

**THE REASONS AND PERCEPTIBLE EFFECTS  
OF THE FOOD CRISIS IN THE FIRST DECADE  
OF THE 21TH CENTURY. ACTIVITIES TAKEN  
BY THE EUROPEAN UNION AND THE WORLD BANK  
AIMED AT STABILIZING THE SITUATION**

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**Abstract.** The presently faced uncontrolled and dramatic increase in food prices incites to rethink the question of food safety and measures addressing this global problem.

**Key words:** food crisis, dramatic increase in food prices, bans/limitations of import of crops, net food exporters and net food importers, determinants of high food prices

**INTRODUCTION**

“As a result of soaring food prices, instead of 1 billion people living in poverty we are soon likely to have 2 billion” [Zoellick 2008 c].

The increase in prices of agricultural products mentioned in the speech of the President of the World Bank shows that the danger of hunger is becoming an exacerbating problem of the 21st, as both the scope and the rapidity of the increase have led to the macroeconomic instability on a global scale. The phenomenon has also reversed the trend of the last 30 years when food prices in Europe and in the whole world were decreasing in real terms. In 2008, in turn, prices of food products have reached their peak. At the same time, different institutions are trying to outdo one another in providing explanations to the situation: they believe that the roots of it can be found in an extremely rapid, even uncontrolled, growth of electric energy prices, in climate changes and in floating currency rates.

In the face of such a high level of prices of food raw materials, it is crucial to respond to the following questions:

1. Which determinants have led to such high prices of food products and what are the consequences?
2. Is it possible to have a downward flow at the market and which corrective measures have been undertaken?

This article aims at explaining interrelations (cause-and-effect relationships) between the factors determining the current situation and an increase in food prices, as well as at attempting to answer the question whether a return to arable crops' prices of the end of 2007 is possible within upcoming months.

### **BASIC REASONS FOR HIGH FOOD PRICES**

One may venture a hypothesis that the reasons for such a dramatic increase in prices of arable crops are both among structural factors and temporary phenomena. The strength of the contribution of these elements to the increase in prices depends directly on a given agricultural products and a region. This is due to the fact that the reasons for an increase in rice or wheat prices differ from the factors determining the prices of soybean or maize. In the latter case, supply plays the key role, whereas in the increase in prices of rice and wheat it is a sharp increase in demand for food that turns out to be decisive. The stable growth of demand for food products both not food-processing (like: wheat, barley, corn) and subjected food-processing (like: skimmed and powdered milk, butter, shelled and ground rice) and for basic raw materials can be included in the category of structural market changes. The World Bank estimates that world population will continue to grow and it will shift from the current 6.2 billion people to 9.5 billion in 2050 [Population... 2008]. Thus, it may be taken for granted that a demand for food has to be characterised by a growing tendency. This considerable demand is generated mainly by developing countries such as China, India and Brazil, which are characterised by high rates of population and population growth, heaving also a high level of economic growth (GNP) [Dryjańska and Potocki 2008].

Among other determinants of the demand for food in the countries are progressive urbanisation and a change in consumer habits, especially in the case of meat. In China in 1985, approximately 20 kilos of meat were eaten annually, whereas at present the number is around 50 kilos per head annually [Mikołuszek 2008].

There are other reasons for the aforementioned increase in prices of agricultural products, namely high prices of energy and fuels, as electric energy is massively applied in the process of production of fertilizers and pesticides, i.e., plant protection products widely used in agriculture [Produkcja żywności... 2008]. It should be noted that a share of agricultural production costs in retail food prices is at the level of 20 to 40% [Przyczyny wzrostu... 2008]; the rest is divided into manufacture and commercial margins mirroring the abovementioned increase in costs of electric energy and work [Udział cen... 2008].

According to some analysts, it is the influence of mounting energy prices that may be decisive in the price of food products when compared to the rising prices of agricultural products [Commision... 2008].

