GLOBALIZATION & COMPETITION IN AGRI-FOOD CHAINS

Johan SWINNEN

Centre for European Policy Studies (CEPS)
&
LICOS – Centre for Institutions and Economic Performance
KU Leuven

EU Agricultural Outlook Conference
December 2015

- Market power and globalization in agri-food chains is an important economic issue and a sensitive item on the policy agenda all around the world.

Major changes in 21st Century

- Governance of agricultural markets and food systems

- Policies (actual)

- Analysis & policy prescriptions for the future

"Misconceptions of modern agricultural markets"

- Microeconomics textbooks continue to point at "agricultural markets" as standard examples of "competitive markets".

  - "*Thousands of farmers produce wheat, which thousands of buyers purchase to produce flour and other products. As a result no single buyer can significantly affect the price of wheat.*"

- (Sexton, AJAE 2012)

- Agricultural markets as "examples of competitive markets" requires several conditions :
  - Buyers and sellers must be **many and small** relative to the total size of the market
  - Products must be **homogenous**
  - **Information** must be perfect, so all buyers and sellers are aware of prices and product characteristics
  - Contracts are **enforced**

Misconceptions of modern agricultural markets

"I don't know of any modern agricultural market that meets all three of these conditions. Most don't meet any of them"

(Sexton 2012)

Reality: Crucially important…

- **Major growth in concentration in parts of the agri-food value chains, in particular at the retail sector**

Reality: Crucially important…

- Major growth in concentration in parts of the agri-food value chains, in particular at the retail sector

- **Contracting & vertical relationships are widespread in modern supply chains**

