Franz Sinabell
Erwin Schmid

Universität für Bodenkultur Wien
Department für Wirtschafts- und
Sozialwissenschaften

WIFO
AUSTRIAN INSTITUTE OF
ECONOMIC RESEARCH

Phasing out of environmentally harmful subsidies: Consequences of the 2003 CAP reform

OECD Workshop on the Disaggregated Impacts of CAP Reform
10-11 March 2010

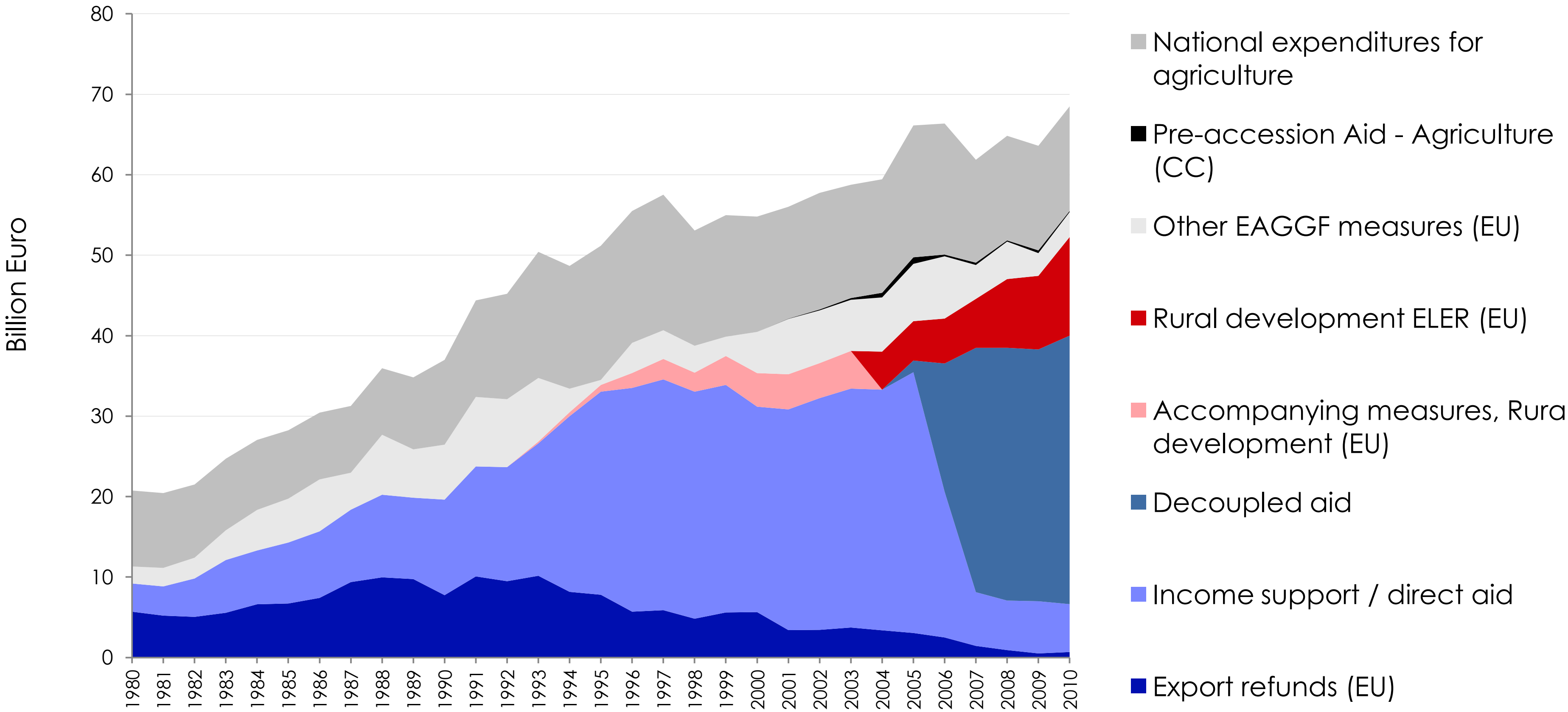
outline

- environmentally counterproductive support
- the policy experiment
- findings from an ex-ante analysis
- ex-post obeservation
- conclusions

