European Commission
Agriculture and Rural Development

Distribution of value added, price transmission and price monitoring

Pierre Bascou

DG AGRI European Commission

Context

- Surge in agricultural commodity prices (until spring 2008)

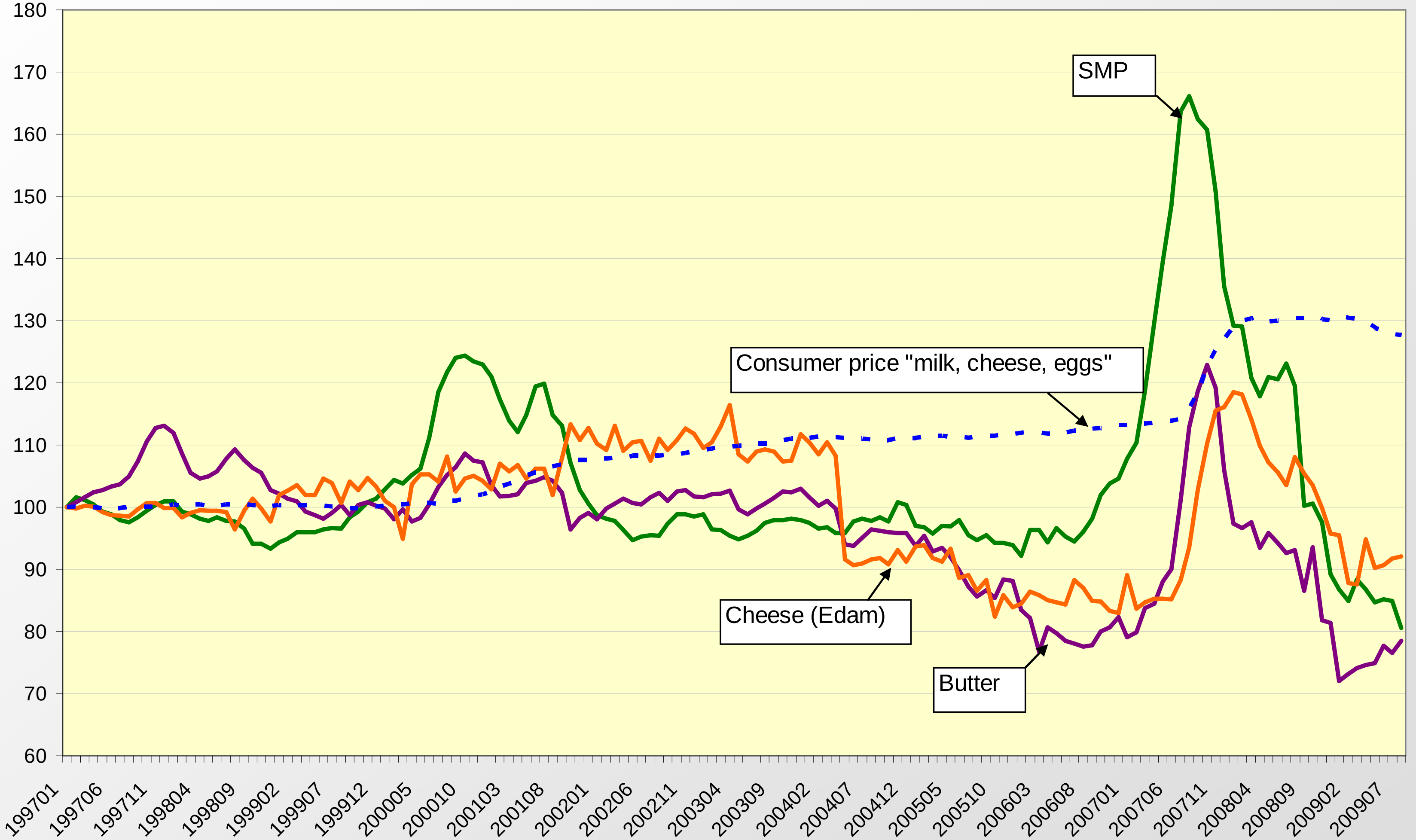
- May 2008 Communication (COM(2008)321)
  - ⇨ Set up three task forces (monitoring price developments, analysing the role of speculation and investigating the functioning of the food supply chain)

- December 2008 Communication (COM(2008)821)
  - ⇨ Set out a roadmap (competitiveness, competition and consumer protection, regulation, monitoring and speculation)

- Retail market monitoring exercise (Single Market Review)

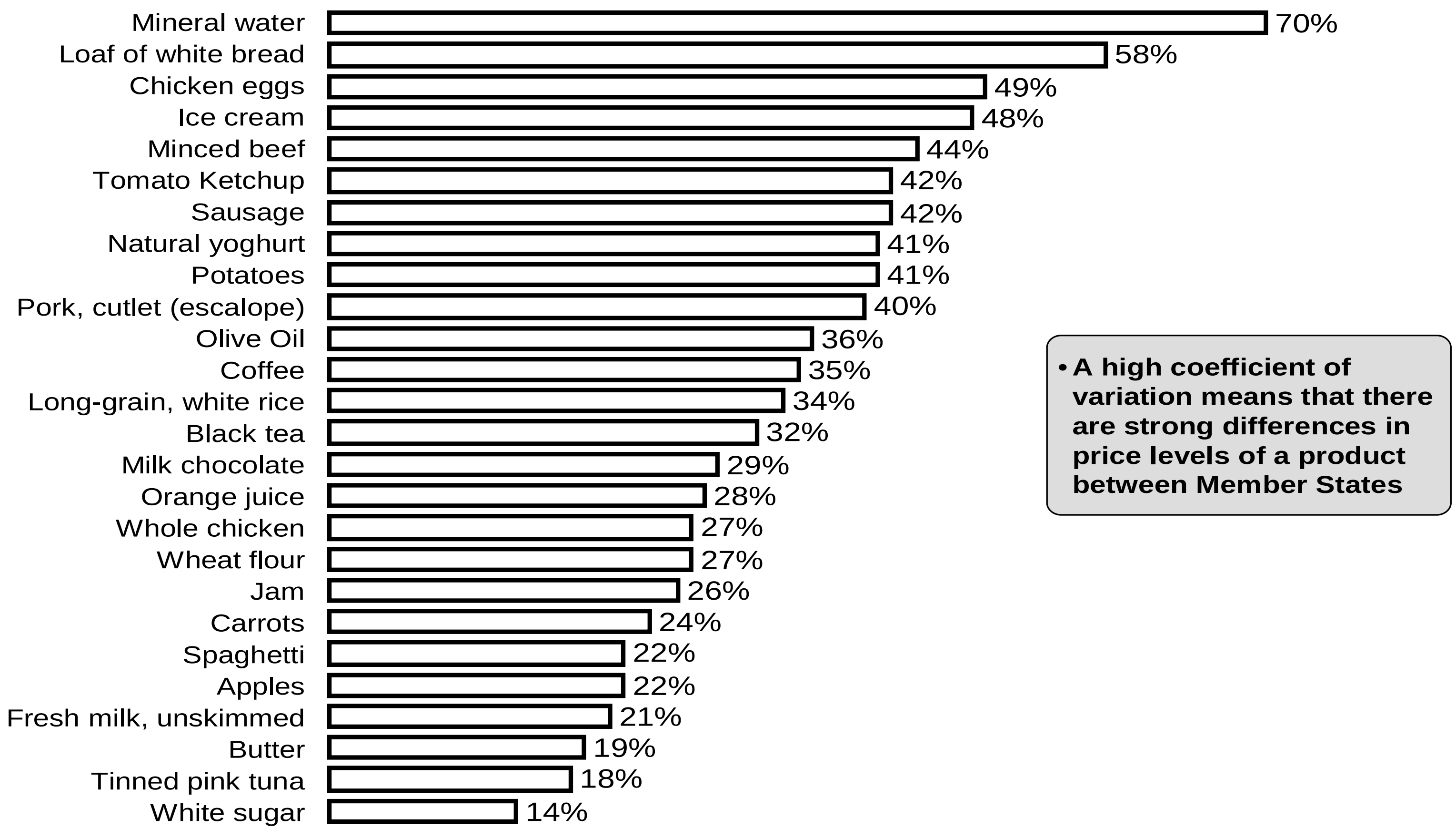
- Dramatic decline in many agricultural commodity prices since mid-2008, whereas food consumer prices remain at high levels …

Development of prices in the dairy supply chain (EU, Jan 2000 = 100)



Dispersion of price levels for selected products across EU Member States

Coefficient of variation of prices selected food products across Member States; June 2008