A recent innovation, biofuel market, has also contributed to the high prices of agricultural raw materials and it brings stronger and stronger anxiety. Prof. John Beddington believes that chopping down rain forests to grow biofuel feedstock is “profoundly irresponsible because it is very hard to imagine how we can see a world growing enough crops to produce renewable energy and at the same time meet the enormous increase in the demand for food” [Vail 2008]. It is worth noting that according to the European Commission, the biofuel production does not entail such long-term consequences as it is suggested because official data indicate that less than 1% of the European Union cereals are dedicated to the production [Fisher-Boel 2008]. In opinion of the author of this statement the common conviction that this new sector of economy demands ever growing cereals’ supplies cultivated traditionally for the purpose of consumer goods is untrue. She also adds that biofuels have become “a scapegoat” in the context of a stable increase in prices of raw materials and other arable crops.

Climate changes are another determinant of prices of arable crops because they significantly limit production opportunities of many traditional producers – exporters of agricultural and food products. It is estimated that adverse climate conditions were a crucial reason for the drop in harvest by 50% in 2006 in Australia [Fisher-Boel 2008]. A negative impact of weather conditions resulted also in insufficient cereal supplies in the regions of South America and Europe. The analysis of climate changes allows to assume that the increasingly frequent climate anomalies will push instability of agricultural production.

Apart from the aforementioned factors of structural nature, which exercise a huge influence on demand, it is crucial to scrutinise another equally important determinant of the cereal market, namely supply. The market of agricultural and food products is characterised by a low level of price flexibility of a demand and supply. The first enumerated determinant is a direct consequence of Engel’s law stating that when incomes rise, the proportion of incomes spent on food falls. Downward tendencies at the food market do not result directly in a growing demand for necessities. A low level of price flexibility of food demand may be explained by the fact that they satisfy physiological needs. As for a low level of price flexibility of the supply for the agricultural products, it is an effect of a long production cycle, as consumer goods are usually manufactured within not less than a year. Some types of crops demand even a couple of years of cultivation (for example, coffee plantations or vineyards). In order to maximise profits from crops it is necessary to increase production, which is a long-term undertaking.

Apart from the already mentioned determinants, other factors have also contributed to the situation at cereal market, that is events at financial markets. Initiated in the fourth quarter of 2007 depreciation of US dollar (which is a major means of realizing and settling market exchange transactions) have had a strong negative effect on the arable crops’ prices [Słaby dolar... 2008]. Facing financial market’s instability, investors made widespread speculations aiming at limiting the appearing financial risk. This led to increased price fluctuations, which have intensified speculations and worsened the instability of markets directly related to agriculture. Destabilisation of currency markets has had the greatest impact on domestic economies of the countries whose currencies are tied to US dollar and which have devaluated their national currencies. In this situation, many food exporting countries have responded to rising prices by toughening their export policies. Countries such as India, China, Egypt and Vietnam have introduced a ban on rice export because this cereal constitutes a basic diet component in these

countries. It is worth noting that Thailand is considering a similar measure after a dramatic increase in rice prices by 50% of its value, which has resulted in further limitation of its sale [Dryjańska and Potocki 2008]. In a short-term perspective, the measures attempt to protect internal markets from insufficient supplies. But in long-term perspective, such limitations and their effects destabilise global agricultural market because they generate incorrect information, which leads to food surplus and other disorders in the market, first at a regional level and then beyond it, as local destabilisation expands its scope. The strength with which the imbalance spreads is a consequence of the specific character of agricultural market and is further caused by a low level of flexibility of the supply of this sector of economy. From this follows that fluctuations in the supply for agricultural products have a direct impact on a periodicity of fluctuations in the sector of economy.

### **MEDIUM-TERM PERSPECTIVE AND ITS CONSEQUENCES**

Food prices have undergone a model change and for at least ten upcoming years will not fall to the level before the crisis. It means a long-term pressure exercised on the countries hit by food crisis [Wysokie ceny... 2008].

The statement comes from the report prepared by OECD with assistance of the United Nations Organisation of Food and Agriculture. The message of the report is unequivocal: in short-term and medium-term perspectives the return to the level of food prices before the food crisis is highly unlikely. Although the current increase in agricultural raw materials resulted mainly from temporary disorders, some of the factors have already gained structural and long-term character, which makes it possible to predict that a long-term destabilisation of demand and supply in the agricultural sector is very probable. Though advancement in technology and the increase in the area of production may, in a significant way, satisfy constantly growing food demands, in supply there will remain a number of factors impeding the speed with which production will be able to adjust to demand. These factors include limited access to soils suitable for cultivation, constantly mounting costs of work in agriculture and limited possibilities of irrigation. They will reduce the opportunities for increasing productivity.