environmentally counterproductive support

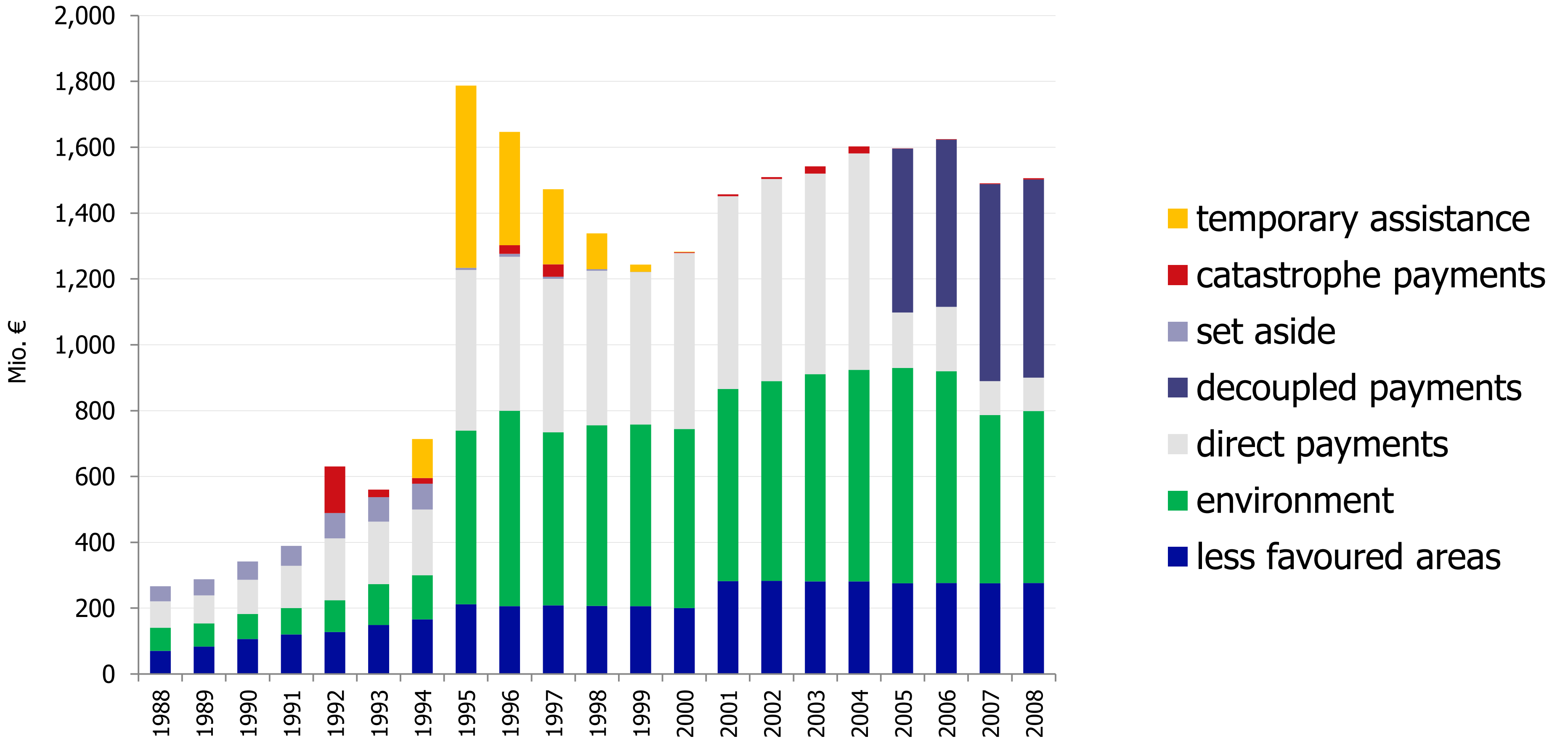
- OECD: Environmentally Harmful Subsidies, 2005
  - outputs: MPS, quota, deficiency payments
  - inputs: subsidies / tax exemptions of inputs
    - fertilizers, fuels, lower interest rates, extension
  - profit and income: historical entitlements, preferential taxes, exemption of env. standards
  - demand: lower VAT, marketing promotion, infrastructure

