

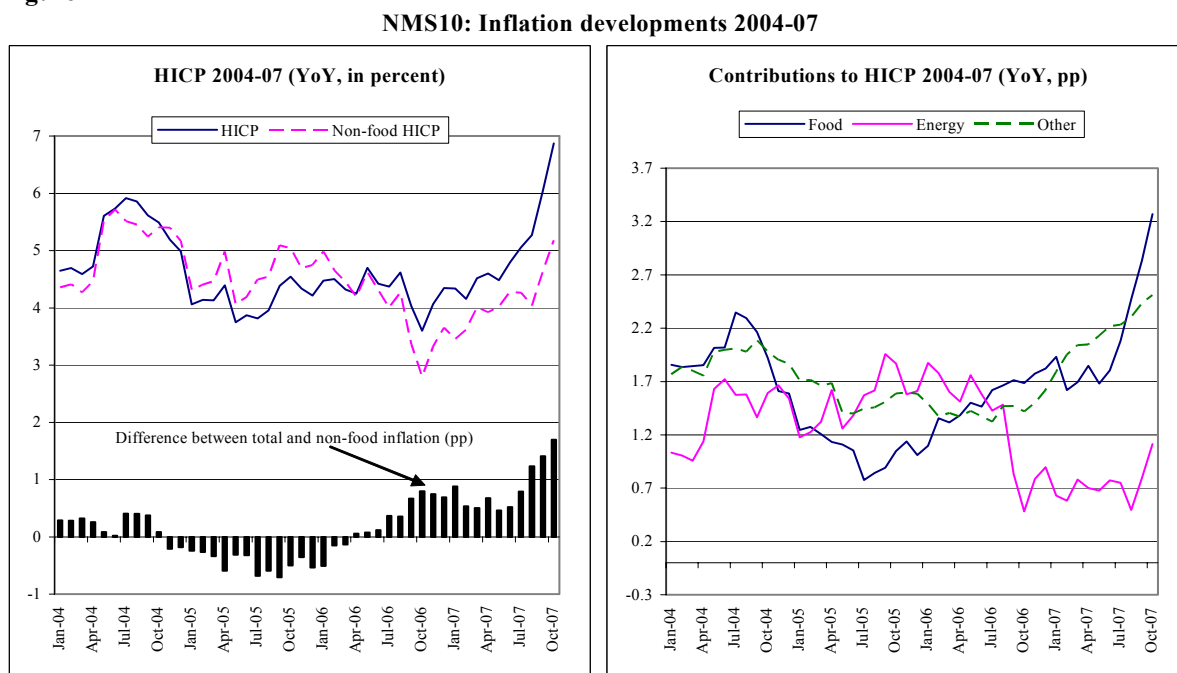
“Agflation” in the New Member States—Some Stylized Facts¹

Deputy governor Rybinski of the National Bank of Poland, recently warned that “agflation” (i.e., food price-induced inflation) in the new member states of Eastern Europe (NMS10) is threatening macro stability and accession to the eurozone. Indeed, food prices affect inflation more in the NMS10 than in the euro zone (EU12)² and this may make it more difficult to meet the Maastricht inflation criterion, at least in the short term. Performance within the region varies, however: while a recent supply shock played a role in South-Eastern Europe, developments in the other NMS10 have been more gradual and in line with world prices. Recent food price increases exceeded cyclical fluctuations, suggesting a structural break with historical trends. Nevertheless, a partial reversal appears likely.

Price Developments in New and Old EU Member States

Consumer inflation in the NMS10 has been rising since 2006, increasingly driven by food prices. The inflationary trend in the NMS10 started in late 2006 (Fig. 1). The widening gap between total and non-food inflation³ suggests that food prices played an important role in this process, and this role has recently magnified. Prices of other goods and services have also been rising since mid-2006 and, with the recent oil price spike, the contribution of energy is now increasing as well. But food remains the biggest contributor.

Figure 1



Source: Eurostat, staff calculations.

