Standards and costs of increasing transparency

Market transparency in food chains workshop (JRC&DG-AGRI)

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Issues to be discussed

1. Studies on cost of increasing price transparency
2. Who collects food supply chain data?
3. What information is collected?
4. Cost estimates
5. Costs vs. benefits: Who gains what?
6. Challenges with standards in data collection
7. Frequency of data collection and reporting
8. Final remarks
Studies on cost of increasing price transparency

1. Study commissioned by Dutch ministry of Economic Affairs (Oosterkamp et al., 2013a,b)
   - Describe various price monitoring systems in different countries and investigate their costs and effects
   - In depth analysis of French and Spanish observatories

2. Ongoing study for JRC by Wageningen UR
   - Review existing approaches price & margin monitoring
   - Develop typology based on methodology and data needs
   - Develop main approaches to price & margin monitoring
   - Analyse these approaches on their cost efficiency
   - Apply these approaches to some EU food supply chains
   - Identify data and methodological gaps in price transmission studies
Who collects food supply chain data?

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WAGENINGEN UNIVERSITY & RESEARCH
Who collects food supply chain data?

Oosterkamp et al. (2013a,b) explore price monitoring by and for the government in France (FR), Spain (ES), Belgium (BE), Germany (DE) and The Netherlands (NL) and discuss the European Food Price Monitor Tool (FPMT).

- **FR and ES**: extensive food price & margin observatories
  - Separate entities
  - Collect, analyse, and present prices and margins
  - Provide insight in supply chains by additional studies
  - Meet and discuss with various supply chain stakeholders

- **BE**: price observatory
  - Main focus on consumer prices based on existing data
  - Relative simple analyses based on aggregate data
Who collects food supply chain data?

- **DE**
  - Federal institute for collecting ag. prices and volumes
  - Statistical office: monthly industry and consumer prices
  - Private party (AMI) also collects and analyses data

- **NL**
  - Food price monitor since 2013 (WR and Statistics Neth.)
  - 9 product groups, 3 chain stages, monthly price, short explanations

- **FPMT**
  - Presents monthly producer, consumer and import price indices for various MS based on existing statistics
  - Estimates an Agricultural Commodity price index
Who collects food supply chain data?

- Ongoing JRC project: 17 price monitoring systems classified into 3 classes based on 8 criteria:
  - C1 Simple monitoring system
    + Clear presentation and reliable results
    - Aggregate and incomplete, with time lag
  - C2 Moderately complex monitoring system
    + Good coverage and rich information
    - Data insufficient
  - C3 Complex monitoring system
    + Much detail and insight
    - Strong data requirements, updates often slow
What information is collected?
What information is collected?

- In most cases only price levels or indices reported without much context or explanation.
- Data often collected via existing channels, e.g. statistics office or marketing board.
- Different agencies collect and report price data, often without much coordination; sources not always clear.
- Some observatories construct margins (FR) or even detailed assessment of costs throughout chain (ES).
- Different objectives can be discerned:  
  1. Timely provision of market prices to farmers  
  2. Protection of consumers from high food prices  
  3. Rigorous analysis of prices throughout supply chain
Cost estimates Oosterkamp et al. (2013a)

- **FR Price and margin observatory**
  - Estimated additional costs k€700
    - Mainly for 7.5 fte personnel
    - Excludes costs other institutes (INSEE) for data collection
    - Excludes cost for industry and retail for providing data

- **ES Price and margin observatory**
  - Estimated additional costs k€2800
    - 10 fte personnel
    - k€1800 for additional data collection (32 pollsters)
    - Excludes cost for industry and retail for providing data
Cost estimates Oosterkamp et al. (2013a)

- **BE**
  - Hardly any additional costs due to existing data use.

- **GE**
  - No change in ongoing data collection.

- **NL Food price monitor**
  - k€200 for collecting additional data and preparing output.
Preliminary variable cost estimates JRC study
Costs in graph are only variable costs.
Costs of primary data collection done by others (statistics office or industry) not considered.
Start-up costs unknown.
Seems that most countries have chosen to collect data at low costs.
Costs for full price and margin monitoring much higher, on average about M€1 or beyond.
 Costs vs. benefits: Who gains what?

- With increasing concentration in supply chain and product differentiation clear need for transparency!

- Market transparency reporting for whom?
  - Farmers, industry, consumers, or policy makers?
  - Stated objectives not always in line with collected data.

- Oosterkamp et al. indicate that both in FR and ES the reported prices and margins hardly used by sector.
  - Industry and retail consider calculations unrealistic
  - Delays of more than one year in publishing results

- Benefits sometimes different than expected:
  - Improved understanding between parties in supply chain
  - Farmers in Spain realised they are small and inefficient
Challenges with standards in data collection

- For farm products standards can be chosen:
  - LTO international milk price review: Standardized milk price in euro per 100 kg milk with 4.2% fat, 3.4% protein, 500,000 kg per year, tbc 24,999 and SCC 249,999 per ml
  - Futures markets (Euronext, CME) use standardized contracts, e.g. 50 tonnes of milling wheat #2 specific details on moisture, impurity etc.

- Often Euro/ton or Euro/100kg used (unknown quality).
- Some agencies present prices, other price indices.
- Increasing heterogeneity in supply chains implies different prices for farmers (even supplying to same processor).
Challenges with standards in data collection

- Caveats for data collection in EU:
  - Actors involved in data collection differ in various countries. They often work according to national guidelines or to meet national goals.
  - Countries differ in their food industry structure (e.g. specialized vs. part-time farmers; PDO production; export vs. domestic orientation; importance of certain products; concentration of processing and retail).

- But even with different definitions (e.g. EU crop market observatory) and different supply chain structures there is substantial price co-movement (Gardebroek et al, 2016) that can be exploited to investigate price transmission.
Frequency of data collection

- For price reporting at least monthly data should be provided, weekly is better. Not sure whether sector requires daily data given supply under contract.

- Price transmission analysis mostly based on monthly data, but would benefit greatly from weekly data.

- In analysis daily data may contain too much noise.

- Balance should be found between value of data vs. costs of collecting and processing data.
Final remarks

- Do we know the actual use of current food price and margin monitoring? E.g. do farmers actually consult it, does industry use it? Does it serve policy&research to safeguard functioning of markets?

- Instead of (only) collecting prices, collecting data on supply chain context (e.g. concentration indices, number of stages/actors, etc.) equally important. Many price transmission studies lack such context and do not investigate reasons for APT.

- Given (i) increasing concentration in supply chains, (ii) increasing product heterogeneity and (iii) world market influence there is a clear need for data on market transparency!