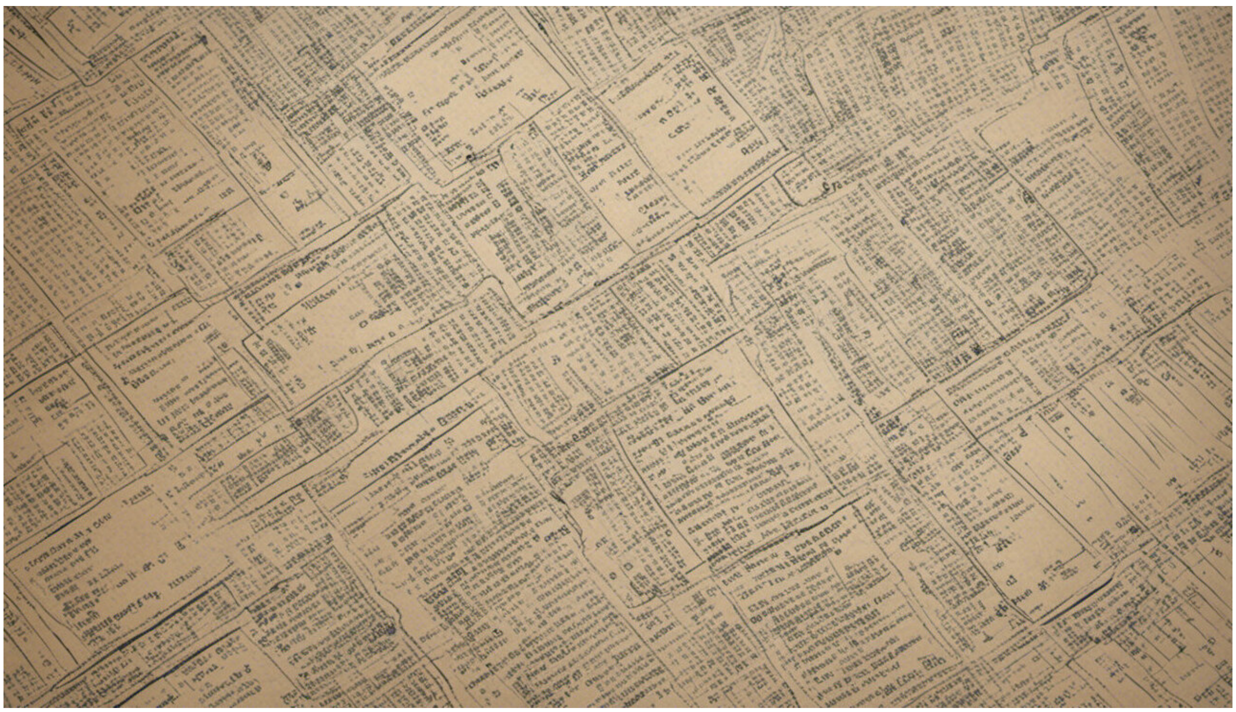
PHYS.ORG

Inflation: How financial speculation is making the global food price crisis worse

November 29 2022, by Sophie van Huellen



Credit: AI-generated image (disclaimer)

UK households, like those in many other countries, are struggling to make ends meet. More than half of households have only £2.66 per week left after paying for bills and essentials, according to figures from the supermarket chain Asda.

The extreme spikes in the cost of energy and food that we have seen this year are mostly to blame for this shift. Basic grocery prices have increased by 17% on average from last year, according to the Office for National Statistics, while some products such as pasta have increased by as much as 60%. This is because the cost of staple food crops, such as wheat, have increased by more than 30% since the beginning of 2021.

The drivers of these soaring prices are multiple: Russia's war on Ukraine (a major wheat exporter), the effect of extreme weather on harvests, and pandemic-era supply chain bottlenecks that are still being felt due to ongoing lockdowns, labor shortages and loss of capacity by producers.