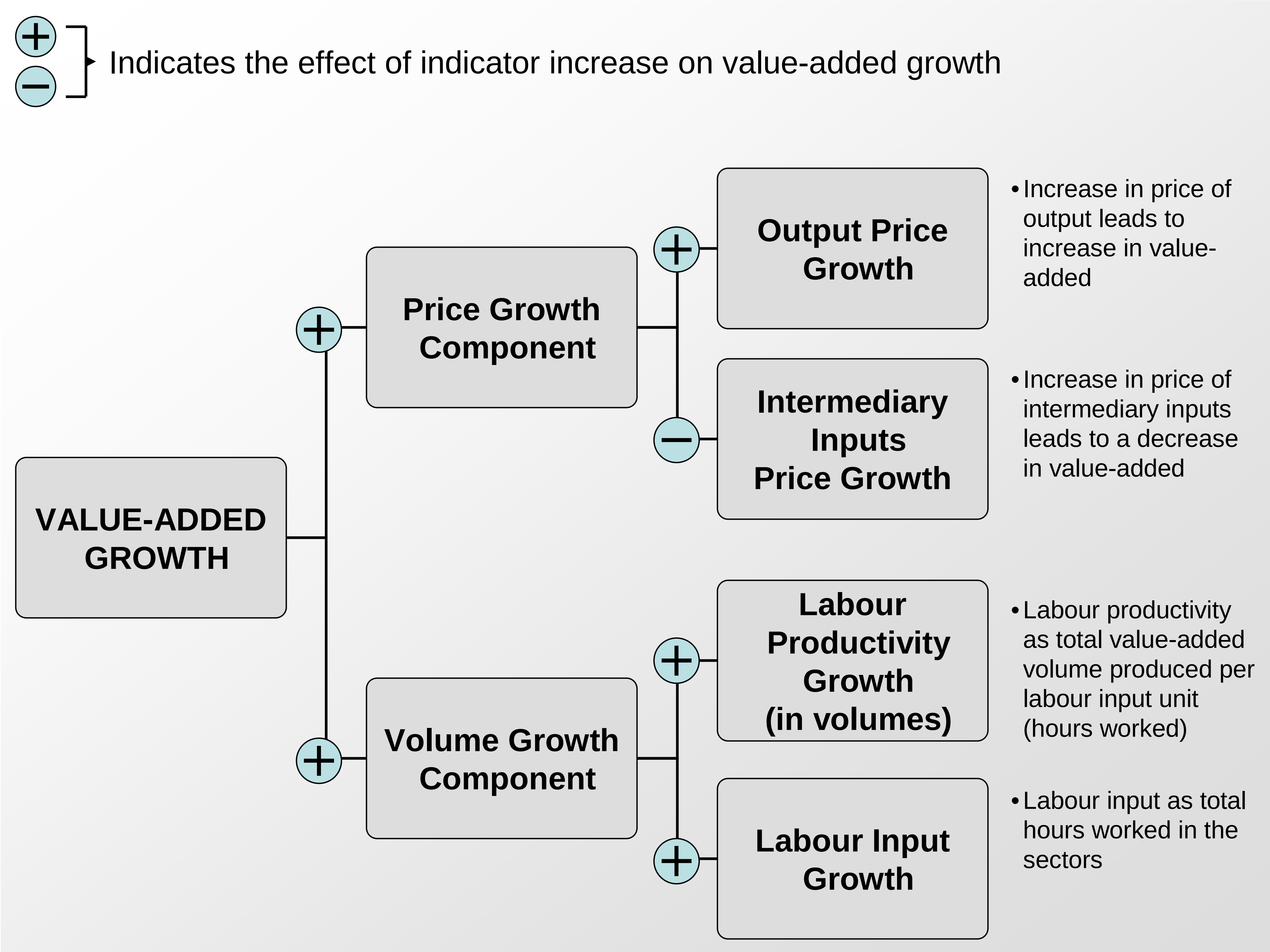
Source: European food prices monitoring tool; EUROSTAT

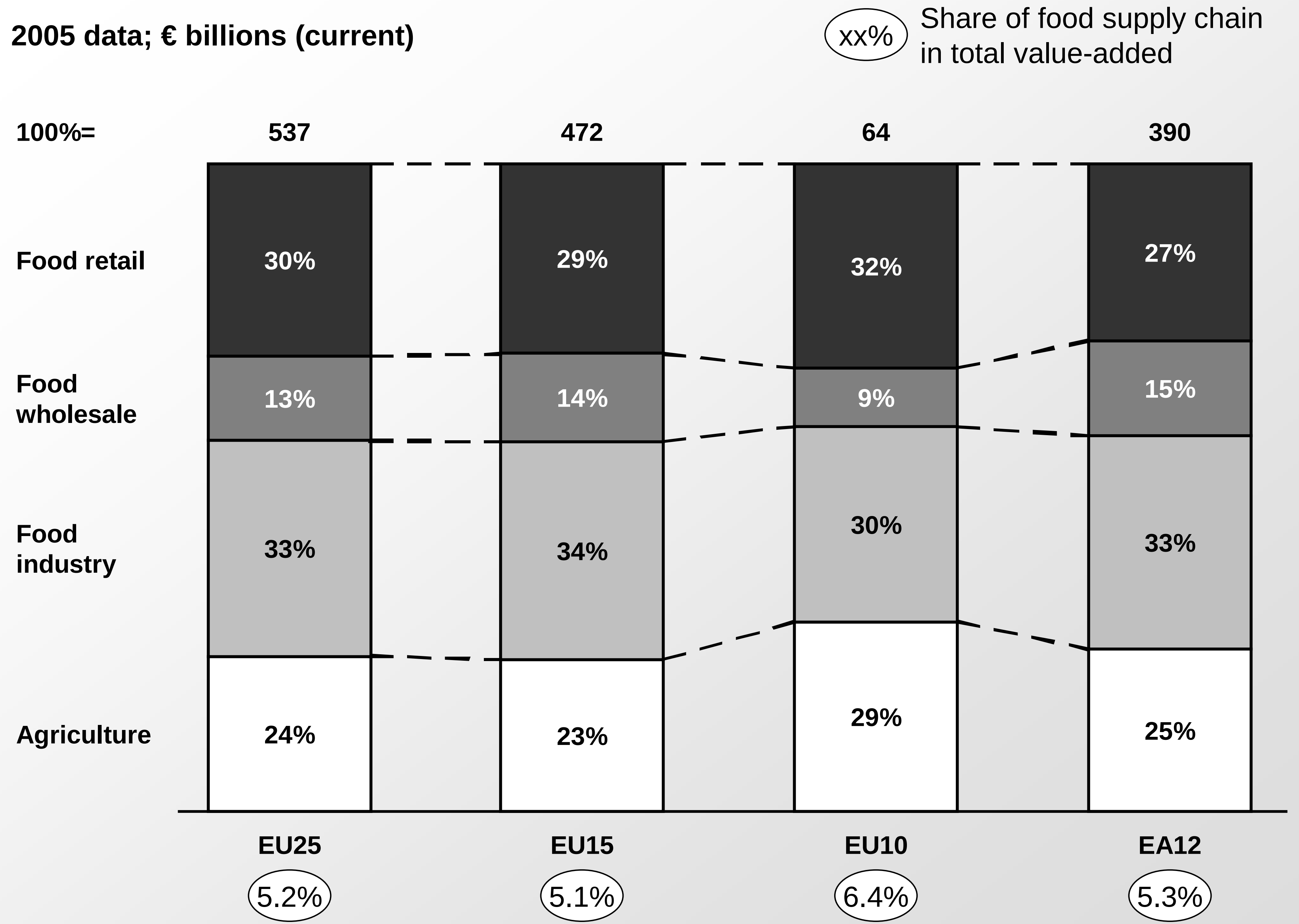
Commission roadmap for follow-up on food supply chain market monitoring

Competi-tiveness	• Promote competitiveness of the Food Supply Chain **(High-Level Group on Agro-food competitiveness)**
Competition and Consumer protection	• Identification of potential main anti-competitive practices **(with national competition authorities)** • Clarification of bargaining power repartition along the chain • Enforcement of consumer protection rules **(unit pricing, unfair commercial practices directives)**
Regulation	• Review of regulation potentially hampering competitiveness and integration **(entry barriers, ability to compete on prices, shop opening hours)**
Monitoring	• Design and set-up of an permanent tool to monitor food prices and pass-through along the chain
Speculation	• Analysis of measures to discourage non-commercial speculation on agricultural commodity prices

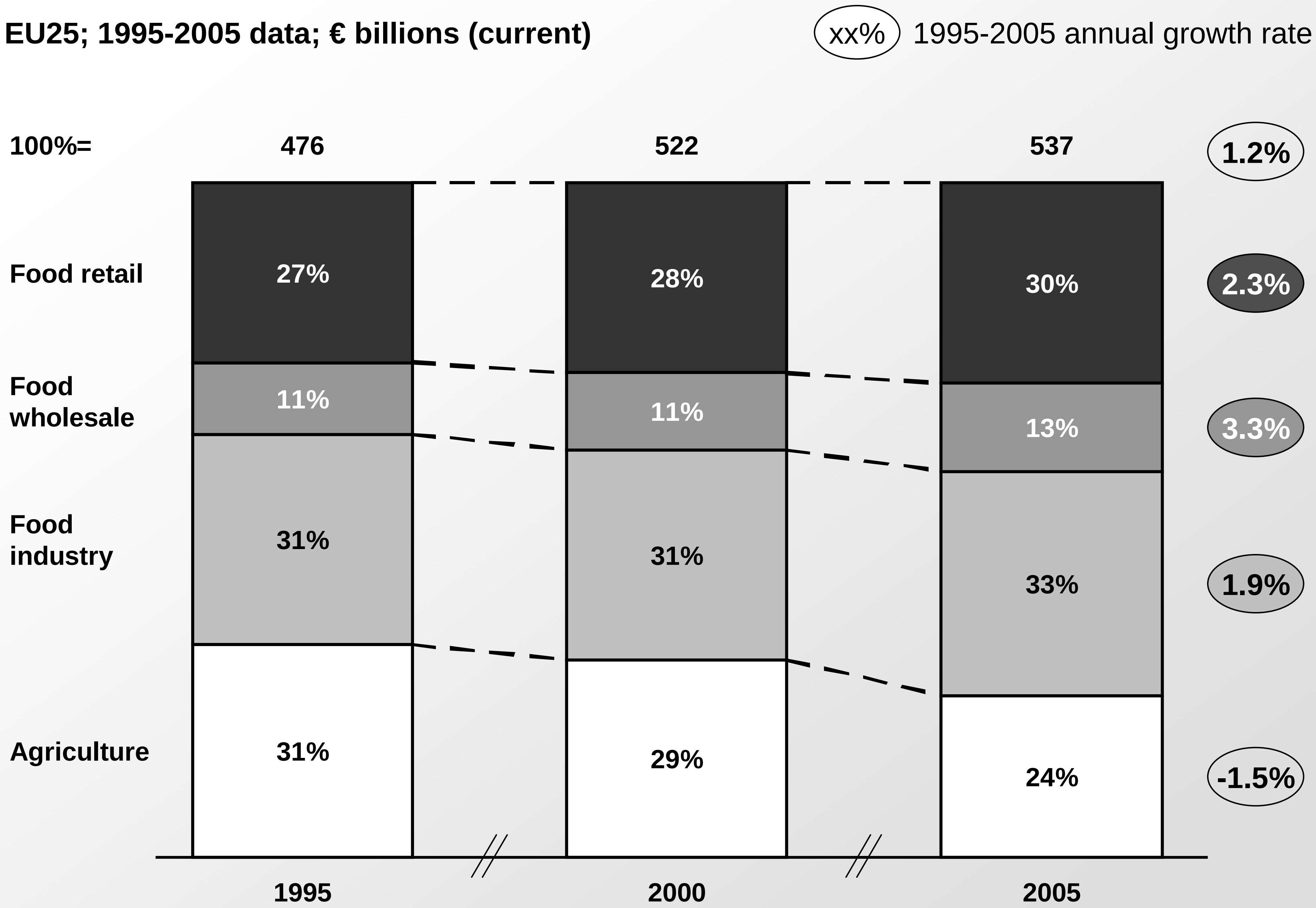
In this framework, work has been carried out in …