EU CAP and national budgets



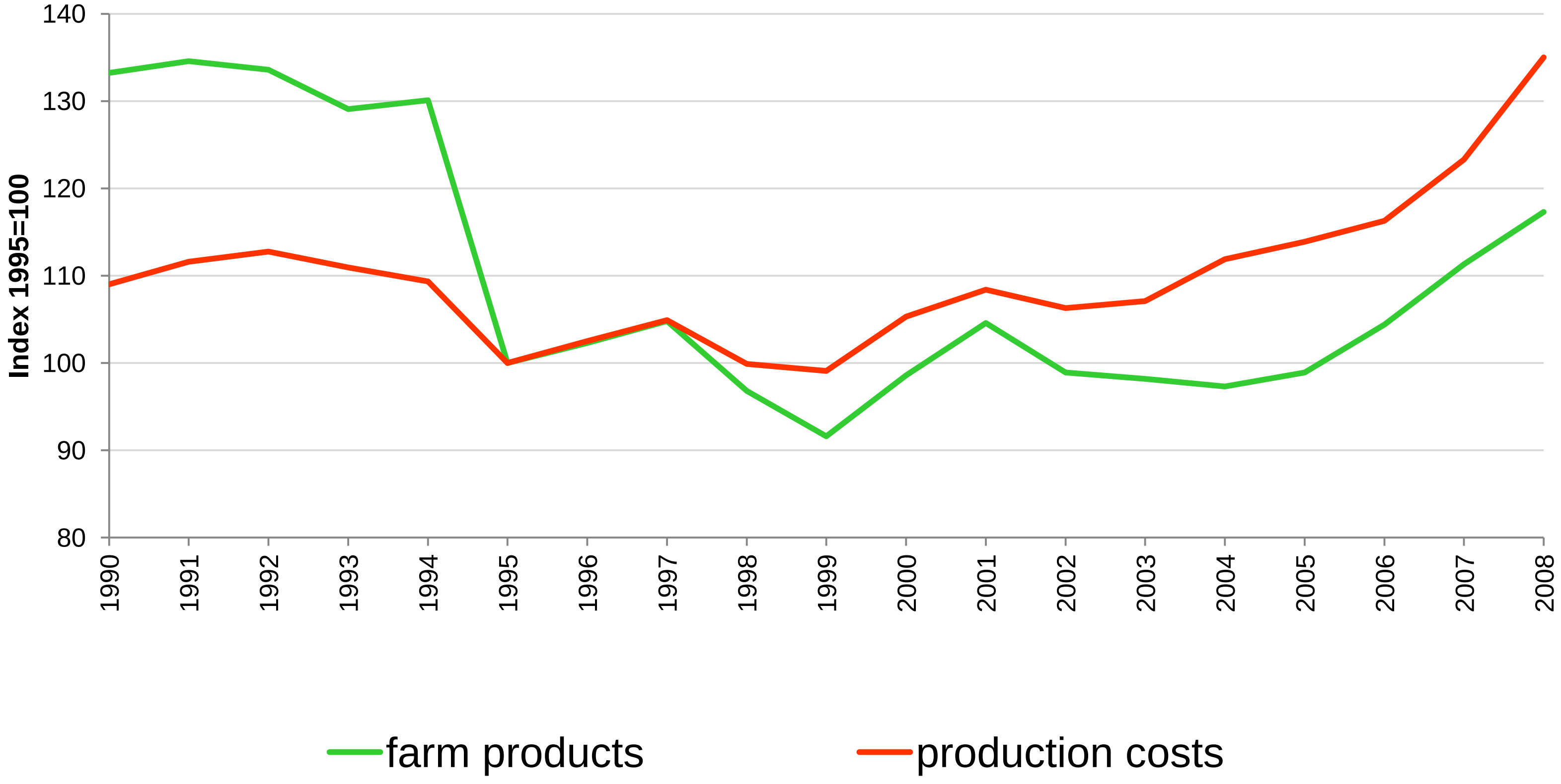
Source: European Commission, Directorate General for Agriculture, Agriculture in the European Union, Statistical and Economic Information, various issues, European Commission, Budget on line http://eur-lex.europa.eu/budget/www/index-en.htm.

