the latter are considered as inputs to the former) create additional pressures towards price inflation.

Figure 3.2.1 depicts the monthly changes of the complex *food price index* published by the FAO for the period between 2018 (January) and 2022 (August). The index is based on calculations over a weighted average bundle, including five different groups of commodities (cereals, meat, sugar, dairy and vegetables). Obviously, the price tendency to increase has already been apparent from the second semester of 2020. Moreover, price increases were preserved throughout 2021 and escalated during 2022. In addition to food, energy (oil, coal, natural gas) prices have also been marked by increasing pressures, the exact quantification of which is a very complex process due to their markets' high var-

FIGURE 3.2.1
Food price index, Food and Agriculture Organization, monthly data, 2018-2022



Source: Food and Agriculture Organization. <<https://www.fao.org/worldfoodsituation/foodpricesindex/en/>>

1. See Commodity prices soar to highest level since 2008 over Russia supply fears, *Financial Times*, by Neil Hume, Tom Wilson & Emiko Terazono, 3 March 2022. <<https://www.ft.com/content/5753f4dd-1e8e-4159-a4e4-d232e4ad50ed>>

2. See How bad will the global food crisis get?, *Financial Times*, Chelsea Bruce-Lockhart & Emiko Terazono, 27 July, 2022. <<https://www.ft.com/content/e44db6b3-7266-4188-8d08-79d678a61146>>

3. See FAO. 2022, *The State of the World's Land and Water Resources for Food and Agriculture – Systems at breaking point. Main report*. Rome. <<https://doi.org/10.4060/cb9910en>>

iations.⁴ The persistent tendencies towards commodity price increases reflect several kinds of differentiated occasions, while they are indicative of the documented pressures on the cost of living and the household budgets.

Be that as it may, the tables and figures below present some of the main results from the microdata of the Household Budget Surveys (HBS) for Greece. Comparisons are made between the 2008 and 2020 surveys – the latest available to the public at the time the present article was written. HBS are sample surveys conducted annually by ELSTAT and refer to the private expenditures made by a great number of households, ordered in twelve different categories, each divided into many sub-categories. In general, from 2008 to 2020, the HBS documents a significant drop of the average monthly expenditures from €2,120.40 to €1,331.83 (estimated to 37.2%). During the years, the decreasing

rate of average household expenditures was not continuous, but it went through a short period of moderate increase (2016-2019). However, consumption inequality that was magnified during the period of deep recession was not counterbalanced.⁵

Among the changes documented by the HBS, an important one refers to the average level of food and energy expenditures as a percentage of overall household expenses. Tables 3.2.1 and 3.2.2 present the percentage share of these categories for a variety of different types of households, ordered by income quintile. The allocation of the overall number of households into income groups aims at emphasizing the differentiated responses that exist between them against the surge of the price level. This multiplicity of the different characteristics (income and demographic) of the households seems to constitute an important parameter that affects their behavior.

TABLE 3.2.1 Food as a percentage of overall household expenditures, per household type and income quintile, 2008 and 2020

Household type	Income quintiles											
	1st		2nd		3rd		4th		5th		Total	
	2008	2020	2008	2020	2008	2020	2008	2020	2008	2020	2008	2020
Single member	21.6%	26.8%	14.4%	23.6%	13.5%	19.3%	12.4%	15.5%	7.2%	15.2%	17.1%	23.1%
Two adults	27.1%	29.5%	23.7%	30.3%	19.0%	27.1%	15.6%	23.7%	12.3%	21.1%	19.5%	25.6%
More than two adults	21.4%	31.3%	21.9%	28.0%	19.6%	26.7%	18.6%	26.6%	14.3%	22.8%	17.1%	25.0%
One adult with dependent member	18.5%	26.1%	18.8%	20.6%	14.3%	19.0%	15.2%	20.2%	13.8%	16.8%	15.8%	20.8%
Two adults with dependent members	21.2%	27.4%	19.4%	28.0%	17.7%	25.1%	15.4%	23.3%	12.0%	19.5%	15.3%	22.6%
More than two adults with dependent members	27.5%	33.4%	22.5%	31.7%	18.9%	31.8%	20.0%	26.5%	14.0%	22.8%	17.1%	25.3%
Total	23.6%	27.7%	20.9%	27.1%	18.2%	25.0%	16.8%	23.8%	12.9%	20.8%	16.8%	23.9%

Source: ELSTAT, Household Budget Survey, author's calculations.