- Transparency
- Relations between the actors of the food supply chain
- Enhancement of the competitiveness of the food supply chain
- The distribution of value added and price transmission


Indicates the effect of indicator increase on value-added growth
VALUE-ADDED GROWTH
Price Growth Component
Volume Growth Component
Output Price Growth
Intermediary Inputs Price Growth
Labour Productivity Growth (in volumes)
Labour Input Growth
• Increase in price of output leads to increase in value-added
• Increase in price of intermediary inputs leads to a decrease in value-added
• Labour productivity as total value-added volume produced per labour input unit (hours worked)
• Labour input as total hours worked in the sectors



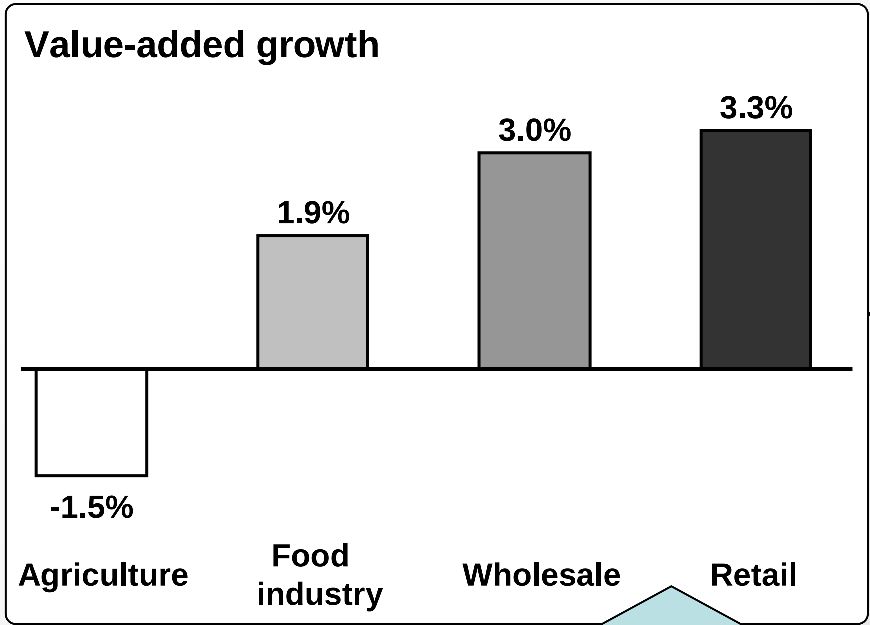
Source: EU KLEMS, EUROSTAT Structural Business Statistics

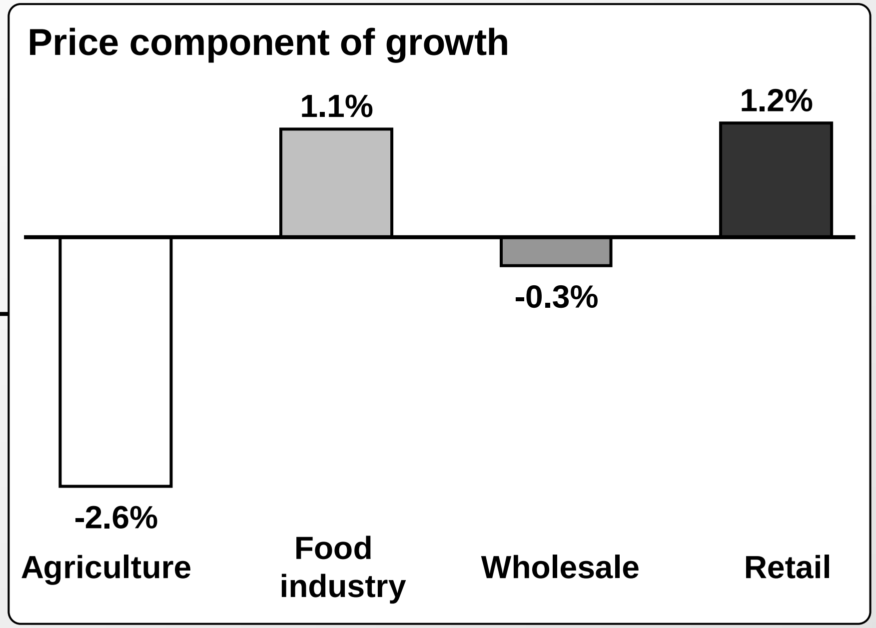


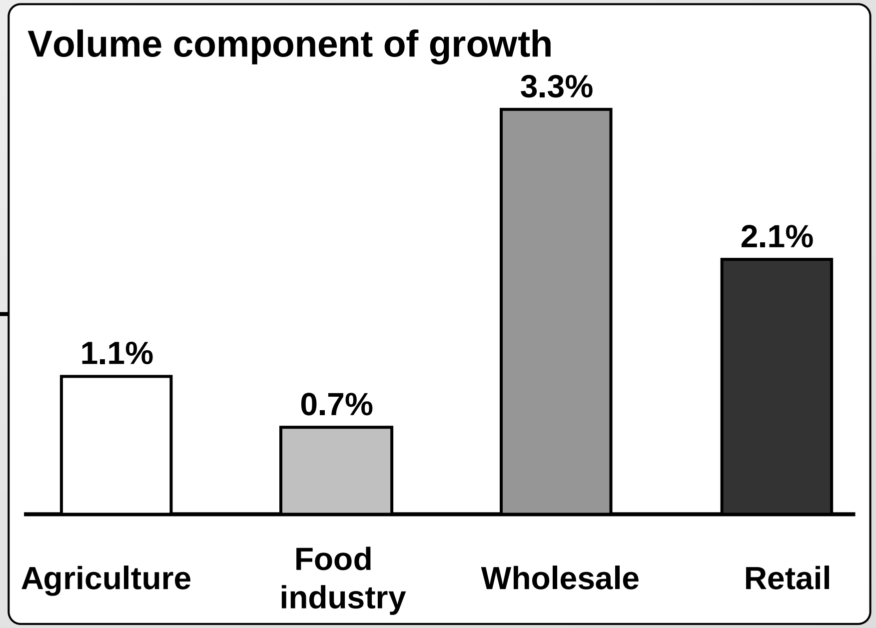
Source: EU KLEMS, EUROSTAT Structural Business Statistics

EU25; 1995-2005 annual growth rate

Indicates the effect of indicator increase on value-added growth



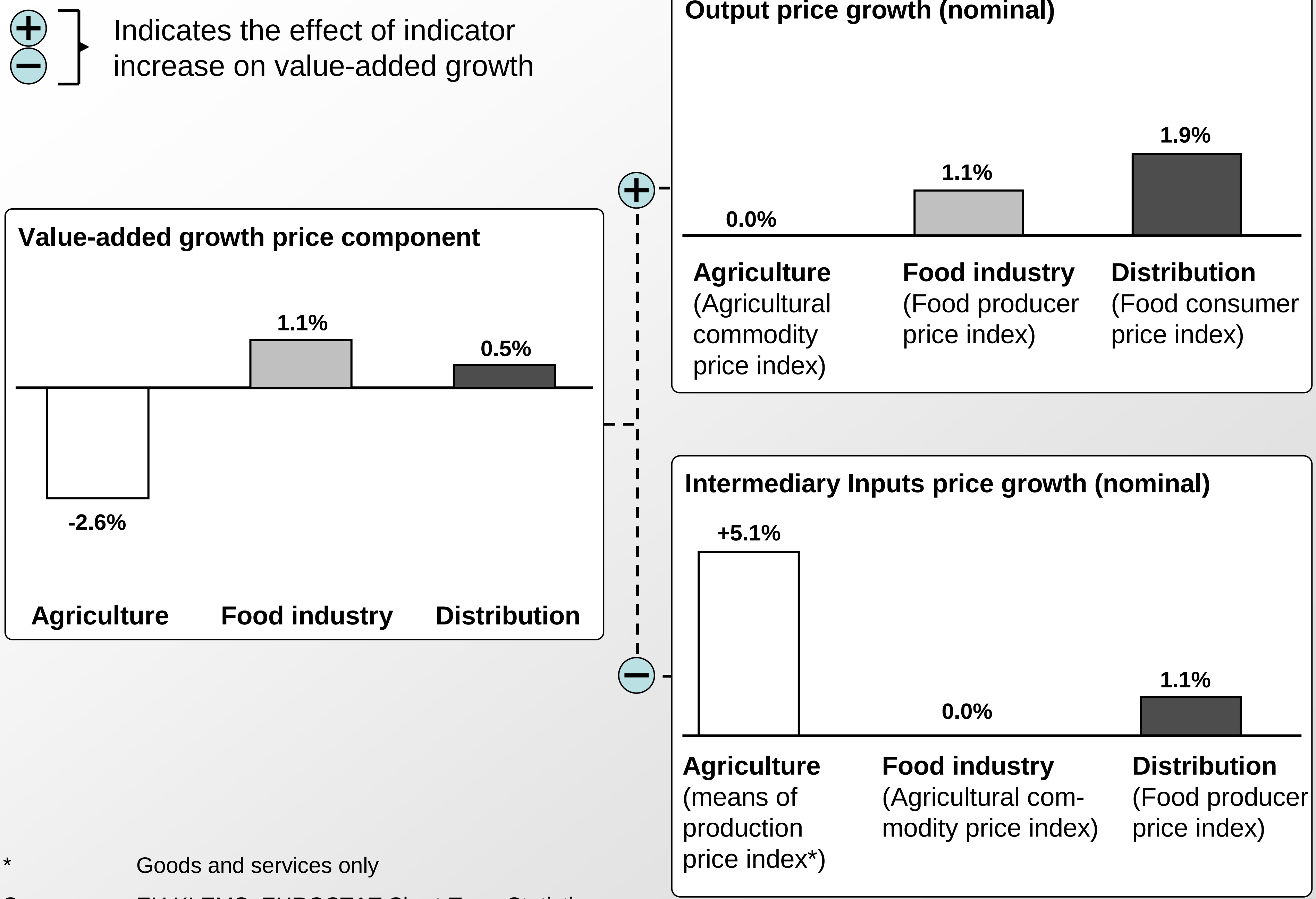




- Value-added growth for total wholesale and retail sector (not only food) since no price x volume growth breakdown available for food distribution
- Food wholesale value-added annual growth 1995-2005 is 3.3%; food retail is 2.3%