Reality: Crucially important…

- Concentration & market power

- Contracting & vertical relationships

- **Quality & Diversity requirements**

Rapid Growth of Agri-Food Standards

Public Standards:
SPS notifications @ WTO

GlobalGAP producers
Private Standards

MORE STRINGENT
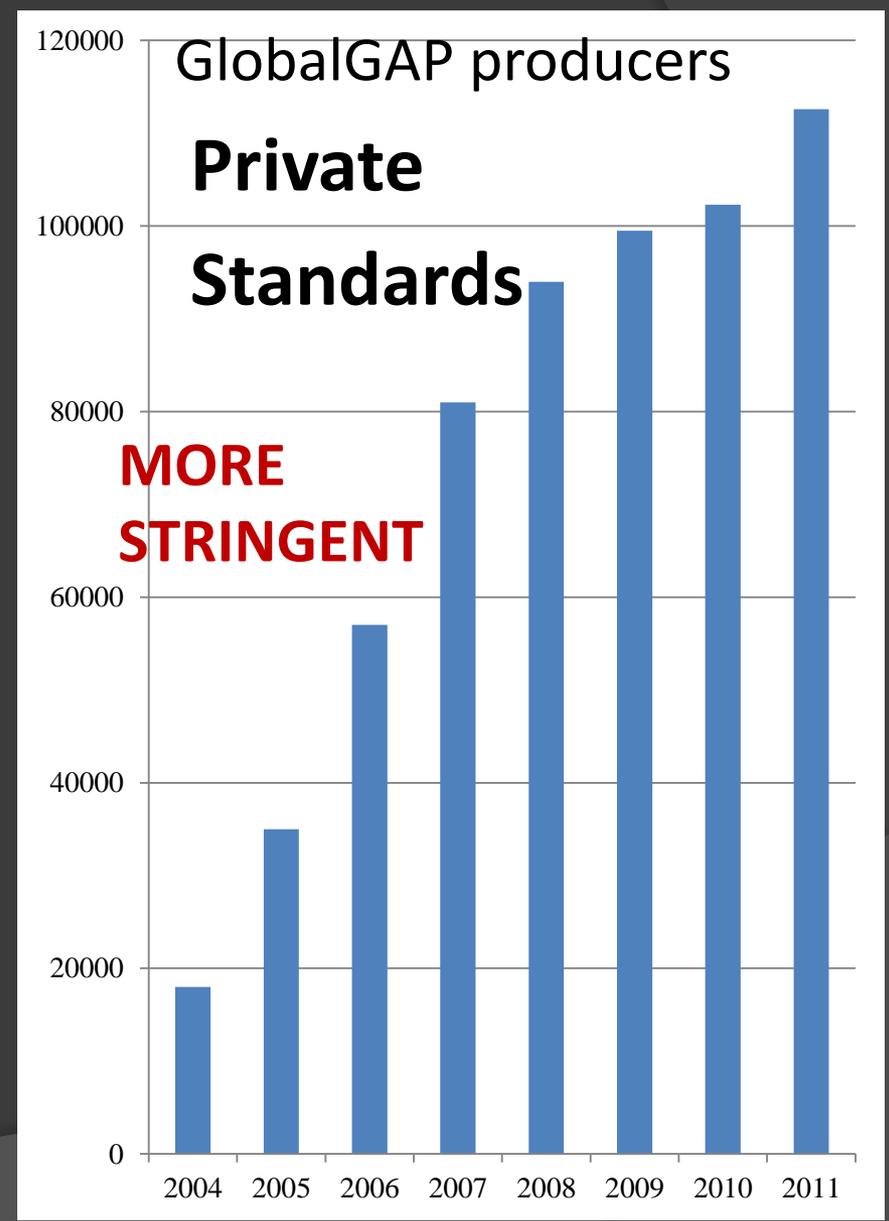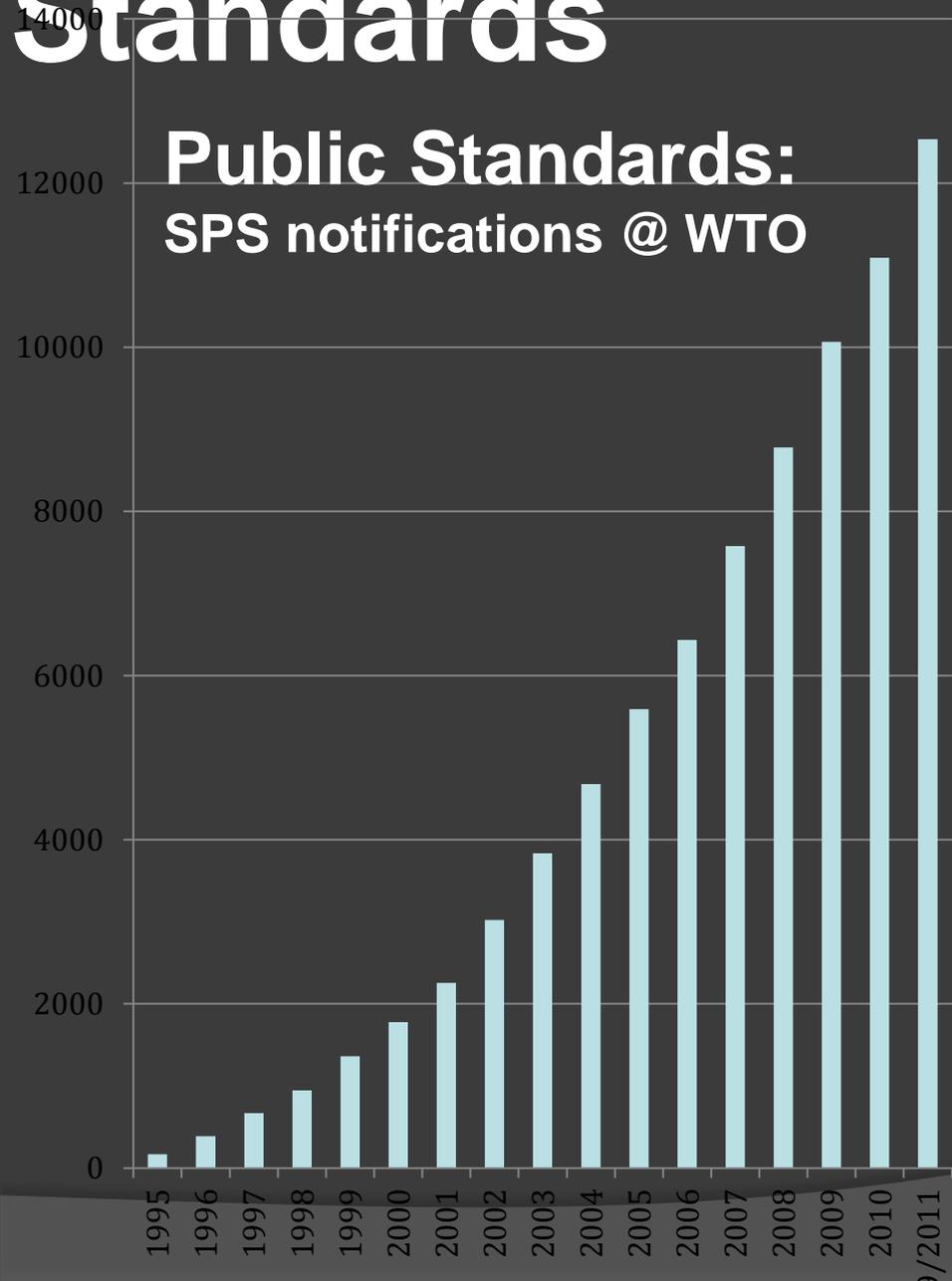
Policies for the "new paradigm" …