The direct impact of such an uncontrolled increase in food prices on consumers depends on a region or a country but it can be stated for sure that developing countries, which are net importers of agricultural raw materials, will be most affected by the results of the global crisis. According to the World Bank, riots resulting from protests against rising prices of necessities have erupted in more than 30 developing countries such as Niger, Senegal, Cameroon, Egypt, Mexico, Ivory Coast or Philippines [Zoellick 2008 a].

The countries enumerated above are net food importers, which clearly indicates that this is the group which suffered most due to the uncontrolled increase in price of food-stuffs. On a global scale, the countries that are net food exporters have earned the most considerable profits, although some of them have introduced the already mentioned export limitations in order to preserve relatively low food prices. A balance of profits and losses needs to be done from a yet different angle: high prices are advantageous for cereal producers, whereas stock farmers are usually affected by negative consequences

of the phenomenon. This results from the fact that they need to pay more to animal feed producers and bear financial consequences of the increase in cereal prices caused by the introduction of an export limitation or imposed export duties.

Direct influence on the poorest is undoubtedly negative, which is confirmed by the already mentioned social unrest in third world countries. The solemnity of the situation is likely to spread over economically developed countries. Higher prices of raw materials necessary in the production of bread or other consumer goods that are basic diet components of local communities in such countries as Italy or Spain have provoked a wave of strikes against soaring prices of agricultural raw materials and fuel prices [Protest... 2007].

### **INITIATIVES OF THE EUROPEAN UNION AND THE WORLD BANK IN THE FACE OF FOOD CRISIS**

Actions undertaken on the international level can be grouped into the following categories:

1. Contribution to global actions aimed at mitigating negative effects of increase in food prices in a short-term and medium-term perspectives,
2. Promotion of an open trade policy through the participation in currently held Doha Round negotiations.

The European Union has expressed its readiness to engage in international initiatives which are to meet obligations of humanitarian aid aiming at alleviating severe consequences of the crisis. They are realised in cooperation with international organisations such as the World Bank. Moreover, the European Commission launched its own initiative having in view a monitoring of consumer goods prices, and on the basis of results obtained in this way it has offered EUR 333 million for relief aid in 2008. Apart from these undertakings of immediate help, the Commission considers the increase in the sums annually allocated for research in agriculture. Just to give an example, Consultative Group on International Agricultural Research benefits from USD 450 million every year [Zoellick 2008 b].

The main efforts connected with resolving the food crisis are made by the World Bank which, within the framework of measures aiming at absorbing negative effects of price shock, has prepared an immediate range of actions facilitating access to funds amounting to USD 1.2 million. It is moreover estimated that the whole amount of financial assistance of the organisation offered annually to support global agriculture production will be increased from current USD 4 million to USD 6 million in the next year [Bryant 2008].

The appearance of the food crisis constitutes a new opportunity for attracting attention to the necessity of urgent conclusion of negotiations liberalising global trade within the Doha Round. Hopes pinned upon the WTO are mainly related to the anticipated decrease in the protection of agricultural market, advanced countries' limitation of subsidies to their own agricultural sector and the elimination of many existing disorders in global trade [Lamy 2008]. It is necessary to note that it is the developing countries (DEV) and the least developed countries (LDV) grouped in many organisations, of which the so called G-33 group is the most active, that count on the improvement of

their economic condition as a result of the removal of limitations in the access to markets of economically developed countries [Stiglitz and Charlton 2006].

## CONCLUSIONS

1. The reasons for current high food prices can be found among structural factors such as: a stable increase in food demand, changes in consumer preferences, rising fuel and energy prices, climate changes, and a low level of price flexibility of supply and demand for arable crops. Events at financial markets, the appreciation of US dollar included, have also contributed to the decrease in food prices.

2. High food prices have the most severe consequences for developing and least developed countries which have a high share in expenses on consumer goods in their total income. This happens according to the Engel's law.