agricultural transfers Austria

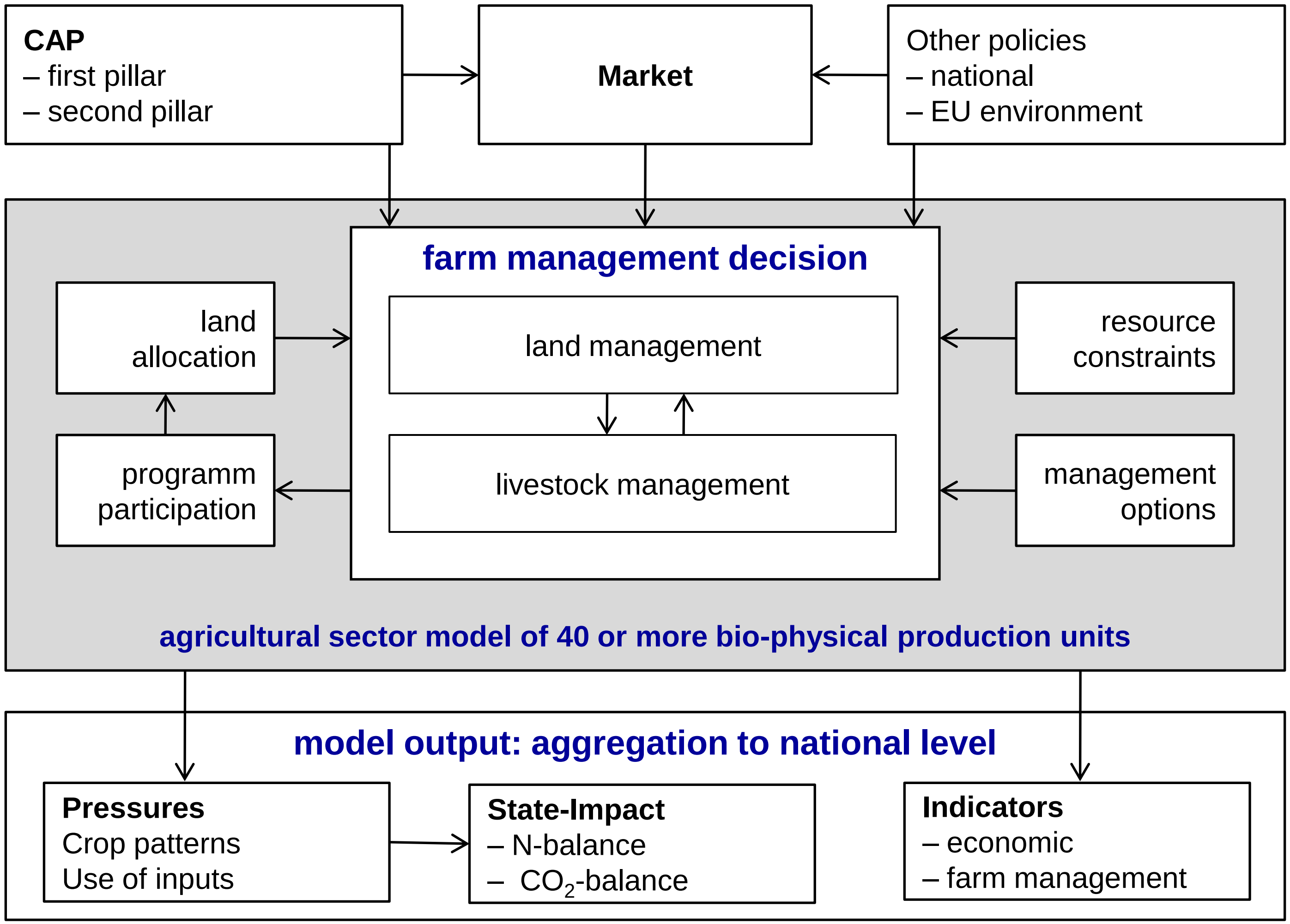


price index crops - livestock products Austria

price indices of farm outputs and inputs Austria



agricultural sector model structure of PASMA



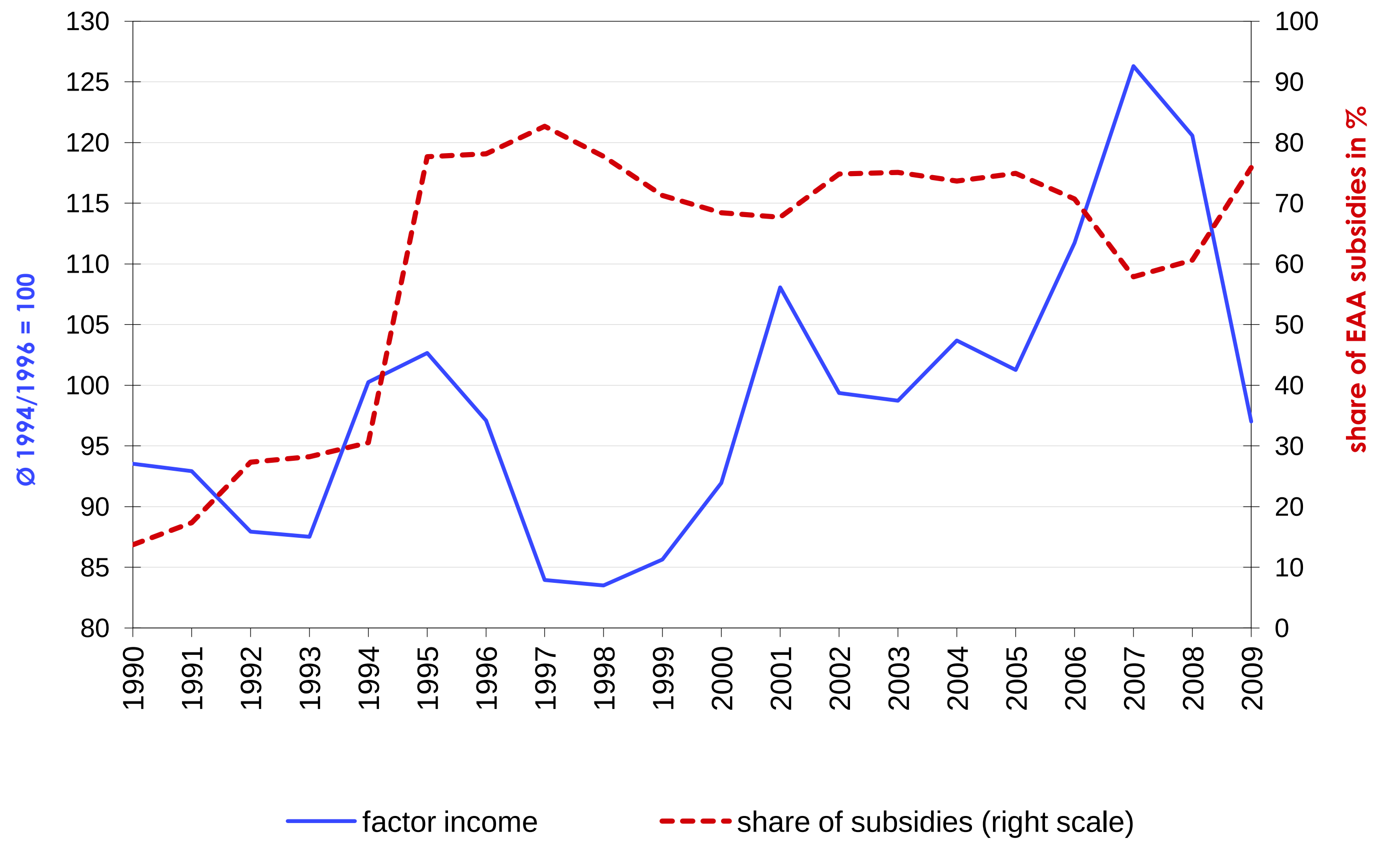
ex-ante results: 2008 vs 2003

	lower prices	medium prices	higher prices
economic indicators			
producer surplus at sector level	-8.9	-4.9	-0.9
producer surplus per AWU[1)]	-7.1	-3.9	-0.7
variable cost livestock products	-8.2	-6.3	-4.2
variable cost crops	-4.2	-3.9	-3.5
factor use indicators			
total arable land	-4.0	-4.0	-4.0
total meadows	8.0	+8.0	8.0
farm labor input	-3.6	-3.2	-2.8
output indicators			
output of beef	-12.0	-10.0	-10.0
output other meat and eggs	±0.0	±0.0	±0.0