- The welfare implications are **complex**

- The policy implications are **not trivial**

Swinnen, J., and A. Vandeplas. 2010. "**Market Power and Rents in Global Supply Chains**." *Agricultural Economics* 41: 109–120

CAP Evaluation in the "Good Old Days"
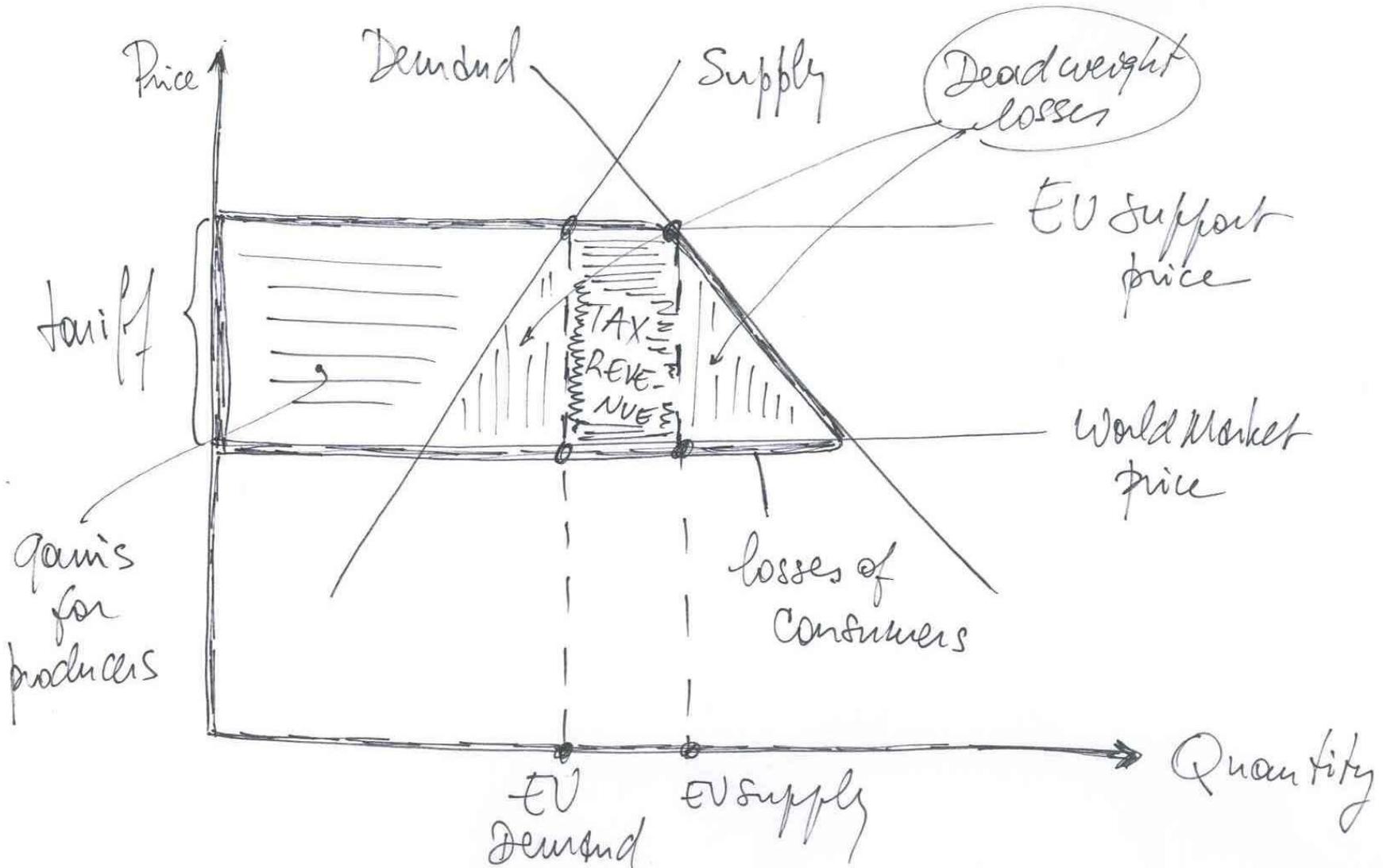
Policy Evaluation in the "New Paradigm"