4. A widely used index for tracking international prices of energy commodities is the S&P GSPI, according to which prices have been heading upwards very rapidly since April 2020. In addition, the *fossil fuel index*, which is published by Our World in Data (<https://ourworldindata.org/grapher/fossil-fuel-price-index>), shows a data series of average prices, depicting that inflation pressures were already at work during the period 2019-2021.

5. See Kaplanoglou G. 2022, Consumption inequality and poverty in Greece: Evidence and lessons from a decade-long crisis, *Economic Analysis and Policy* 75, 244-261. <<https://doi.org/10.1016/j.eap.2022.05.003>>

TABLE 3.2.2 Energy as a percentage of overall household expenditures, per household type and income quintile, 2008 and 2020

Household type	Income quintiles											
	1st		2nd		3rd		4th		5th		Total	
	2008	2020	2008	2020	2008	2020	2008	2020	2008	2020	2008	2020
Single member	7.2%	12.0%	4.8%	10.1%	5.1%	8.1%	4.3%	6.9%	2.7%	4.9%	5.8%	10.0%
Two adults	8.8%	11.2%	8.0%	12.5%	6.3%	10.2%	5.1%	8.8%	4.2%	6.9%	6.5%	9.6%
More than two adults	6.9%	10.3%	6.5%	9.0%	6.1%	9.4%	5.2%	8.0%	4.2%	6.7%	5.0%	7.7%
One adult with dependent member	6.0%	7.1%	3.9%	6.1%	4.2%	5.5%	4.9%	5.7%	3.4%	4.4%	4.4%	5.9%
Two adults with dependent members	6.2%	8.2%	5.4%	7.6%	4.8%	7.4%	4.0%	6.3%	3.1%	5.3%	4.1%	6.2%
More than two adults with dependent members	8.6%	11.0%	6.2%	7.7%	5.2%	11.0%	5.2%	7.3%	4.0%	6.5%	4.7%	7.3%
Total	7.6%	11.0%	6.4%	9.9%	5.4%	8.7%	4.6%	7.4%	3.7%	6.0%	4.9%	7.9%

Source: ELSTAT, Household Budget Survey, author's calculations.

Table 3.2.1 shows the share of food expenditures, as a percentage of the overall household expenses. In the case of the first quintile, the greatest increase is documented for households comprised by more than two adults (9.9 percentage points, p.p.). Among those belonging to the second quintile, the most important relative change occurs at the single-member (9.3 p.p.) and at the multiple-membered households (more than two adults with dependent members, increase by 9.2 p.p.). In those of the third quintile, the most important increase is estimated for the case of the last type (by 12.2 p.p.). Moreover, in households belonging at the fourth quintile, the highest increase is calculated for the single-parent households (by 8 p.p.) and for those having more than two adults (by 8.1 p.p.). Lastly, among the households belonging at the highest, fifth, quintile, the most important change has been documented in households having more than two adults (8.8 p.p.) and in the those having more than two adults along with dependent members (8.8 p.p.).

Furthermore, Table 3.2.2 depicts the energy costs for heating and lighting purposes as a percentage of the overall household budget. Among the households that belong to the first and second income quintiles, the

most important relative change is documented for the single-member ones, 4.8 p.p. and 5.3 p.p. respectively. Among those households in the third quintile, those most affected by the higher prices seem to be those having more than two adults with dependent members (5.8 p.p.). Lastly, among the households of the fourth and fifth quintiles, the biggest change is documented for those with two adults, 3.7 p.p. and 2.7 p.p. respectively.

The two tables show that the household budgets have unequally adjusted to the inflationary pressures that have been gradually evolving from the first quarter of 2020. Figure 3.2.2 gathers both consumption categories together, showing the relative change of their share as a percent of the overall household budget. The price increases that took place between 2008 and 2020 have changed the composition of the household consumption bundle and the general profile of the poorest group. HBS documents that the percentage shares of households have increased by 10 p.p. Nevertheless, the needs of each household type differ, and those belonging to the poorest groups seem to devote at least one-third of their total expenditures to food.

FIGURE 3.2.2

Average share of food and energy as a percentage of total household expenditures, 2008 and 2020

