Overview of Food Prices

Recent Trends at Global, European and National Levels



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Global Situation

Global Food Commodity Prices

The UN Food and Agriculture Organization (FAO) Food Price Index monitors changes in global food commodity prices. It is based on the average of five major commodity groups: meat, dairy products, cereals, vegetable oils, and sugar, weighted by the average export shares of each of the groups. The Meat Price Index is based on export prices from 10 representative markets for the four meats: bovine, pig, poultry, and sheep, weighted by

their export shares. The Dairy Price Index is based on two representative export markets for four products: butter, cheese, SMP, and WMP. Similar compilation systems apply for the other indices. The index has a base of average 2014-2016 prices =100.

As the following summary table shows, global food commodity prices are currently quite strong. Prices increased strongly during 2021, except for meat prices which were stable in the second half of 2021. Prices have continued to increase in 2022.

Global Food Price Index (Average 2014-16 = 100)

	2015	2020	2021	Dec 21	May 22	May 22 / 2020
Meat price	96.7	95.5	107.7	111.0	122.0	+27.5%
Dairy price	87,1	101.8	119.1	129.0	141.6	+39.4%
Cereals price	95.9	103.1	131.2	140.5	173.4	+68.2%
Veg oil price	89.9	99.4	164.9	178.5	229.3	+130.7%
Sugar price	83.2	79.5	109.3	116.4	120.3	+51.3%
All food price	93.0	98.1	125.7	133.7	157.4	+60.4%

(FAO)

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The previous table shows three fairly distinct trends in global food prices.

First, while global food prices were relatively stable up to, and including, 2020, significant increases took place in 2021. The overall index increased by 28% between 2020 and 2021. This was caused by a combination of three factors: post-COVID economic recovery, shortages of transport infrastructure, and higher transport costs.

Second, in the five months from January to May 2022 the Food Price Index increased by 18%. The May price is over 60% higher than average 2020 prices. This recent increase is linked to the fallout from the invasion of Ukraine at a time when global prices are already strong.

Third, at a sectoral level, the highest price increase has been for vegetable oils; this has been dramatic in a short space of time. The next highest price increase has been for cereals, followed by dairy products. Meat price increases have been less extreme, moderated by low pig-meat prices in particular. (The sugar price increase largely reflects the low price in the base year).

Agricultural Exports from Ukraine and Russia

FAO data sets out the major exporters of <u>food commodities</u> in 2021 in declining order by country as follows¹:

Wheat: Russia (18% of global exports), US, Canada, Australia, Ukraine (10%).

<u>Barley</u>: Australia (18%), Ukraine (14%), Russia (12%), Canada, France.

Maize: US (38%), Argentina, Ukraine (10%), Brazil.

<u>Sunflower oil</u>: Ukraine (38%), Russia (26%), Argentina.

Rapeseed oil: Canada (46%), Russia (10%).

Rapeseed: Canada (48%), Australia, Ukraine (16%).

Data is also provided on major exporters of <u>fertilisers</u> as follows:

<u>Phosphate (P) fertilisers</u>: China (24%), Russia (15%), Morocco, US.

<u>Potassium (K) fertilisers</u>: Canada (34%), Russia (18%), Belarus (12%).

<u>Nitrogen (N) fertilisers</u>: Russia (16%), China (10%). (Also, natural gas, including Russian exports, is a major ingredient in Nitrogen fertilisers).

<u>Ukraine exports for the 2021/22</u> (July/June) marketing year have been disrupted by the war, including the impact on the Black Sea. The capacity of Ukraine farmers to sow and harvest crops for the <u>2022/23</u> year is influenced by the war. However, the degree of loss is not possible to quantify at this stage.

Global Energy Prices

In parallel with higher food commodity prices, energy prices have increased substantially during 2021. That trend has continued in 2022, as the following table shows.

Trends in Global Energy Prices

	2019	2020	2021	Dec 21	Feb 22	May 22
Crude oil, average, \$/bl.	61.4	41.3	60.1	72.4	95.8	112.4
Natural gas, Index (2010 = 100)	61.1	45.5	130.7	235.5	197.5	252

(World Bank Commodities Price Data)

¹ The data below includes the percentages for the largest exporter in each category and, where applicable, the percentages for Russia, Ukraine, and Belarus.

EU Situation

The most recent data from Eurostat on the Harmonised Index of Consumer Prices for the year to April shows overall average inflation in the EU at 7.4%; the food and non-alcoholic drink prices component increased by 6.3%, and the energy prices component increased by 37.5%. The estimated overall inflation rate for the year to May is 8.1%.

On 9 June 2022, the European Central Bank announced its strategy in response to rising inflation. The ECB will end bond purchases on 1 July and increase interest rates by 0.25% later in the month, with a similar or higher rate rise in September. Its objective is to prevent the recent price rises, driven by high energy and food prices and the war in Ukraine, growing into a wage-price spiral that would be difficult to unwind.