- On farmer's income:

$$\frac{\partial Y}{\delta \Psi} = \frac{\partial Y}{\delta \alpha} \cdot \frac{\partial \alpha}{\delta \Psi} + \frac{\partial Y}{\delta \varphi^f} \cdot \frac{\partial \varphi^f}{\delta \Psi} + \frac{\partial Y}{\delta \gamma} \cdot \frac{\partial \gamma}{\delta \Psi}$$

- with $\partial Y / \partial \alpha \geq 0$, $\partial Y / \partial \varphi^f \leq 0$, $\partial Y / \partial \gamma \geq 0$

- On contract feasibility:

$$\frac{\partial [\theta - \theta_{\min}]}{\delta \Psi} = \left[\frac{\partial \theta}{\delta \alpha} - \frac{\partial \theta_{\min}}{\delta \alpha} \right] \cdot \frac{\partial \alpha}{\delta \Psi} - \frac{\partial \theta_{\min}}{\delta \varphi^f} \cdot \frac{\partial \varphi^f}{\delta \Psi} - \frac{\partial \theta_{\min}}{\delta \gamma} \cdot \frac{\partial \gamma}{\delta \Psi}$$

- with $\partial \theta / \partial \alpha < 0$, $\partial \theta_{\min} / \partial \alpha \leq 0$, $\partial \theta_{\min} / \partial \varphi_f \leq 0$, $\partial \theta_{\min} / \partial \gamma \geq 0$

CAP Policy discussion

From

"(un)fair prices"

to

"(un)fair trading practices"
(UTPs)

Increasing the farmer's share of the value in the chain

5 euro

2 euro

20 eurocents

1 - 2 eurocents
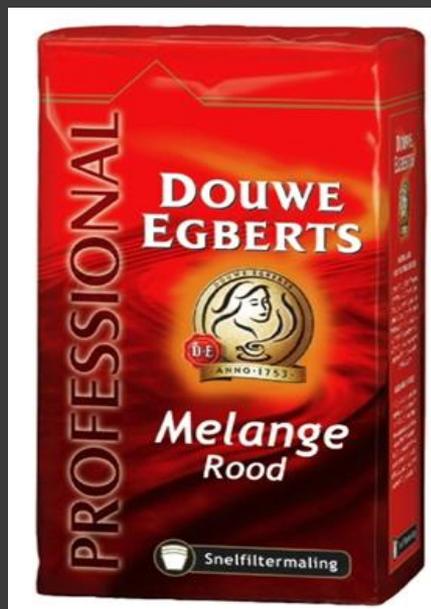
Complex interactions and impacts of modern value chains

- Theoretical / conceptual arguments

- Empirical studies

- What does the media say ?