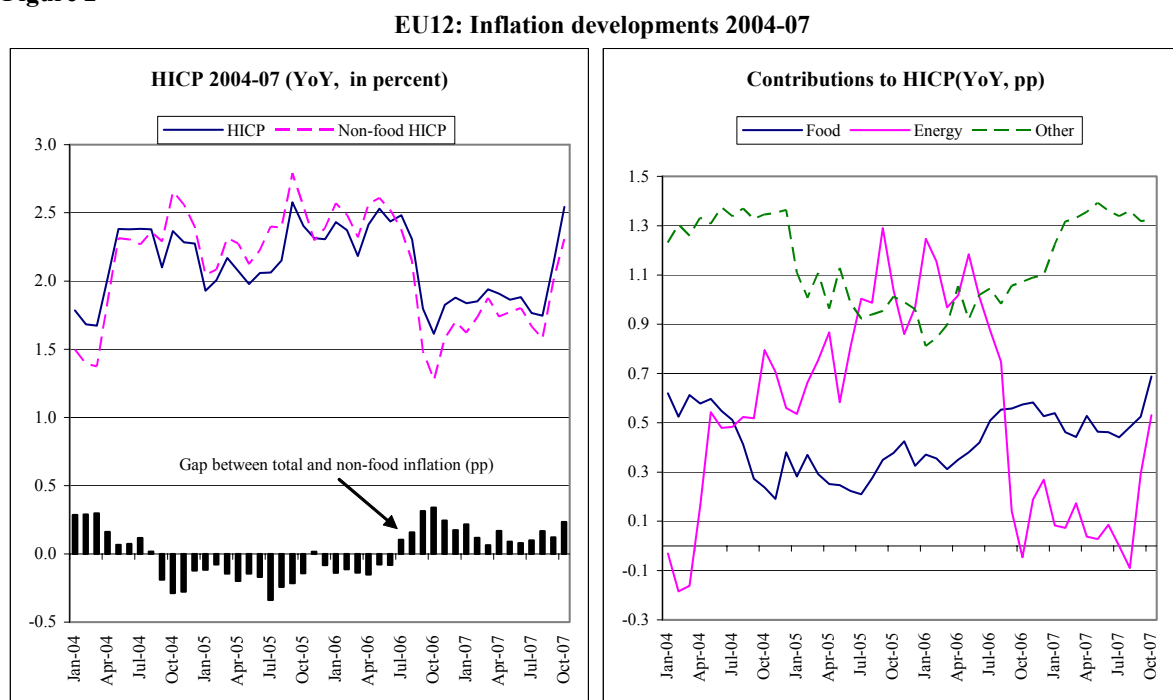
¹Prepared in by Christoph Rosenberg, Robert Sierhej, and Marcel Tirpak with assistance from Agata Kariozen.

² NMS10 includes Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovenia, Slovakia, and Romania. EU12 includes the ‘old’ Euro zone members, i.e., excluding Slovenia

³ Eurostat’s HICP (harmonized index of consumer prices) is used as measure of inflation in this note.

Developments in the NMS10 differ from the EU12, where inflation accelerated only recently and food is not playing a crucial role. EU12 inflation picked up sharply in the last months, breaching the ECB target (Fig. 2). Unlike in the NMS, the gap between total and non-food inflation is neither particularly high nor rising sharply. Indeed, a decomposition of EU12 inflation shows that energy prices were the main driver behind their recent price surge. The pressure from food prices is also starting to be felt, although the process is much more gradual than in the NMS10.

Figure 2



Source: Eurostat, staff calculations.

Inflation Patterns within the New Member States

While food prices are exerting increasing inflation pressures in all NMS, supply-side factors appear to play a larger role in Romania and Bulgaria than elsewhere in the region. Inflation developments broken into three sub-groups—Baltics, central Europe (CEE5), and southeastern Europe (SEE)—are presented in Figure 3.

