

Assessing the impact of biofuels on cereal prices: Evaluating a chain of actions

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Introduction

The increase in biofuel production based on ambitious policies in both the USA and EU has been criticized for its negative impact on global food prices and food availability, which cause an increase in the prevalence of malnutrition in developing countries. The strong cereal price increases in 2007 in particular have been mainly attributed to enhanced biofuel production.^{1,2} Some studies offer a more balanced view with respect to the relation between biofuels, prices and hunger³, but most often biofuels take most of the blame. This can be understood if one puts the dramatic cereal price increase in a historical perspective (Figure 1).

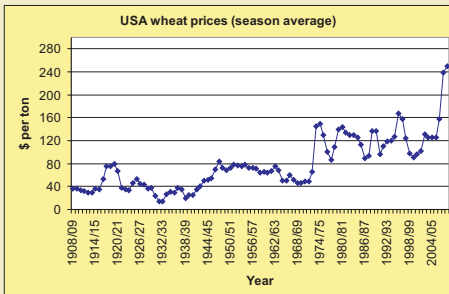


Figure 1. Historic development of wheat price in the USA. Source: 4

Statistics

There is no doubt that cereal prices increased, nor is there doubt about the impact on food accessibility for the poor. But the exact nature of the price increases is still insufficiently understood. Although prices remained high for a while, price increases came to an end soon after they started (Figure 2). Following an eight month period of rise in 2007, USA wheat prices have shown an almost continuous decline since October 2007. Prices decreased by 100 \$/ton in one year, to finally reach levels observed in 2006.

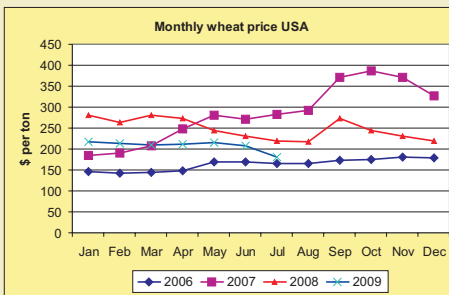
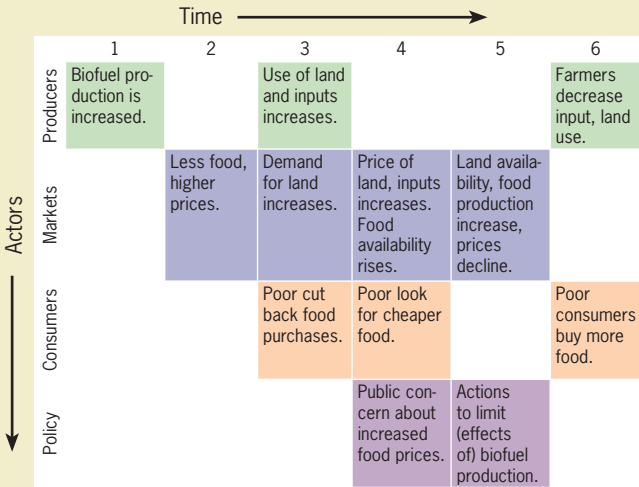


Figure 2. Wheat price development since January 2006. Source: 4

A chain of actions

Neither the 2007 price increase nor the decline afterwards are easily explained. It is generally assumed that biofuel production caused at least part of the increase, but this cannot explain the decline (as biofuel production has increased since 2007). Speculation may play a role, but other factors may also be involved. Figure 1 lists actions that were taken by producers, consumers and policy makers following price increases. These actions have led to increased food production, to altered food demand and to changes in policies related to biofuel production. Producers responded to rising food prices by increasing food production, while consumers cut back on their food expenses. As a consequence, food prices declined and food availability improved. This may have been enhanced by policy actions aimed to reduce the negative impacts of biofuel production. Several chains of actions can be identified, all influencing the impact of biofuel production on cereal prices. This makes it difficult to distinguish the final price effect caused by the initial increase in biofuel production.

Figure 1. Chain of actions following increased biofuel production



Discussion and conclusion

The initial cereal price increase in 2007 was followed by a 21 month period of price decline and triggered a chain of events which mitigated price rises and improved food availability. Actions such as described in Figure 1 may have gone (partly) unnoticed, and are not well documented. As various actions and reactions occur simultaneously, it is difficult to assess the exact impact of biofuels on cereal prices.

References

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