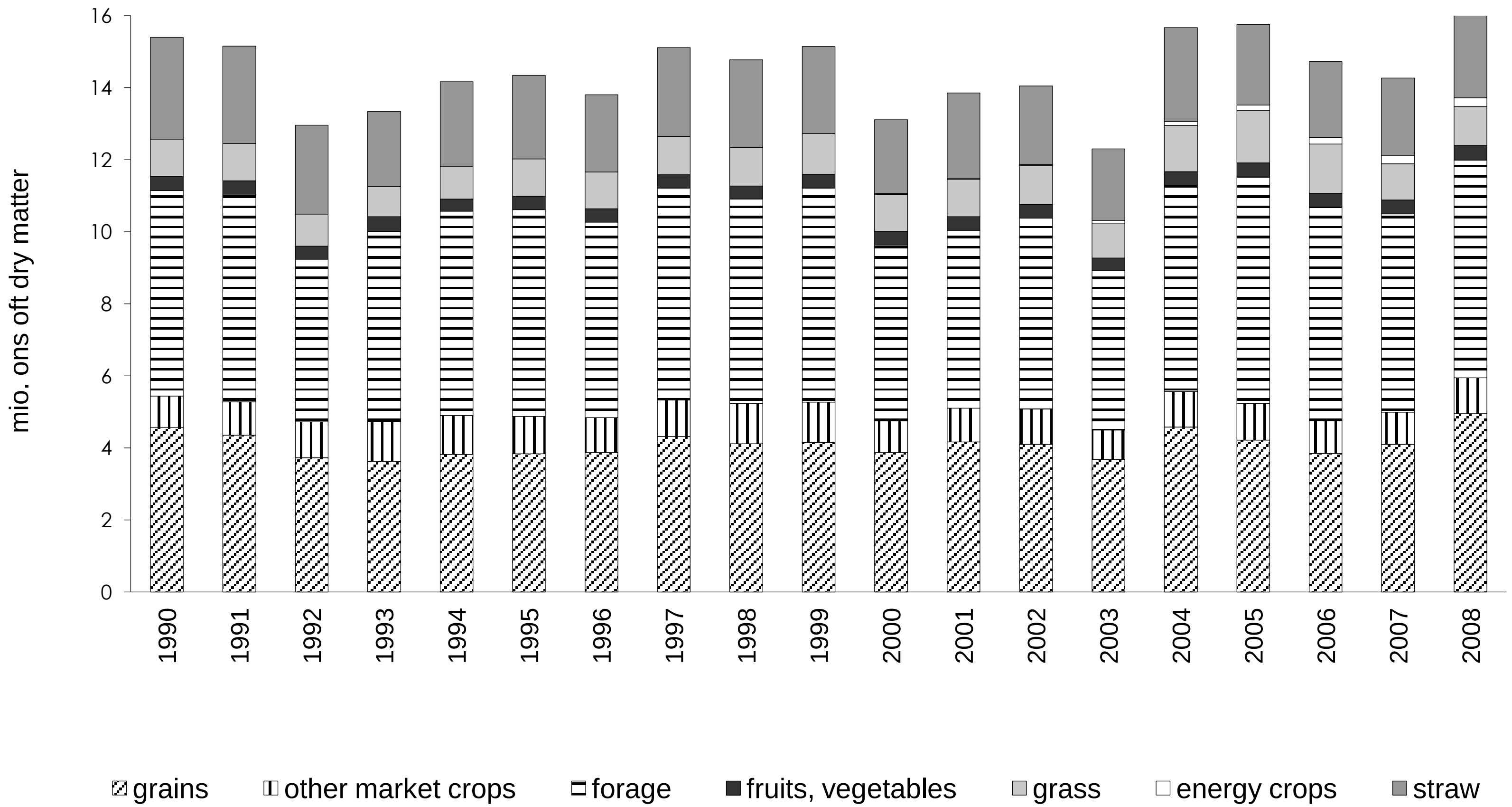
ex-ante results: 2008 vs 2003

	lower prices	medium prices	higher prices
environmental indicators			
methane emission	-1.5	-1.4	-1.4
carbon storage in soil	+0.6	+0.6	+0.6
nitrate from manure	-5.1	-4.7	-4.3
nitrate from mineral fertilizers	+1.0	+1.0	+1.0
nitrogen surplus	-5.1	-3.7	-4.2
farm management indicators			
organic farming on arable land	-0.8	-0.9	-0.9
organic farming subsidies	+1.1	+1.2	+1.1
soil cover during winter	-4.4	-4.4	-4.4
livestock units	-5.1	-4.7	-4.3
output other meat and eggs	±0.0	±0.0	±0.0