3. Many net food exporters have introduced limitations or imposed bans on import of key commodities for their balance of trade.

4. In a long-term perspective, the retention of high food prices would give evidence of a durable instability at global food market, which in turn would make agriculture a strategic sector because of its consequences on food safety.

5. Actions stabilizing agricultural sector, undertaken at the moment, have a short-term character and are mainly realised in the form of financial aid. Key donors of the aid are the World Bank and the European Union.

6. Food crisis provides a new development opportunity calling for the necessity of urgent conclusion of Doha Round negotiations.

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## **PRZYCZYNY I ODCZUWALNE SKUTKI KRYZYSU ŻYWNOSCIOWEGO PIERWSZEJ DEKADY XXI WIEKU. DZIAŁANIA STABILIZUJĄCE SYTUACJĘ, PODEJMOWANE PRZEZ UNIĘ EUROPEJSKĄ I BANK ŚWIATOWY**

**Streszczenie.** Ceny artykułów rolno-spożywczych charakteryzowały się w drugiej połowie XX wieku relatywnie dużą stabilizacją cenową. W 2008 roku trend ten uległ radykalnej zmianie, skutkiem czego był bardzo gwałtowny, wręcz niekontrolowany wzrost cen produktów pierwszej potrzeby. Główną przyczyną tego stanu rzeczy był (i wciąż jest) rosnący popyt na żywność, zgłaszany w pierwszej kolejności przez kraje rozwijające się, takie jak Chiny czy Indie, które, jak wiadomo, odznaczają się na tle reszty świata bardzo wysokim wskaźnikiem przyrostu naturalnego. Do równie istotnych przyczyn tak drastycznego wzrostu cen produktów pierwszej potrzeby trzeba zaliczyć wysokie ceny nośników energii elektrycznej, będące pochodną relatywnie wysokich cen ropy naftowej. Również zachodzące obecnie zmiany klimatyczne ograniczają w znacznym stopniu możliwości eksportowe państw i obszarów świata, uchodzących za tradycyjnych producentów artykułów rolno-spożywczych. Należy też wspomnieć, iż u podstaw niskiej elastyczności cenowej podaży na artykuły rolno-spożywcze znajduje się długi cykl produkcyjny, co dodatkowo ogranicza możliwości eksportowe płodów rolnych i czyni uprawę rolną przedsięwzięciem wysoce kapitałochłonnym. Wzrost cen żywności należy również łączyć z wydarzeniami mającymi miejsce na rynku walutowym. Dewaluacja waluty amerykańskiej, w której jest rozliczana większość transakcji kupna-sprzedaży na rynku rolnym, przełożyła się bezpośrednio na wprowadzone ograniczenia eksportowe wielu państw producentów żywności. Z uwagi na skalę i stopień zaawansowania opisanych powyżej procesów, leżących u podstaw wzrostu cen na artykuły rolno-spożywcze, należy założyć, że w perspektywie krótko- i średniookresowej możliwości powrotu cen na artykuły rolno-spożywcze sprzed kryzysu są niewielkie, zaś bezpośrednie konsekwencje tego stanu rzeczy nie są takie same dla producentów i konsumentów żywności. W obliczu tak ogromnej skali destabilizacji cenowej na rynku produktów rolnych zostały poczynione szeroko zakrojone działania w postaci zwiększenia podaży środków pieniężnych na działania osłowne pod auspicjami międzynarodowych organizacji gospodarczych, takich jak Bank Światowy, mające na celu absorpcję negatywnych skutków szoku cenowego. Również

Komisja Europejska, poza przeznaczeniem znacznej ilości środków pieniężnych na stabilizację cen produktów rolnych, podjęła decyzję o monitorowaniu poziomu cen artykułów konsumpcyjnych. Kryzys żywnościowy stanowi nowy impuls rozwojowy, przemawiający za koniecznością podjęcia i rychłego zakończenia trwającej rundy rokowań Doha.

**Słowa kluczowe:** kryzys żywnościowy, gwałtowny wzrost cen żywności, zakazy/ograniczenia wywozu produktów rolnych, eksporterzy a importerzy netto żywności, determinanty wysokich cen żywności

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