But these supply factors do not entirely explain recent price movements. Bumper grain harvests have been reported by China in 2021 and the US in 2022, and the UN's Food and Agriculture Organization (FAO) predicts a "comfortable supply situation" for grain in 2022–23. This calls into question whether soaring food prices can be attributed solely to supply shortages.

When the world last experienced a major food crisis in 2008, financial speculation with food-based derivatives was seen as a contributing factor. Indeed, my research on that food crisis suggests the world is once again likely to be experiencing a food price crisis rather than a food supply crisis.

The role of traders

While soaring food prices threaten food security globally, large food trading firms are profiting. These companies bet on the direction of food prices by storing or trading substantial amounts of goods—making big financial gains as a result.

But it's not just physical goods that are traded. Financial markets also see producers and consumers, alongside banks, brokers and investors, trading in commodities such as food. Sometimes called paper trading because it involves the use of "futures contracts" rather than actual crops, this activity happens on commodity exchanges around the world.

Traders can buy (called "being long") or sell ("short") on these exchanges, and most contracts end before the delivery date so a trader doesn't have to own or receive the goods to benefit—or not—from price changes. Similarly, traders only have to place a deposit with an exchange, from which gains and losses are added or taken. They do not have to put down the full value of the crop they are buying or selling via the commodity exchange unless they take delivery of the physical item at the end of the contract.

The role of speculators

While this can of course promote speculation, commodity exchanges also help producers, consumers and traders in physical food commodities to manage their risk. For instance, a farmer might take a short position (essentially betting that prices will fall) on the price of wheat via a contract that ends (or matures) close to the time of harvest. If prices fall while the crop grows, the contract gains in value and makes up for the farmer's losses if the actual crops are worth less. It's like an insurance policy that enables the farmer to plan ahead at the time of planting the crop.

For risk management to work, however, the physical price of the commodity must track the futures price. To guarantee this close relationship, the price of a physical contract is based on the price of a specific futures contract. For example, the Brent Crude futures contract traded on the Intercontinental Exchange is a globally accepted benchmark for a certain type of oil. Global food prices are similarly determined on financial futures markets.

The use of benchmarks is often justified by the claim that financial markets are good at "price discovery"—determining the current value of a product. The "efficient market paradigm" states that all information about market fundamentals—that is, physical demand and supply conditions—is reflected in the futures price.

Ignoring the fundamentals

For this to hold, trading activity must be based on this fundamental information alone. However, my research shows that financial traders use a variety of trading strategies that are not based on reading market fundamentals. This has important implications for food prices.

Take "index traders," for example. These are typically large investors such as pension or insurance funds that invest in indices that track certain types of assets. They use commodity derivatives for diversification, to balance out the effects of inflation on other parts of their investment portfolios. They are also known as "noise traders" because their trading decisions support price increases that are completely unrelated to actual demand and supply.

On the other hand, hedge funds and investment banks tend to make trading decisions based on a mix of both market fundamentals and statistical charts or graphs showing historical price trends. This is known as "positive feedback trading" because it replicates and amplifies real price trends.

Research I conducted in 2020 shows that positive feedback and noise traders can have a substantial and prolonged impact on commodity futures prices. This means high food prices do not always signal a food shortage. An increase in speculative activity on food commodity markets since 2020 suggests that financial speculation could well have contributed to recent price highs.

This indicates that the current food crisis is a price crisis, rather than a supply crisis. But this does not mean that there are no food shortages.

High prices have severe consequences for food import-dependent countries that don't have the facilities or money to secure supplies for their own people. Stockpiling by larger countries in anticipation of rising food prices, with the intent of securing access to food for their own citizens, further squeezes the physical supply of food. This is how a food price crisis can quickly turn into a food supply crisis.

And as the world saw when prices spiked in 2007–2008, when speculation creates a disconnect between real food supply and demand conditions, it can have devastating consequences for food security globally.

Provided by The Conversation