policy outcome
farm incomes EAA

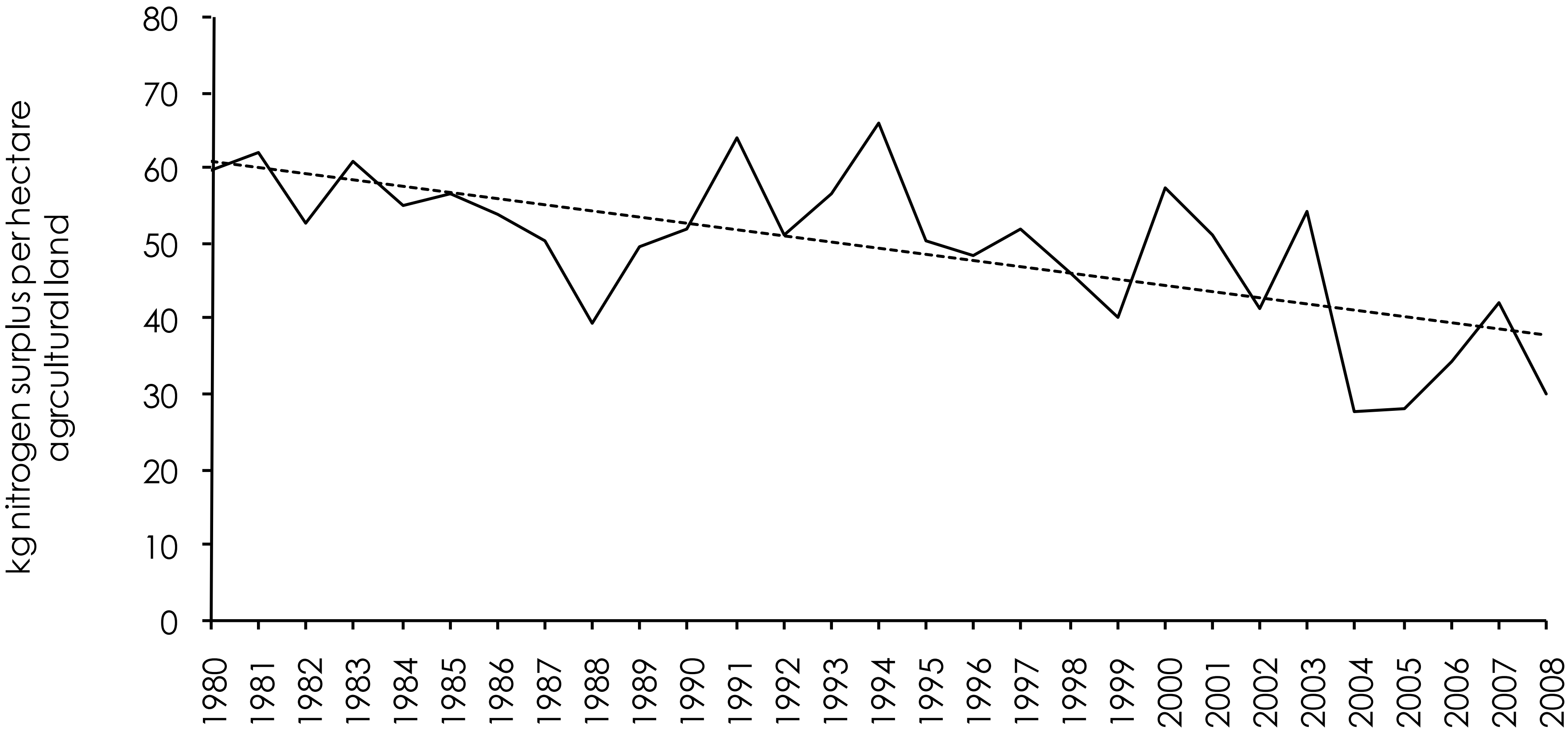


production outcome agricultural output