Source: EU KLEMS

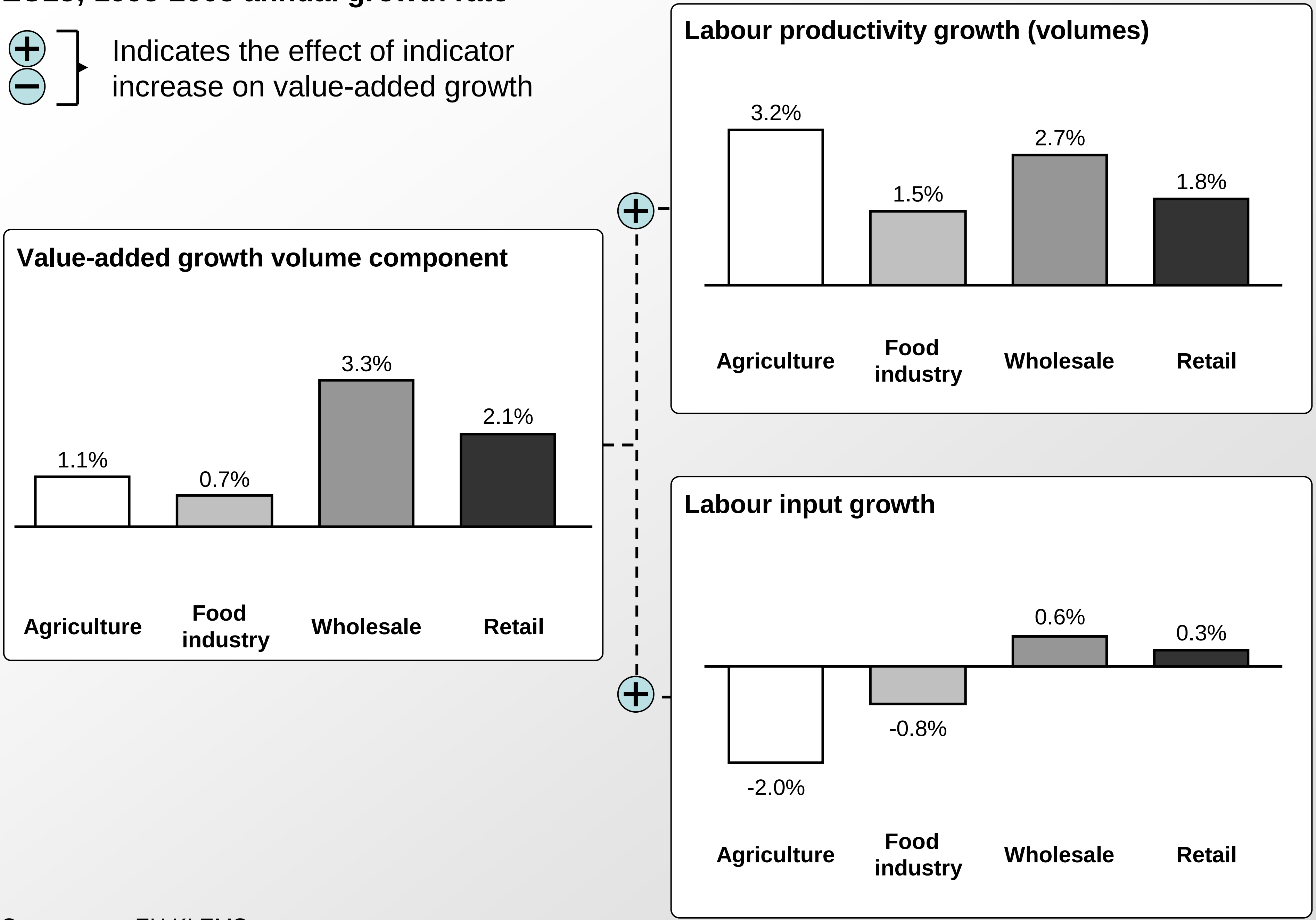
EU25; 1995-2005 annual growth rate



* Goods and services only

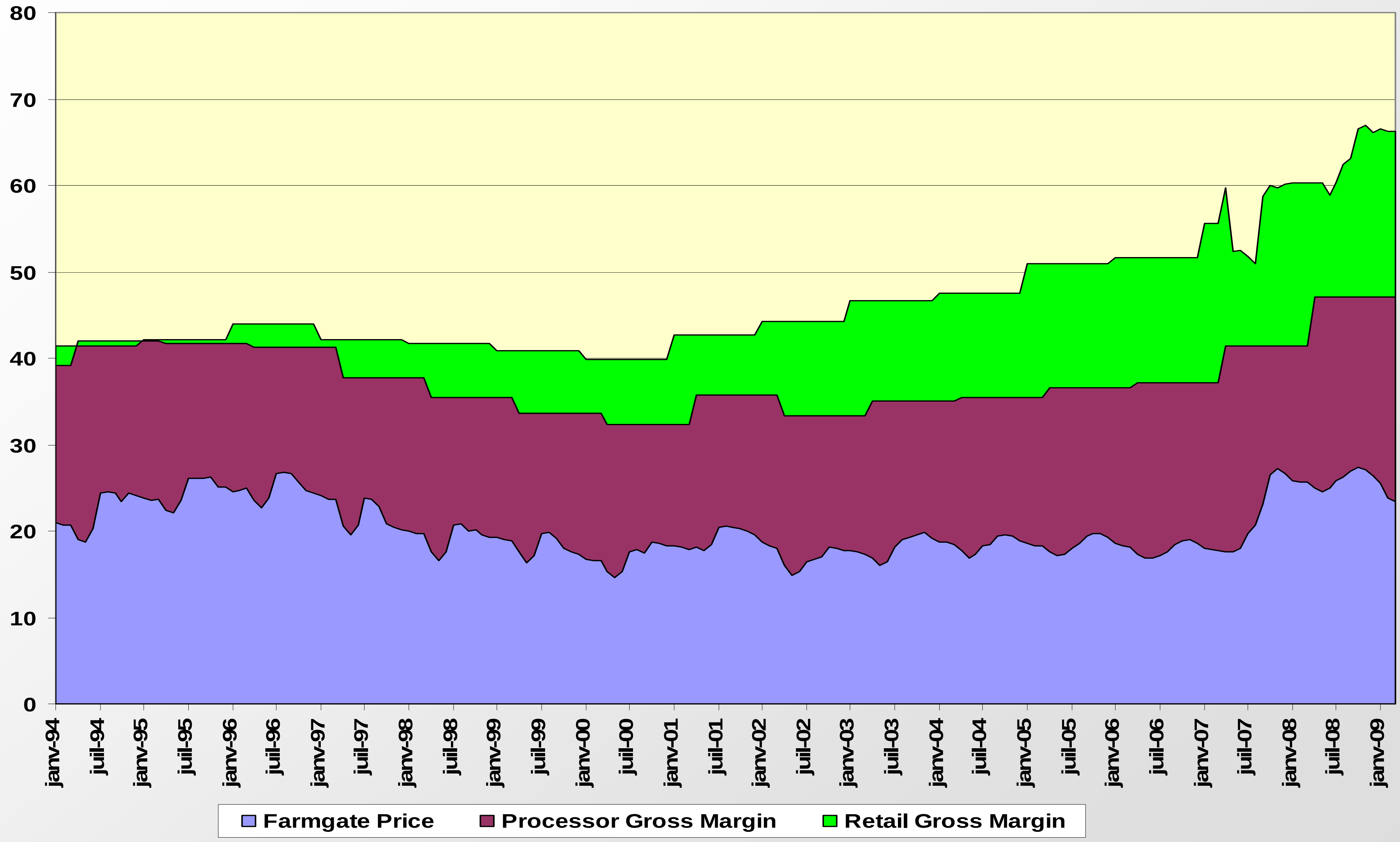
Source: EU KLEMS; EUROSTAT Short-Term Statistics