European Commission Analysis of Agrifood Supplies and Prices

The European Commission published its <u>"Short-term Outlook for EU Agricultural Markets, 2022"</u> on 5 April. The Commission overview is as follows:

The Russian invasion of Ukraine significantly disrupted global agricultural markets, creating more uncertainty regarding the future global availability of grains and oilseeds, and adding a layer of instability to already tense markets. It raises fundamental food security concerns, as well as systematic concerns regarding EU dependency on feed and fertiliser imports, in particular from Ukraine, Russia and Belarus.

The availability of food, feed and fertiliser is not a primary concern in the EU regarding this year and the next cereals marketing year (2022/23). The EU is largely self-sufficient in food, with a massive agri-food trade surplus, and the EU Single Market can be expected to prove once again its role in absorbing shocks. There are nevertheless concerns regarding affordability due to high market prices and inflationary trends.

As regards the outlook for specific EU agriculture markets, the two most immediately affected by the war in Ukraine are cereals and oilseeds.

For <u>cereals</u>, assuming "normal" weather in the 2022 growing season, the Commission forecasts a 1.5% increase in production to 297 million tonnes. When this is combined with an expected reduction of 1.1% in animal feed (due mainly to lower pig production), EU net exports of cereals are forecast to increase by 11.5 million tonnes to over 41 million tonnes. The statistical annex to the Commission report shows that about 19% of cereals in the EU are for human consumption; the main use is for animal feed.

Oilseeds (rapeseed, sunflower and soyabeans) are used to produce vegetable oils for human consumption, and the residual components (oilmeals) are used as high-protein meal for animal feed. High prices last year, and again in 2022, are likely to result in higher production in both the EU and in many other regions. In recent years, the EU has been about 62% self-sufficient in oilseeds, requiring annual imports of about 19-20million tonnes. The EU also imports about 19 million tonnes of oilmeals annually. Total EU oilseed production is expected to increase in 2022 by 6.4%, reaching 32.2 million tonnes. The Commission does not seem to be too concerned about replacement of past imports from Ukraine. Rather, the dominant issue is price.

EU Policy Response

On 23 March 2022, the European Commission published a broadly focussed communication: "Safeguarding food security and reinforcing the resilience of food systems". As regards EU farm production, there are two main measures discussed in this communication. First,a €500 million support package for farmers most affected by higher input costs and the closure of export markets. Second, a temporary derogation to allow production of any crop for food or feed purposes on fallow land in order to enlarge the EU's production capacity. The Commission also notes that future strategy on the Common Agricultural Policy (CAP) to apply from 2023 onwards must include measures to reduce dependence on inputs such as fertilisers, energy, and pesticides, without undermining productivity.

Situation in Ireland

Ireland's Agricultural Economy

Ireland's Central Statistics Office (CSO) publishes monthly data on the trend in both agricultural output prices and agricultural input prices. The most recent publication relates to April 2022 prices. The following table on output prices covers the main sectors.

The table shows that output prices were broadly stable up to 2020. However, prices increased for the majority of sectors during 2021 and that trend has continued in 2022. The largest price increases were for milk, followed by cereals and cattle. The major exceptions are pig prices, which have fallen, and poultry prices, which have been broadly flat.

Agricultural Output Price Index (2015 = 100)

	2015	2020	2021	Dec 21	Apr 22	Apr 22 / 2020
Cattle	100	92.6	104.7	108.6	124.7	+34.7%
Milk	100	109.9	127.4	145.5	173.2	+57.6%
Pigs	100	118.2	106.9	99.1	113.1	-4.3%
Sheep	100	109.4	133.2	147.5	136.2	+24.5%
Poultry	100	100.3	100.7	103.9	104.0	+3.7
Cereals	100	111.6	131.7	134.3	154.5	+38.4%
All Output	100	104.0	115.9	124.6	141.1	+35.8%

(CSO)

From the perspective of producers, output price trends must be assessed relative to input prices. Recent input prices are shown in the following table.

Agricultural Input Price Index (2015 = 100)

	2015	2020	2021	Dec 21	Apr 22	Apr 22 /2020
Feedstuffs	100	108.3	119.5	128.4	147.3	+36.0%
Fertilisers	100	81.3	101.8	147.7	250.8	+208.5%
Energy	100	98.0	112.9	127.4	152.5	+55.6%
Plant Protection Products	100	104.1	104.9	105.3	130.2	+25.1%
Veterinary	100	109.0	110.3	110.3	113.4	+4.0%
All Inputs	100	102.2	111.5	123.8	150.4	+47.2%

(CSO)

A number of trends are noteworthy:

- The table on input prices shows an enormous increase in fertiliser prices, driven by both energy prices, in the case of nitrogen fertilisers, and the importance of Russia and Belarus as sources of raw materials. This is followed by energy and feeding-stuffs prices.
- Comparing the data in the two tables, it is seen that total output price increases exceeded overall input price increases up to and including 2021. However, in recent months input price increases overtook output price increases.
- At a sectoral level it is seen that, relative to 2020, pig producers are faced with 4% lower product prices. Meanwhile the price of the main input, feedstuffs, has increased by 36%, resulting in unsustainable losses. Also, poultry prices have increased only to a minor degree.

