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Price Surges in Food Markets

How Should Organized Futures Markets be Regulated?

Policy Brief No. 9

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- FAO, 2009. The 2007–2008 Food Price Swing. Impact and Policies in Eastern and Southern Africa, *FAO Commodities and Trade Technical Paper 12*
  ftp://ftp.fao.org/docrep/fao/012/i0984e/i0984e00.pdf
- FAO, 2010: *Food Outlook, Global Market Analysis*, June.
  http://www.fao.org/docrep/012/ak349e/ak349e00.pdf

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Contents

1. SUMMARY

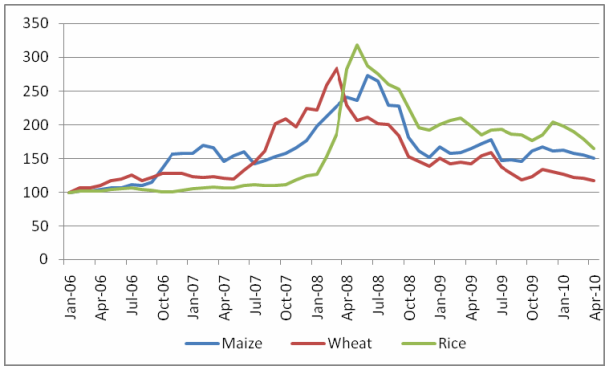
- Commodity futures have become an integral part of food markets
- For some, they are a tool to "hedge" against fluctuating prices; others use them as speculative investments
- Appropriate regulation can improve market performance

The drastic increase of food prices in the period 2006-2008 spurred fears of global food insecurity. Apart from actual changes in supply and demand of some commodities, the upward swing might also have been amplified by speculation in organized futures markets. However, limiting or banning speculative trading might do more harm than good.

2. FOOD PRICES ON THE RISE

Food prices soared on world markets between 2006 and 2008 (see Figure 1). Prices of maize, rice and wheat, for example, reached their highest levels in 30 years. The crisis caused political and economic instability and led to food riots in a number of countries. Although prices have declined notably, the market is still perceived as more volatile than before the crisis.

Figure 1: World cereal prices (Jan 06=100)



Source: FAO 2010.

High oil prices, strong demand for crops from the bio-fuel sector, falling stockpiles of food and lower cereal production all contributed to the price surge. The development was further boosted by strong economic growth and expansive monetary policies that resulted in low interest rates. Policies such as export restrictions that many countries implemented as a response to rising food prices also played a role.

While macroeconomic factors in conjunction with changes in supply and demand certainly caused an upward pressure on food markets, they alone cannot satisfactorily explain the hike. Some therefore believe that the "commodities super cycle" was amplified by speculative behavior in organized futures markets.

3. WHAT ARE COMMODITY FUTURES?

Futures contracts involve the formal obligation to sell or buy a given amount of a commodity at a specified time. They thus provide an important instrument to "hedge" against the price risks in commodity markets and are basically used by all traders of physical commodities as part of their normal trading behavior. By entering in a futures contract, both the seller and the purchaser gain certainty of the price of their transaction, independent of the actual development of the market.

However, only 2 percent of futures contracts end in the delivery of the physical commodity. Instead, commodity futures are generally traded before their expiration date. As a result, futures also attract investors who are not interested in the commodity as such, but in making a speculative gain. In fact, commodity futures have become increasingly appealing to non-commercial investors as their returns seem to be negatively correlated with returns to equities and bonds. They thus constitute an attractive vehicle for portfolio diversification. This process has provided important liquidity to the market since speculators are assuming risks related to the price of the commodity.

4. SPECULATION AND FOOD PRICES

Does speculation in commodity futures increase price volatility on food markets? Some economists say no, suggesting instead that futures markets have a stabilizing effect as traders merely react to price signals that eventually depend on market fundamentals. In this way speculation would even accelerate the process of finding an equilibrium price.

Such theory, however, may not hold in the presence of trend-following investors or those with market power. For example, in the short term an investor might be attracted by the opportunities offered by the upward trend of a commodity price although this development may not be based on any fundamental data. These speculative investments could strengthen the trend and push the futures price further from its true equilibrium, especially if many investors jump the bandwagon ("herd behavior") or those who invest have sufficient funds to influence the market.

Index funds are an example of such powerful investors. They have become key players in the market, holding about 25-35 percent of all agricultural futures contracts. Besides investing large amounts of money, they also hold futures contracts for a long time. Some observers suggest that this trading behavior makes them less likely to react to changes in market fundamentals.

Empirical evidence for both hypotheses is inconclusive. For each study that finds a positive impact there is at least one that claims the contrary. Indeed, there are a number of reasons to believe that speculation might not have been the main driver of the food price surge.

For one, price volatility has also been high for commodities that do not have futures markets or for which these markets are not important (e.g. steel and rice). Furthermore, as excess demand in well-functioning futures markets can easily be met by sufficient supply (i.e. by issuing new futures contracts), the effect of speculation on the equilibrium price is relatively small and short-lived compared to price swings of a physical asset where supply might be less elastic or even fixed.

5. WHAT TYPE OF REGULATION?

Available analyses and data suggest that trading in futures markets may have amplified price volatility in the short term only. Longer-term equilibrium prices, however, are ultimately determined in cash markets where buying and selling physical commodities reflects the fundamental supply and demand forces.

Efforts to reduce speculation in futures markets might even have unintended consequences. Mechanisms to intervene in futures markets, if the futures price diverges from an equilibrium level determined by market fundamentals (a level which in itself will be difficult to determine), might divert speculators from trading and thus lower the liquidity in the market available for hedging purposes. Proposals to create an international fund to react to price hikes in futures markets might therefore not be an optimal solution. What is more, such a fund would require exorbitant resources to counteract speculation effectively.

6. CONCLUSION

Regulatory measures should aim primarily at enhancing confidence in the good functioning of the market. This can be achieved by increasing transparency and the amount of available information on futures trading. Furthermore, suspicious behavior (e.g. traders requesting permission to invest above their speculative position limits) should be investigated closely, as already practiced by the US futures trading supervisory body. In August 2009, the agency lifted exemptions for two firms trading in maize, wheat and soybean futures.

Commodity futures have become an integral part of food markets, and they perform an important role for many market participants. Adequate regulation should improve, not ban, speculative trading in order to foster market performance.

7. FURTHER READINGS

Rapsomanikis, G. 2009: The 2007-2008 Food Price Swing. Impact and Policies in Eastern and Southern Africa. *FAO Commodities and Trade Technical Paper 12*: FTP://FTP.FAO.ORG/DOCREP/FAO/012/I0984E/I0984E00.PDF

FAO, 2010: *The FAO Food Outlook,Global Market Analysis - June 2010*: HTTP://WWW.FAO.ORG/DOCREP/012/AK349E/AK349E00.PDF

Policies for Good Economic Management of Food Price Swings in African Countries (Web Resource): HTTP://WWW.FAO.ORG/ES/ESC/FOODPRICESWING/

FAO, 2009. Managing Food Markets through Stock during the 2007-2008 Food Price Crisis, *Policy Brief No. 1*: HTTP://WWW.FAO.ORG/ES/ESC/FOODPRICESWING/BRIEFS/POLICY_BRIEF-1.PDF