EU25; 1995-2005 annual growth rate

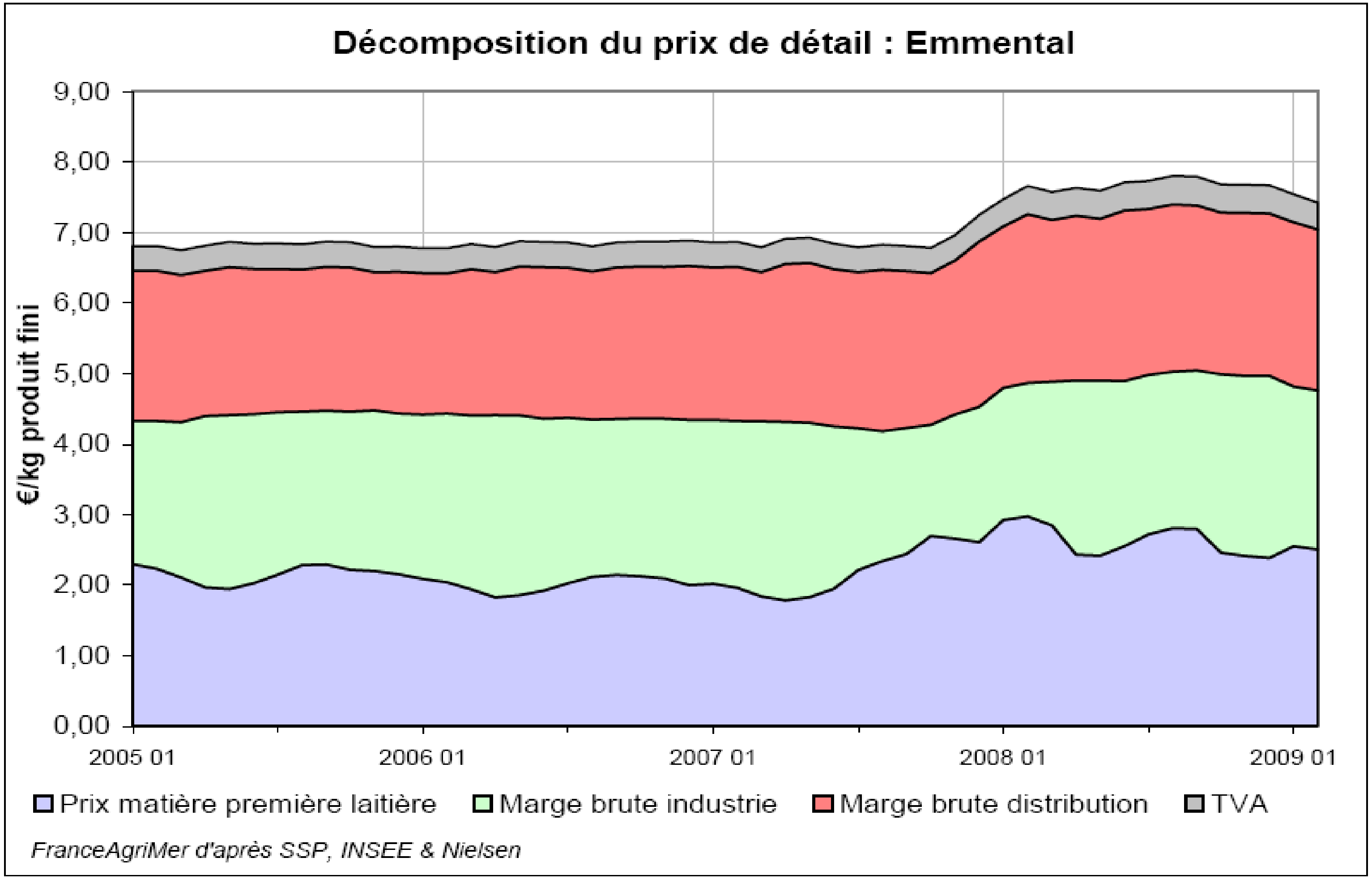


Source: EU KLEMS

Development in the liquid milk margins (UK, 1994 – 2009)



Development in the margins of Emmental (France, euro/kg)



Price transmission

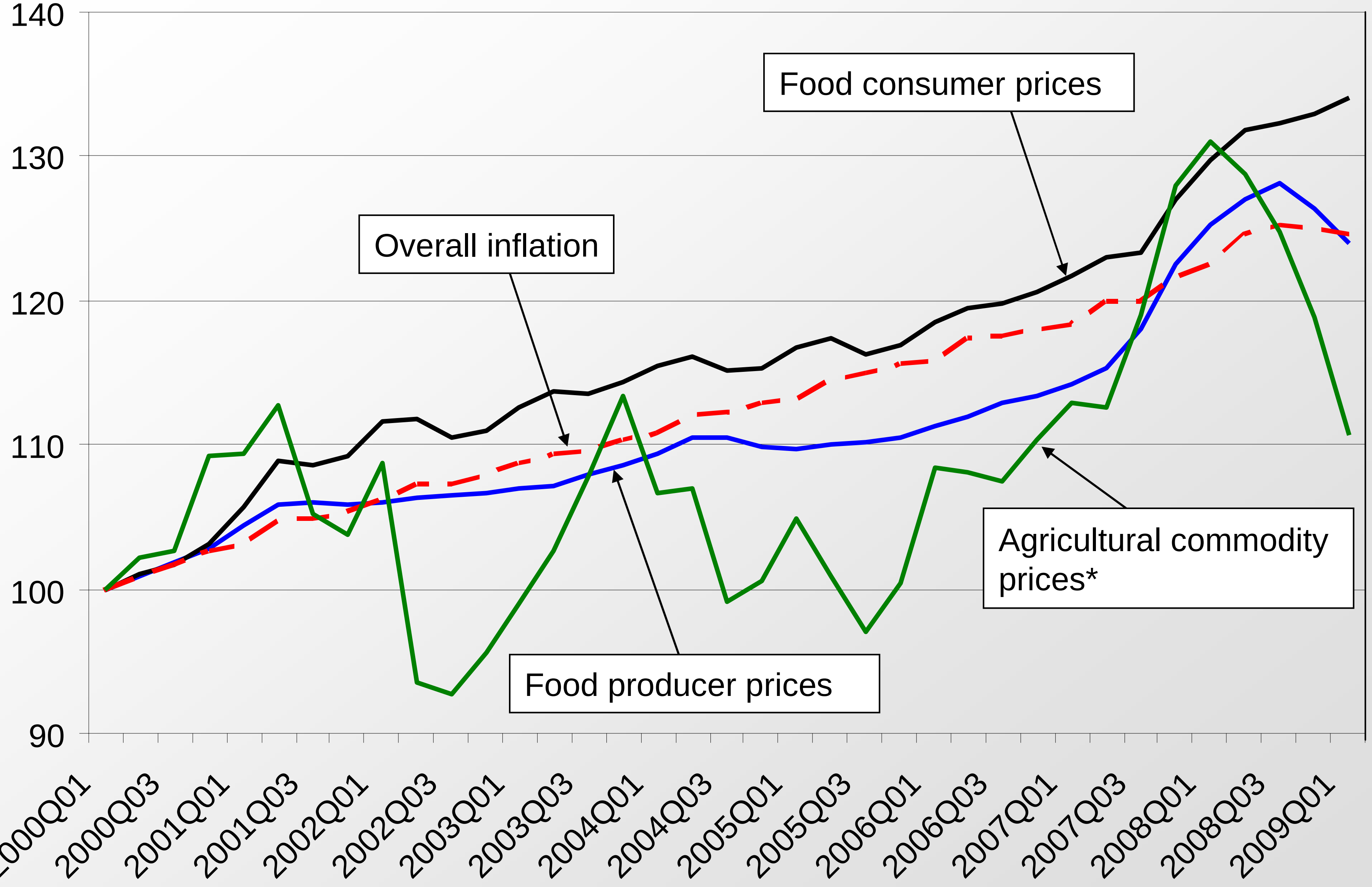
-Objectives: assessment of magnitude, speed and asymmetry of price transmission to assess effectiveness – efficiency of the chain

- Methodology: statistical/econometric analysis (causality, co-integration, asymmetry tests etc.) at aggregate level & for the dairy and pork supply chain

- Limitations of the analysis: data quality, diversity of situation across products and countries, measurement (but no causation)

- Imperfect price transmission does not necessarily means market malfunctioning (e.g. low share of agricultural commodity in total cost of food products, marketing strategies – price levelling, perishable nature of many food products, long-term contracts etc.)

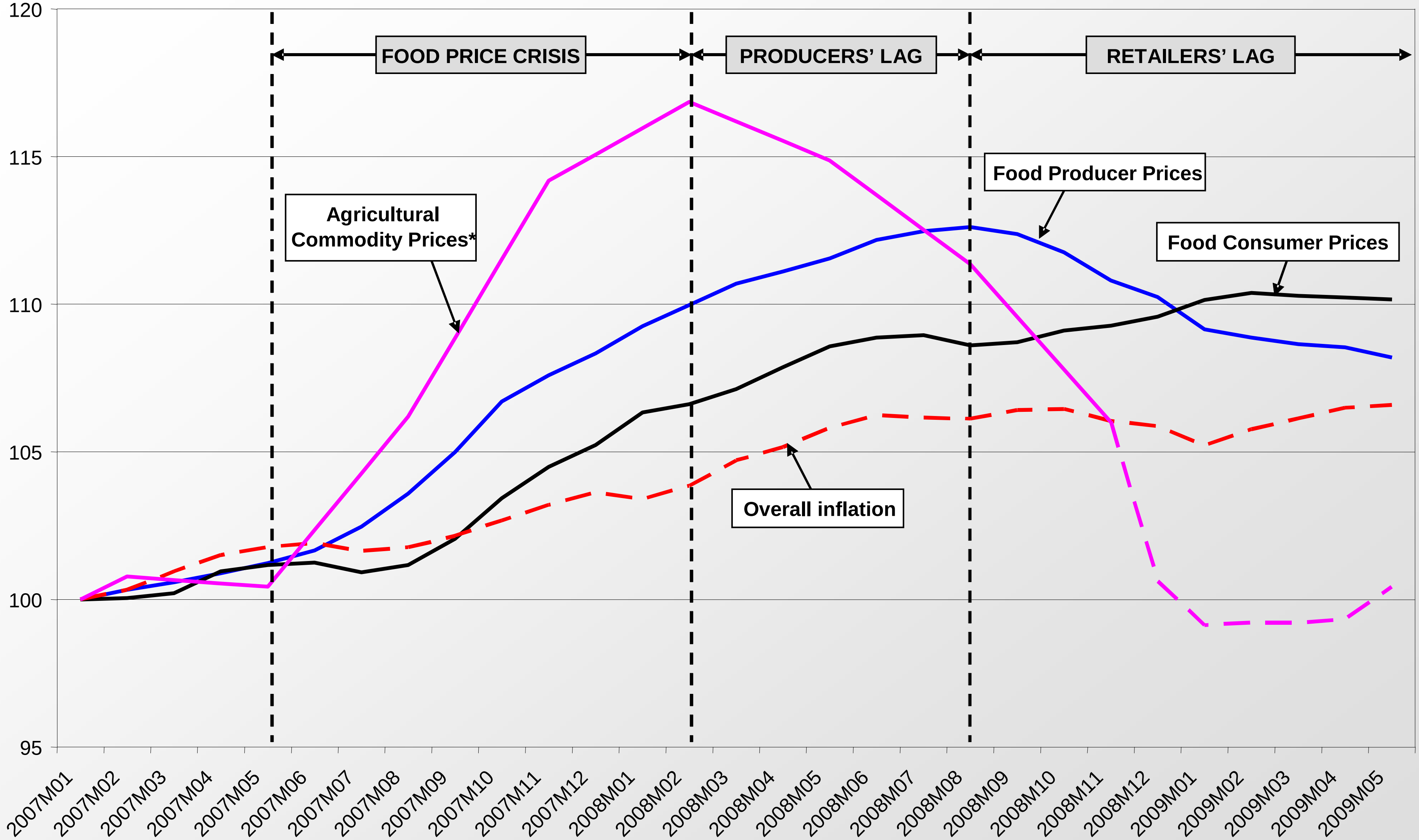
Q1 2000- Q1 2009; Quarterly price indices (nominal); 2000Q1=100