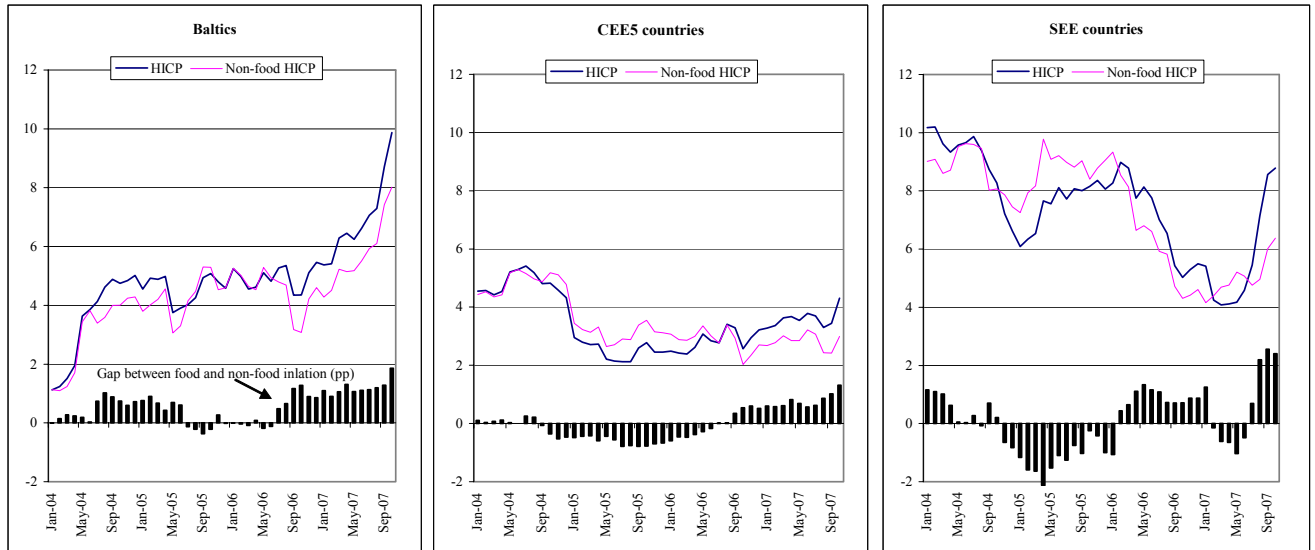
- Inflation in the **Baltics** has been rising fast since the second half of 2006, both for total and non-food HICP. Food prices started to play a role in 2006 and pressures appear to have increased recently. Among the Baltics, the divergence between food and non-food inflation is strong in Lithuania and not so significant in Latvia and Estonia. One reason may be that overall demand pressures affecting all consumer goods played a larger role in the latter countries. It may also reflect some structural differences between agricultural sectors.
- The **CEE5 countries** have the lowest inflation rates in the region, reflecting their monetary regime that allows for nominal exchange rate appreciation and higher real interest rates. Nevertheless, food price patterns are similar to the Baltics, with upward pressures starting last year, and increasing in the last months. The Czech Republic

seems to face the most severe pressures, with the highest gap between total and non-food inflation among the CEE5 and food prices growing faster than in neighboring Slovakia or Poland.

- The **SEE countries** appear to be facing a genuine supply shock this year: relative food prices rose sharply during the harvest months, opposite to the pattern of past years. While inflation in Bulgaria is much higher than in Romania, food price trends are similar suggesting that both countries were heavily affected by the drought this summer (see below).

Figure 3

NMS10: Sub-regional inflation developments 2004-07 (YoY in percent)



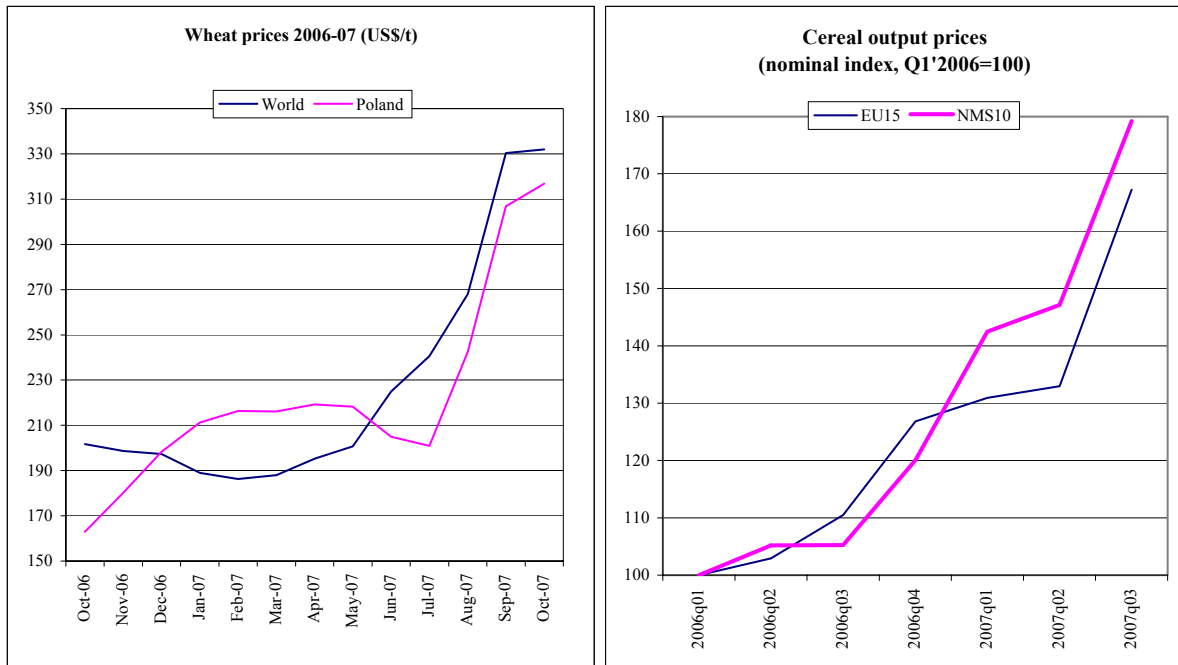
Source: Eurostat and staff calculations.