From the media …

Polish government

- "Food retailers in Europe failed to pass on price reductions to consumers, keeping their margins high and causing many farmers to abandon agriculture".

Farmer protest against low supermarket prices (Belgium)

Protest against opening up the retail sector to foreign investment (FDI) in India

Also from the media …

Indian farmers protest PRO opening Western-style supermarkets

Farmers : "Reliance buys up farm produce from local farmers. For many farmers it saves them money because they no longer have to go through traditional middlemen to sell their goods."

Demonstrations of consumers PRO modern supermarkets …

In Nitra, Slovakia, consumers demanded that the city government would give Lidl a license to open a supermarket in their part of town, which was disproportionately populated by pensioners and low wage consumers – consumers which hoped to benefit from increased competition and low prices (2007).

2010 - After months of controversy, LIDL finally opened its budget shop in Wolverhampton, UK...

Hundreds of customers were queuing before the doors …
Pensioners argued:

"I'm delighted because the prices here are better than other shops in the area, which are just too expensive for pensioners who have to watch the penny".

Conceptual and Empirical Studies

find complex and mixed effects on farmers and consumers

Quality Standards, Value Chains, and International Development

Economic and Political Theory

JOHAN SWINNEN,
KOEN DECONINCK,
THIJS VANDEMOORTELE,
ANNELEEN VANDEPLAS

CAMBRIDGE

Theory : The simple argument

High concentration → market power →

a) buyer power: lower prices for suppliers

b) seller power: higher consumer prices

Theory : Some complications

While concentration is a useful first indicator of market power, **high concentration does not necessarily translate into market power**

- **Asymmetries** in size, cost, or strategy may impede collusion

(Compte et al., 2002; Kühn, 2002; Barla, 2000; Dobson et al., 2001)

Theory : Some complications

While concentration is a useful first indicator of market power, **high concentration does not necessarily translate into market power**

- **Vertical relationships** matter : strong competition may lead to break-down of buyer-supplier relationships

(McCorriston & Sheldon, 2007; McCorriston, 2015; Swinnen et al 2015)

Theory : Some **more** complications

… high concentration **may <u>enhance</u> welfare** if it :

- Increases SCALE economies
- Reduces TRANSACTION costs
- Secures return on investments in R&D
- Offsets market power of other agents supplier ("COUNTERVAILING power")
  - (Very different debate today than 20 years ago)

Empirical Studies - consumers

- **Diverging conclusions on the effects of retail concentration / modern retail on consumer prices:**

OECD COUNTRIES
- **HIGHER PRICES:** Lamm (1981), Marion et al. (1993), Cotterill (1986), Cotterill Harper (1995), Cotterill (1999)
- **LOWER PRICES or NO EFFECT :** Kaufman Handy (1989), Newmark (1990), Binkley Connor (1998), Binkley et al. (2002)

DEVELOPING COUNTRIES
- **HIGHER PRICES:** Minten (2011)
- **LOWER PRICES :** Reardon and Hopkins (2006), D'Haese and Van Huylebroeck (2005), Neven et al (2006)

Empirical Evidence - farmers

- **Results vary and depend on variety of model assumptions & case specifities (McCorriston, 2015)**

  - RICH COUNTRIES
    - **Significant** market power (e.g. Lloyd et al 2009)
    - **No** or **weak** market power (e.g. Dobson et al (2001), Scokai et al (2009)

  - EMERGING and DEVELOPING COUNTRIES
    - **Mixed** findings (Sadler et al 2007; Minten et al (2009), Maertens et al (2009))

Conclusion : A Complex Chain System

- Obvious need for better understanding

- Data & information is limited :
  - "it is practically impossible to measure retailers buying power as prices paid by retailers to their suppliers are typically not revealed" (Sexton et al 2005)

  - With contracts, data problems are worse

- Endogeneity problems:

  - Comparative analyses between commodities and countries are problematic because the vertical structure of the chain is likely to be endogenous to the institutional constraints and commodity characteristics ….