* Agricultural commodity price index has been extrapolated for 2009Q1 based on price levels of major commodities

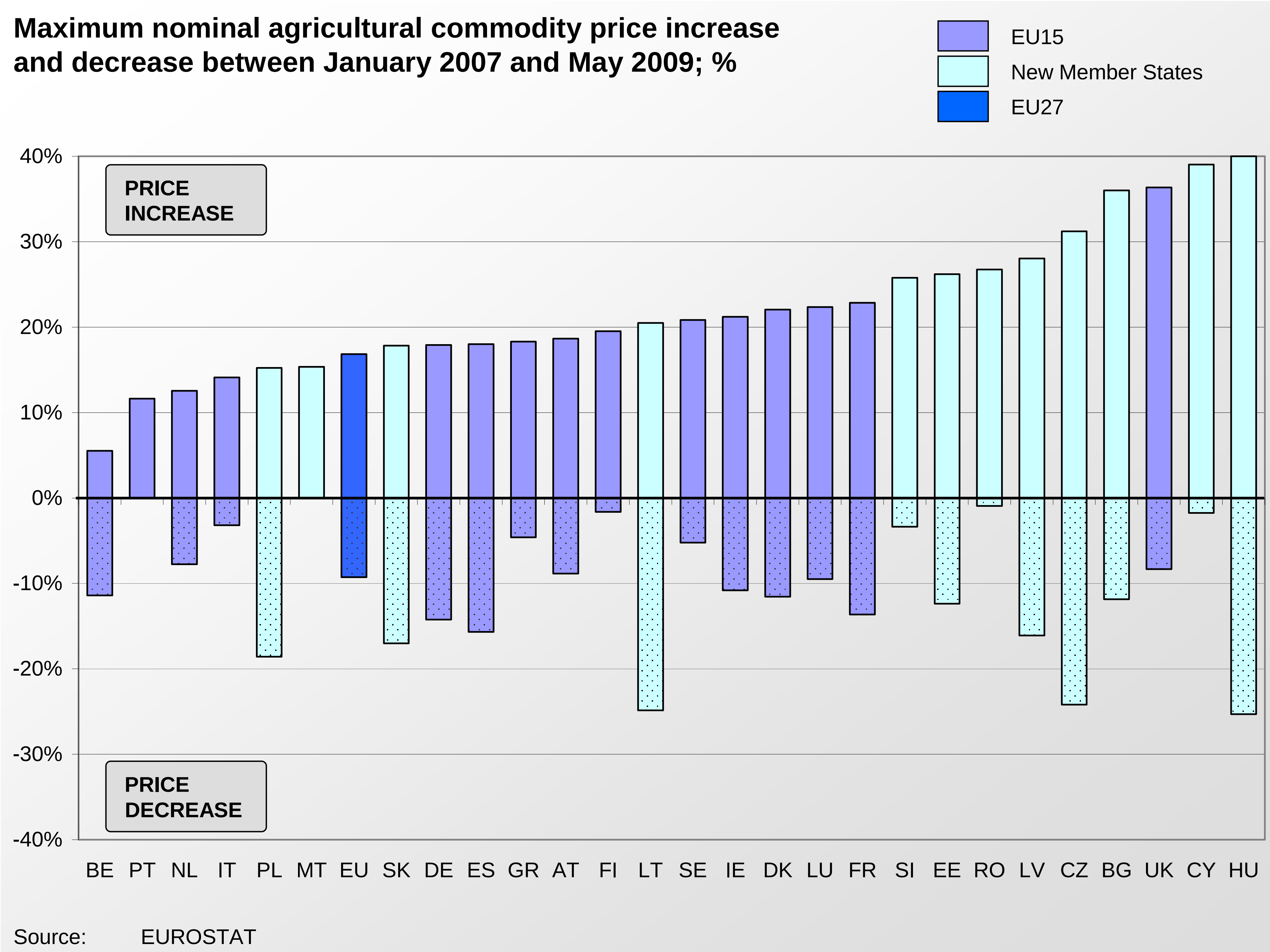
Source: EUROSTAT; AGRIVIEWS

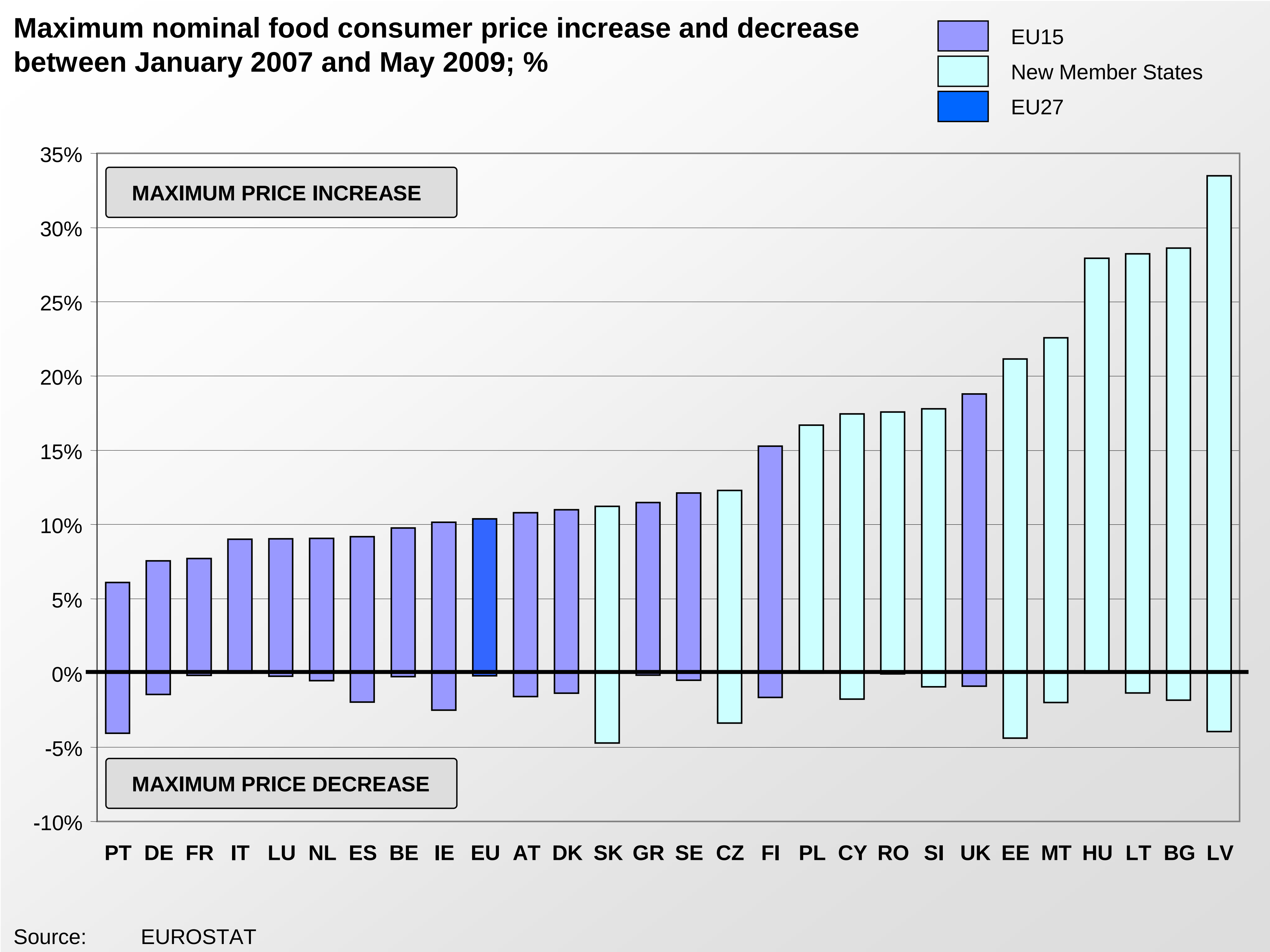
January 2007-May 2009; Monthly price indices (nominal); 2007M01=100