EU and national policies for agriculture are increasingly focussed on environmental and climate objectives. The recent dramatic increase in chemical fertiliser prices should act as an economic incentive to farmers to understand and adopt the new technology that is now available, particularly through the Teagasc Signpost programme. The Signpost programme aims to achieve early progress in reducing gaseous emissions from Irish agriculture, improve water quality and biodiversity, and create more sustainable farming enterprises. The main practical measures which farmers can apply include: increased role for clover in grassland, increased role for multi-species swards, optimum use of slurry by using low-emission spreading equipment, adequate use of lime to optimise the soil pH levels, and use of protected urea to reduce emissions.

Recent Trends in Consumer Prices in Ireland

The increase in the consumer price index (CPI) between 2016 and most of 2021 has been exceptionally low. However, prices increased more rapidly in the last quarter of 2021, and that trend has continued in 2022.

Consumer Price Index

	2016	2020	2021	Dec 21	Feb 22	May 22
CPI (Dec 2016 = 100)	100.3	101.8	104.2	107.0	107.6	111.6
CPI: annual increase (%)	0	-0.3	2.4	5.5	5.6	7.8

(CSO, Dec 2016=100)

The following table selects the items which showed the greatest prices increases.

CPI Items Showing Greatest % Increase in year to May 2022

Item	Weight in CPI	% Price Increase
Housing, water, electricity, gas and other fuels	16.4	20.9%
Transport	14.0	16.5%
Alcoholic beverages and tobacco	5.6	7.5%
Restaurants and hotels	15.2	5.9%
Food and non-alcoholic drink	11.4	4.4%
Others	37.7	0.5%*
All items	100	7.8%

(* net effect of some price increases and some price decreases)

The table indicates that the main source of price rises to-date is energy. (A different classification by the CSO shows that energy product prices on their own increased by 46% in the 12 months to May 2022).

Specifically in relation to food prices, the following comments are relevant.

- To-date the annual increase in retail food prices, at 4.4%, is relatively low, although more than half of that has occurred in the past three months. However, it comes on top of very substantial increases in energy prices, and consumers are likely to be concerned about the combined impact. Retail food prices in Ireland are likely to increase further, based on recent trends in agricultural output prices and energy prices.
- The weight in the CPI index of food (consumed in the home), at 11.4%, is relatively low, and much lower than it was 30 or 40 years ago. However, lowincome households generally spend a higher proportion of their income on food. Further data on this can be found in the very recent CSO publication: "Estimated inflation by household characteristics, March 2022". The paper shows that in the 2015/16 Household Budget Survey (which provides base data for the CPI) the average expenditure on food and non-alcoholic drink for all households was 12.7% of total expenditure; but for the two lowest income deciles it was 16% and 17%. By contrast, for the two highest income deciles it was 10.5% and 8.9%.

Emerging Conclusions To-date

In addition to the recent rapid increase in global energy prices, global food commodity prices have also increased rapidly. Not all of the main food commodity prices are equally affected: prices of oilseeds have shown the greatest increases, followed by cereals and dairy products.

A contributing factor to the high food commodity prices in recent months is the Russian invasion of Ukraine. Both Russia and Ukraine are significant exporters of cereals and oilseeds, and Russia is an important exporter of fertiliser products.

As regards the EU agri-food market, the reaction from the Commission is that the availability of food, feed and fertiliser is not a short-term concern, but it has concerns about the affordability of food. The Commission also raises longer-term concerns about the EU's dependency on feed and fertiliser imports from Russia, Ukraine, and Belarus.

Much of Ireland's agricultural economy has benefitted from strong global commodity prices, particularly for dairy products, cereals and lamb prices in the past 12 months. By contrast, pig-meat prices are exceptionally depressed (related to global over-supply problems), and poultry-meat prices are also low. However, the price increases for farm products are rapidly being offset by very high fertiliser prices, as well as high energy and feed prices.

Agricultural policies in the EU and Ireland are increasingly focussed on environmental and climate objectives. The recent dramatic increase in chemical fertiliser prices should act as an economic incentive to farmers to adopt new available technology. The Teagasc Signpost programme is both leading and supporting the transition of Irish farming towards more sustainable systems.

At Irish consumer price level, several years of almost zero inflation came to an end in 2021, particularly in the last quarter. The consumer price index for the 12 months to May has increased by 7.8%. It seems likely that the peak will be higher, and the duration of high inflation is a matter of conjecture. What is evident todate is that the rise in inflation has been mainly driven by high energy prices. Food prices (at least for food consumed in the home) had a much lesser impact.

Con Lucey was Chief Economist of the Irish Farmers Association (IFA) from 1979 to 2008. He was a Council member of the IIEA for many years, and is a member of the IIEA's UK expert group.

¹ Although not taken into account in this short review, it seems likely that the most negative consequences of high global energy prices and high global food commodity prices will fall on the least-developed and developing countries, particularly those which are energy-importing and/or food-importing countries).

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