

Bio-fuel in the EU: a complex topic

- Energy security/price
- · Climate change
- Environment
- Trade balance
- · Trade policy
- · Public budget
- Competition policy
- Farm income/policy

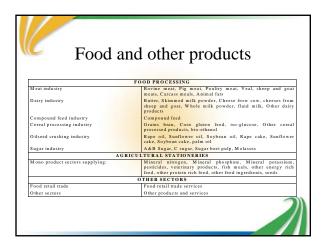
The EU bio-fuel policy

- 2003 Directive sets a target for consumption
 - Member states implement it (tax exemptions/ surchage; obligations)
- Common Agricultural Policy
 - Set aside and energy crop direct payments
- Assessment
 - Only one macro economic study by the EC (crude assumptions on imports/animal/labour)

Our modelling framework

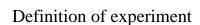
- CGE model for EU15
- Simulation of CAP/WTO scenarios
- Flexible representation of economic behaviour
- Fine coverage of farm and food processing sectors



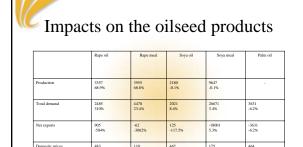


Baseline assumptions

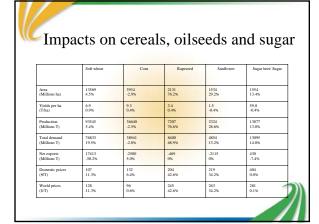
- Productivity
- Household preferences
- Macro-economic conditions
- World market conditions
- Supply of primary factors
- No new CAP, no new WTO agreement
- No Biofuel

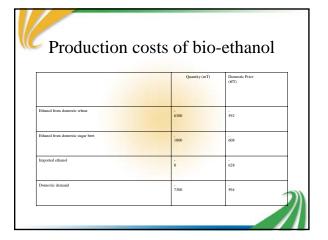


- EC estimate of fuel consumption
- 8 Millions tons of Rape oil
- 7.3 Millions tons of Bio ethanol (from sugar beet or soft wheat)
- Specific duty on bio ethanol
- Set aside / Blair House agreement



129 -12.4%





Impacts on livestock sectors

	Pork	Poultry meat	Beef	Butter	Compound feed
Production	19150	8888	6507	1846	121032
(Millions T)	0.5%	0.6%	0.9%	0.0%	0.8%
Total demand	18273	8728	6821	1505	121032
(Millions T)	0.2%	0.0%	0.1%	1.9%	0.8%
Net exports	841	128	-307	342	-
(Millions T)	6.9%	6.8%	-12.5%	-6.6%	
Domestic prices	2648	2823	3811	2462	257
(€T)	-1.2%	-1.2%	-0.4%	0.0%	0.7%
World prices	3177	3864	1927	1701	
(\$/T)	-1.2%	-0.7%	-0.9%	2.7%	

Sensitivity analysis

- Availability of land
- Price elasticity of farm supply
- Fossil oil price

Efficiency in terms of farm support

• Public expenditure: 10.5 b€ • Leakage to foreign producers: 4.8 b€ • Leakage to food industry: 2.5 b€ • Farm incomes: 3.2 b€ – Land and quota rents: 1.0 b€ Capital rewards: 0.7 b€ Labour rewards: 1.5 b€ • Farm job creation : 42000 Units