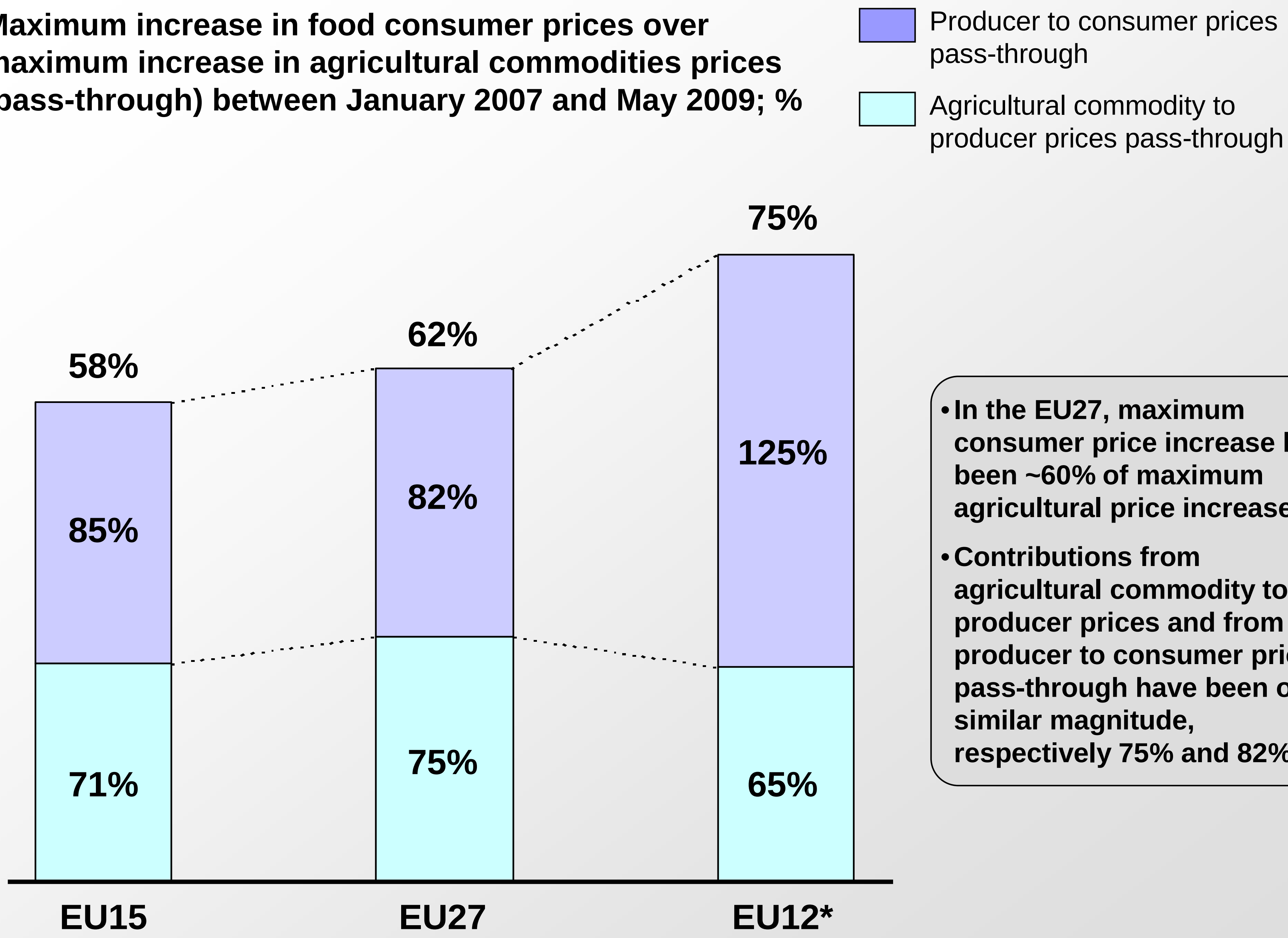
* Agricultural commodity price index has been extrapolated from January 2009 on based on price levels of major commodities (Agriviews)

Source: EUROSTAT; AGRIVIEWS


Maximum nominal agricultural commodity price increase
and decrease between January 2007 and May 2009; %
EU15
New Member States
EU27
PRICE INCREASE
PRICE DECREASE
40%
30%
20%
10%
0%
-10%
-20%
-30%
-40%
BE PT NL IT PL MT EU SK DE ES GR AT FI LT SE IE DK LU FR SI EE RO LV CZ BG UK CY HU
Source: EUROSTAT


Maximum nominal food consumer price increase and decrease
between January 2007 and May 2009; %
EU15
New Member States
EU27
MAXIMUM PRICE INCREASE
MAXIMUM PRICE DECREASE
35%
30%
25%
20%
15%
10%
5%
0%
-5%
-10%
PT DE FR IT LU NL ES BE IE EU AT DK SK GR SE CZ FI PL CY RO SI UK EE MT HU LT BG LV
Source: EUROSTAT

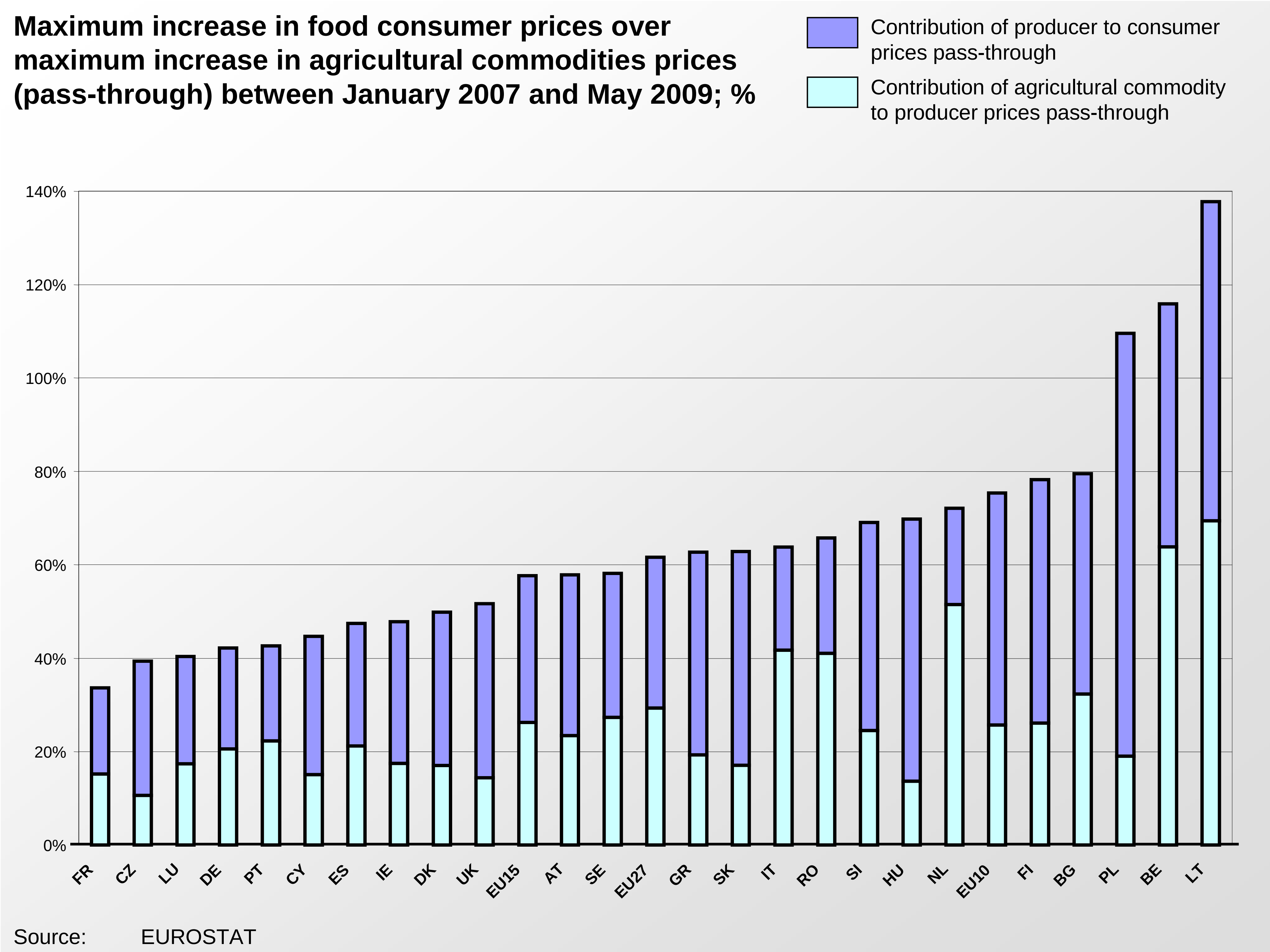
Maximum increase in food consumer prices over maximum increase in agricultural commodities prices (pass-through) between January 2007 and May 2009; %