Factors Underlying Food and Non-Food Price Developments in the New Member States

- **World prices:** World prices for key agricultural products have recently soared, reflecting growing demand from emerging market countries, the switch to bio-fuel production and, more recently, an output shortfall in Australia. Data for Poland suggest that for internationally traded commodities like wheat NMS10 prices broadly follow global trends (Fig. 4). Similarly, many agricultural output prices (e.g., cereal) track EU-wide movements. This suggests that global “agflation” is an important factor in food price inflation in the region. It does not, however, explain why the effect is stronger in the NMS10 than in the EU12 countries.

Figure 4

Prices of raw agricultural products



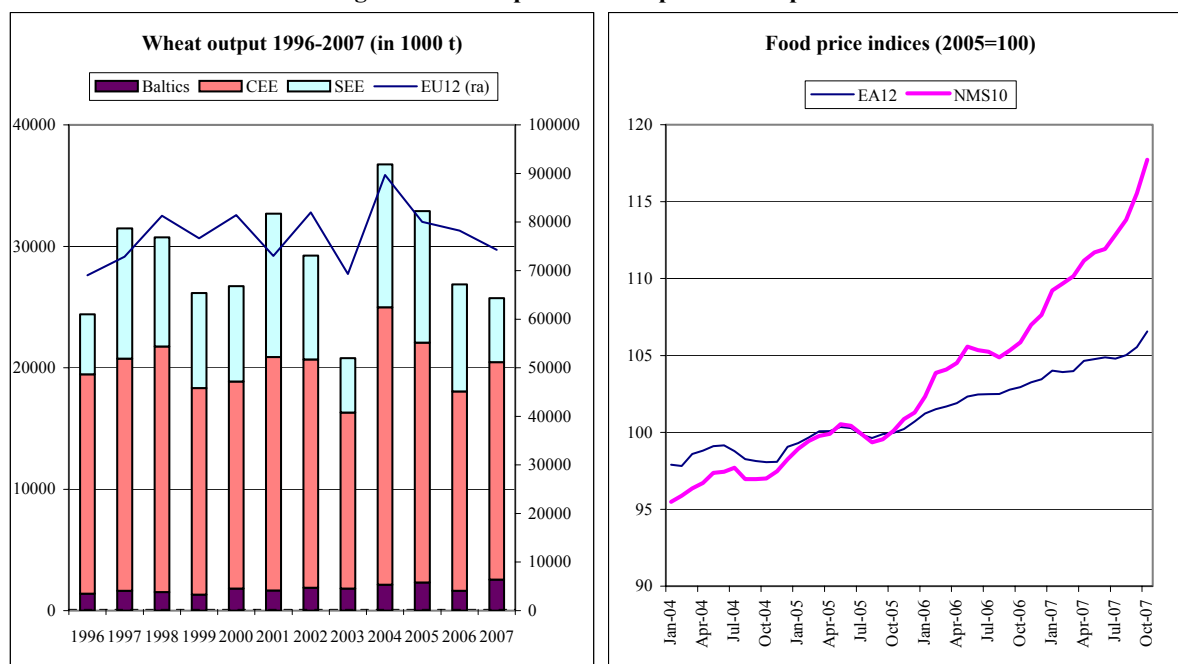
Source: FAO, Eurostat, CSO Poland, staff calculations.

- Agricultural output:** Output data suggest that the NMS10 have lately been more adversely affected by bad crops than the EU12. Most importantly, wheat production in SEE (Romania and Bulgaria) declined by 40 percent this year (Fig. 5), probably contributing to the sharp rise in their food prices shown in Fig 3. Wheat crops in the Baltics and CEE5 dropped in 2006, a possible reason why their upward trend in food prices started already last year. The better harvest in 2007 did not suffice to restore the pre-2006 production level.⁴ The Eurostat estimates indicate that maize also suffered; for example, yields per hectare dropped by 70 percent in SEE. Moreover, CEE5 fruit production was hit by frost this year, with Poland--the largest producer in the NMS10--experiencing a decline of 20-50 percent (depending on the kind of fruit). While difficult to quantify and disentangle from global and EU-wide price movements, all this suggests that disruptions to local agricultural production have played some role in the rise of NMS10 food prices since 2006.