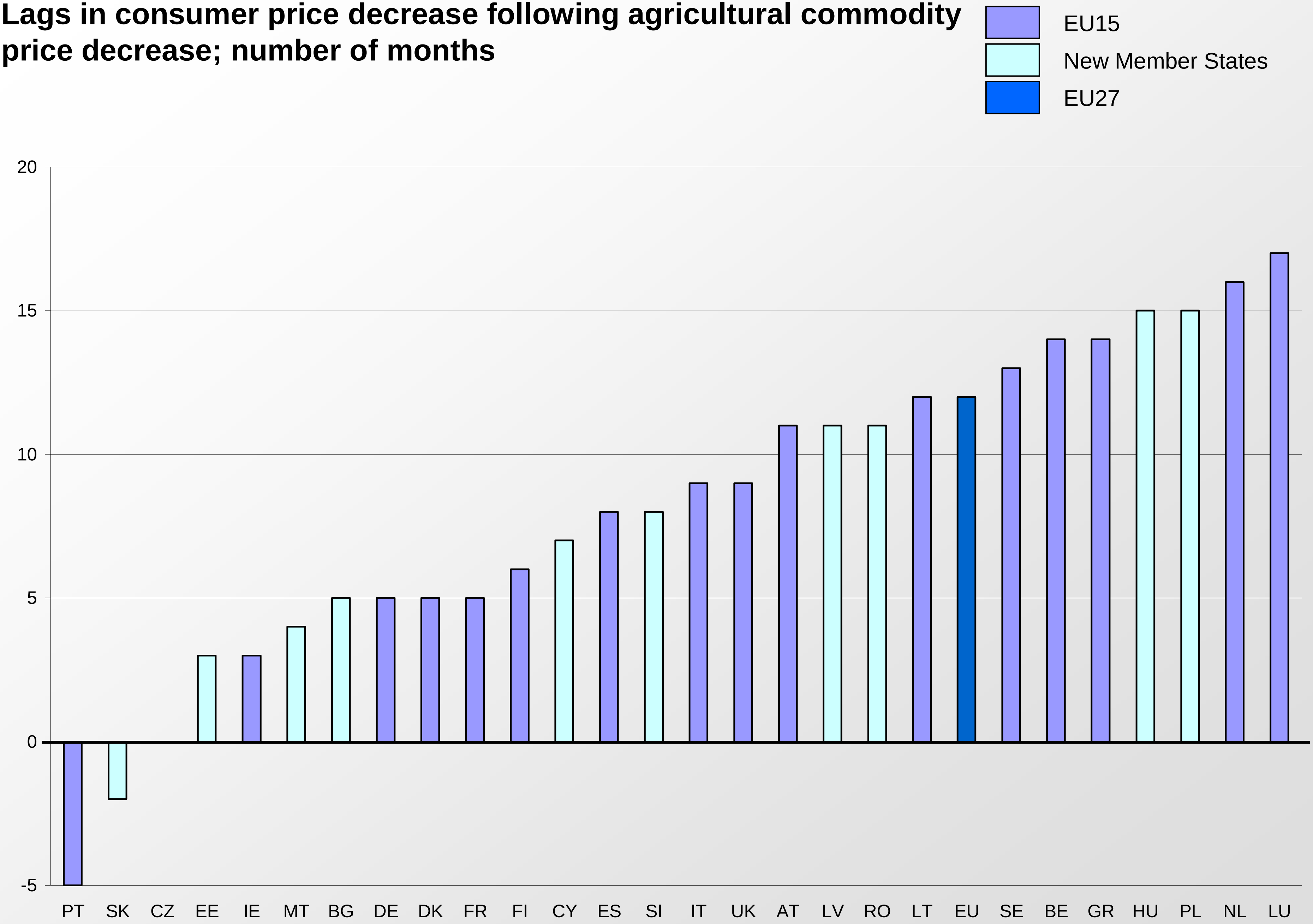
- **In the EU27, maximum consumer price increase has been ~60% of maximum agricultural price increase**
- **Contributions from agricultural commodity to producer prices and from producer to consumer prices pass-through have been of similar magnitude, respectively 75% and 82%**

* Excluding EE, LV and MT for which no data on food producer prices are available

Source: EUROSTAT

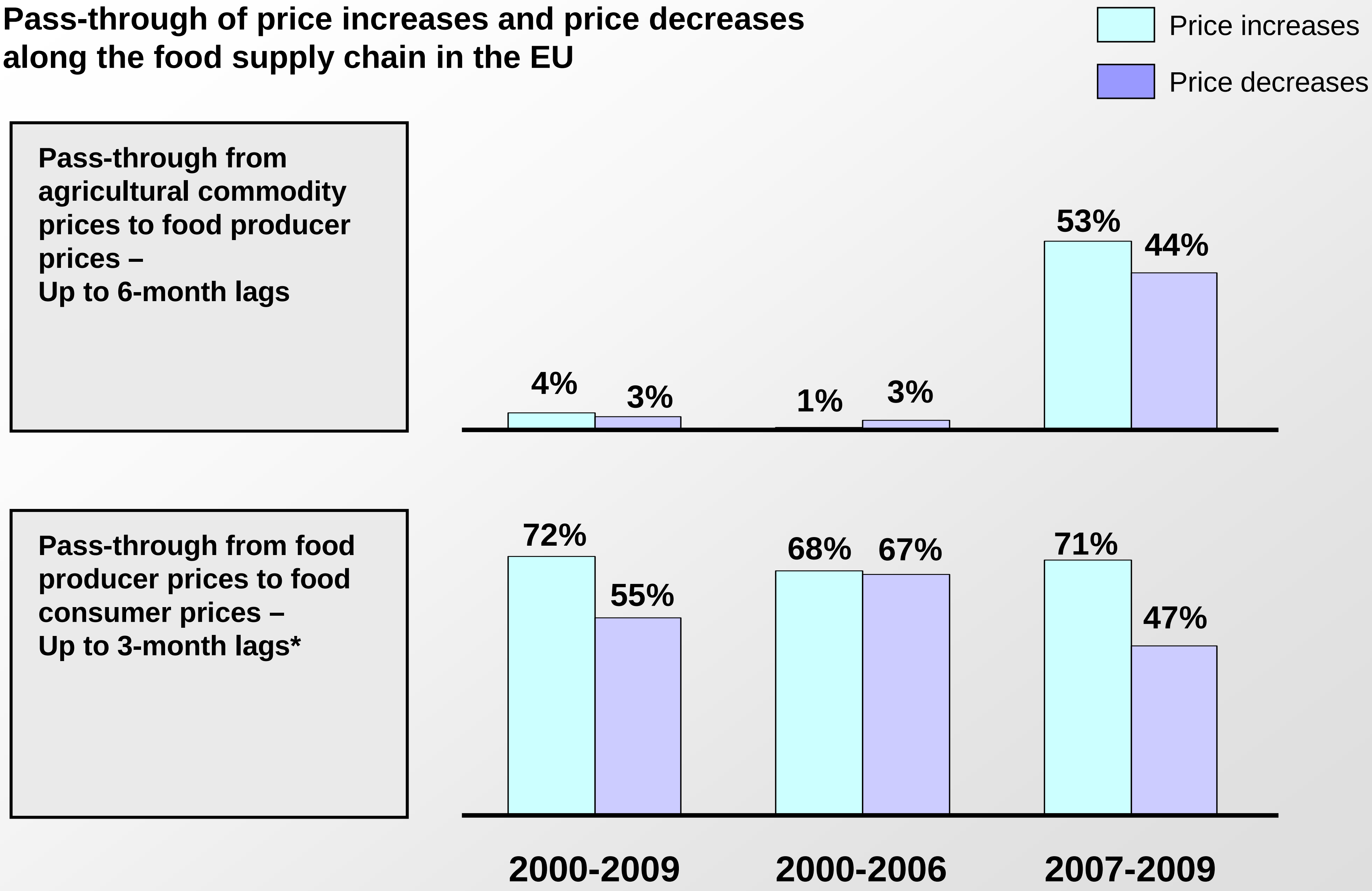

Maximum increase in food consumer prices over maximum increase in agricultural commodities prices (pass-through) between January 2007 and May 2009; %
Contribution of producer to consumer prices pass-through
Contribution of agricultural commodity to producer prices pass-through
140%
120%
100%
80%
60%
40%
20%
0%
FR
CZ
LU
DE
PT
CY
ES
IE
DK
UK
EU15
AT
SE
EU27
GR
SK
IT
RO
SI
HU
NL
EU10
FI
BG
PL
BE
LT
Source: EUROSTAT

Lags in consumer price decrease following agricultural commodity price decrease; number of months



Source: EUROSTAT

Pass-through of price increases and price decreases along the food supply chain in the EU



* Calculating pass-through with 6-month lags is not possible for price decreases over the 2007-2009 period, given the lack of occurrence of price decreases over the period; for the other period, the 6-month lagged producer price variation has no significant impact on consumer prices

Source: EUROSTAT; own calculations

Price transmission – Main (provisional) findings

- Low price transmission between agricultural sector and food industry, but high price transmission between food industry and retail sector

- Major change after the price surge in 2007 (“rocket and feather” pattern)

- Major differences across Member States (~ EU-15 vs. EU-12)

- Price transmission is not “mechanical”, difficult to assess, explain and foresee

Distribution of value added and price transmission along the food chain

Some issues

- Is this situation in terms of distribution of value added sustainable for the food chain ?

- Bargaining power: how to improve the current imbalance to achieve a fairer distribution of value added (at least socially). What about the development of producer’s organisation, further restructuring?

- Price transmission: an improved transmission of price changes would ensure a better adjustment along the chain (though a partial price transmission may be due to other factors than anti-competitive behaviour and/or imbalanced bargaining power)

- Transparency: improved availability of information on prices and margins along the chain would exert pressure on the chain

Food price monitoring tool

Key objectives

- Monitoring price levels for a set of food products: to evaluate price dispersion across Member States

- Monitoring price changes at each stage of the food supply chain for a set of product chains: to evaluate the price transmission mechanism at Member State level and the level of margins

STRUCTURE OF FOOD SUPPLY CHAIN MONITORING TOOL

		Agriculture	Food Industry	Retail
Price levels	Product chain 1 Product chain 2 … … … … Product chain n	• DG AGRI database covering a large scope of agricultural commodities • Monthly updates	• No information on food producer price levels	• Price levels in 2008 and 2009 (1 annual occurrence) for ~30 products through HICP collection/ Consumer Market Scoreboard
Price changes	Product chain 1 Product chain 2 … … … … Product chain 10	• Agricultural Commodity prices indices available with ESTAT and/or DG AGRI Database • Monthly updates	• Food Producer price indices available in ESTAT Short-Term Business Statistics • Monthly updates • Indices at Activity level (NACE classification)	• HICP for food products • Monthly updates • Indices available at category level (COICOP classification)

Distribution of value added along the food chain, price transmission, food price monitoring tool

Next steps

- New report on the functioning of the food supply chain to address these issues planned for end of 2009, including the implementation of the Roadmap from the December 2008 Food Price Communication

- Need for caution when drawing general policy conclusions and recommendations from analytical and empirical findings on these issues (despite evidence of some inefficiencies in market functioning and partial price transmission along the food supply chain)