⁴ Data for Poland suggest that the ongoing structural shift in agriculture towards bio-fuel production is playing a role: the farmed area of rapeseed grew by 27.5 percent this year. Comparable data for other NMS are probably available on request from statistical offices.

Figure 5

Agricultural output and food price developments



Source: Eurostat and staff calculations.

- Consumption structure:** The role of food in the consumer basket is much higher in the NMS10 than in EU12 countries (Tab. 1). This implies that any food price shock has a more severe impact on measured headline inflation. While the weight of food in NMS10 consumer baskets has been declining, it remains close to 30 percent on average (above 40 percent in Romania), some 10 ppt higher than in the EU12.

Table 1. HICP weights 2004-07

	2004	2005	2006	2007	Average 2004-07
	<i>EA12</i>				
Goods	58.7	59.2	59.2	59.2	59.1
o/w					
Energy	8.1	8.6	9.2	9.6	8.9
Food	19.5	19.6	19.3	19.5	19.5
Services	41.3	40.8	40.8	40.8	40.9
	<i>NMS10</i>				
Goods	73.6	71.1	70.8	70.4	71.5
o/w					
Energy	14.5	14.4	14.6	14.3	14.5
Food	32.9	30.6	29.7	29.0	30.6
Services	26.4	28.9	29.2	29.6	28.5

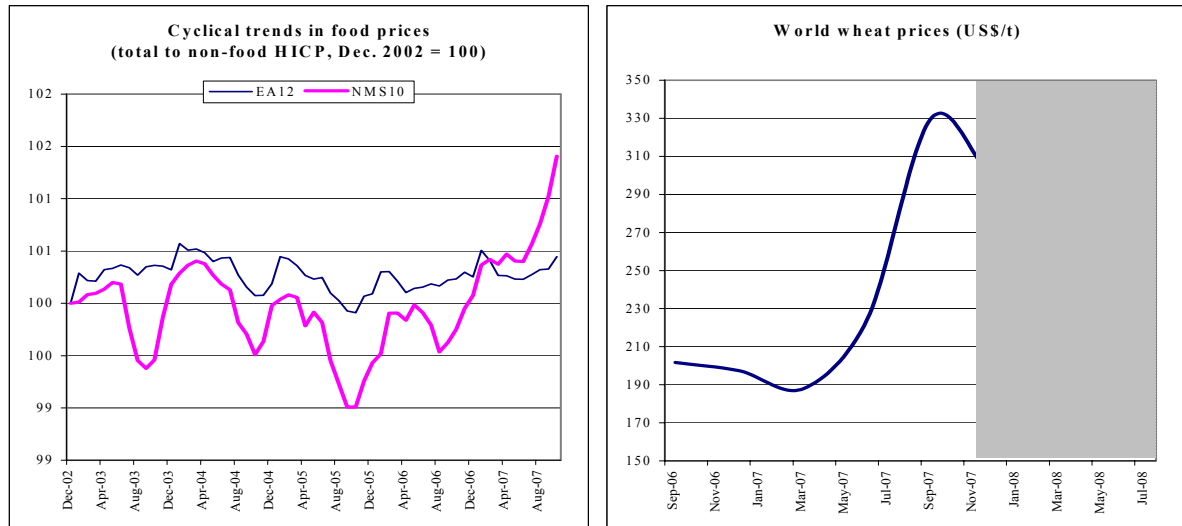
Prospects for Food Price Developments

Historical trends and market expectations on world prices point to a partial reversal of recent food price inflation next year. Historical data show a high cyclicality of food prices relative to non-food items in the NMS, much larger than in the EU12—even after their accession to the common agricultural market in 2004 (Fig. 6). The recent food prices jump in

the NMS10 is, however, beyond normal fluctuations, suggesting a possible structural break in the historical food vs. non-food price patterns. Nevertheless, there are reasons to believe in some reversal of the recent price growth next year. First, it is not clear that unfavorable weather conditions—globally and locally—will be repeated in 2008 (unless one believes that they are related to global climate change). Secondly, one would expect a supply response from farmers in reaction to recent price hikes. This cautiously optimistic outlook is also reflected in market expectations: wheat derivatives, for example, suggest an expected 25 percent decline in world prices compared to current levels. Any such decline would benefit headline inflation in the NMS10 more than in the EU12 countries.

Figure 6

Cyclical developments and market expectations on food prices



Source: Eurostat, FAO, staff calculations.