WIFO

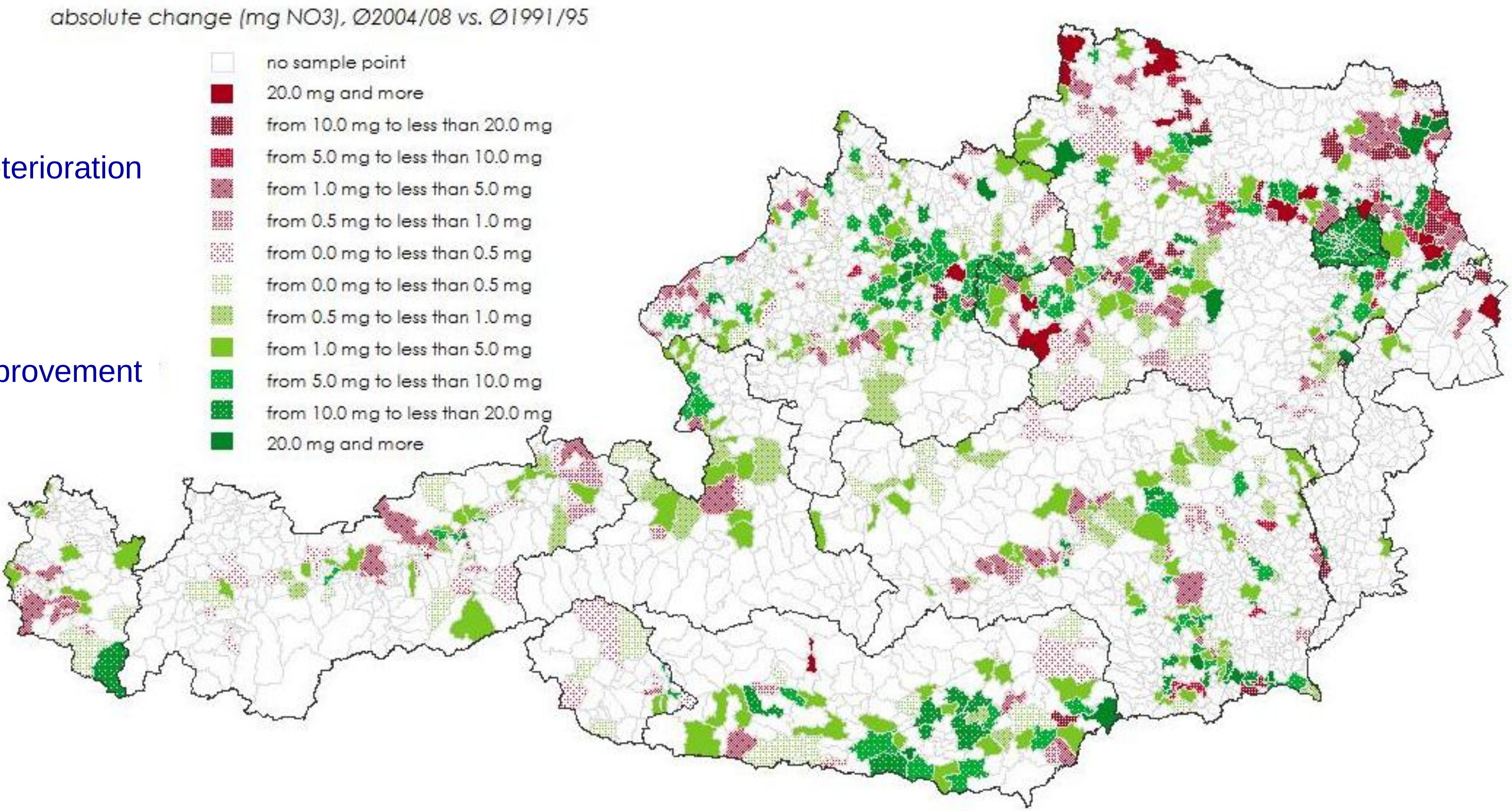
environmental indicator
nitrate balance



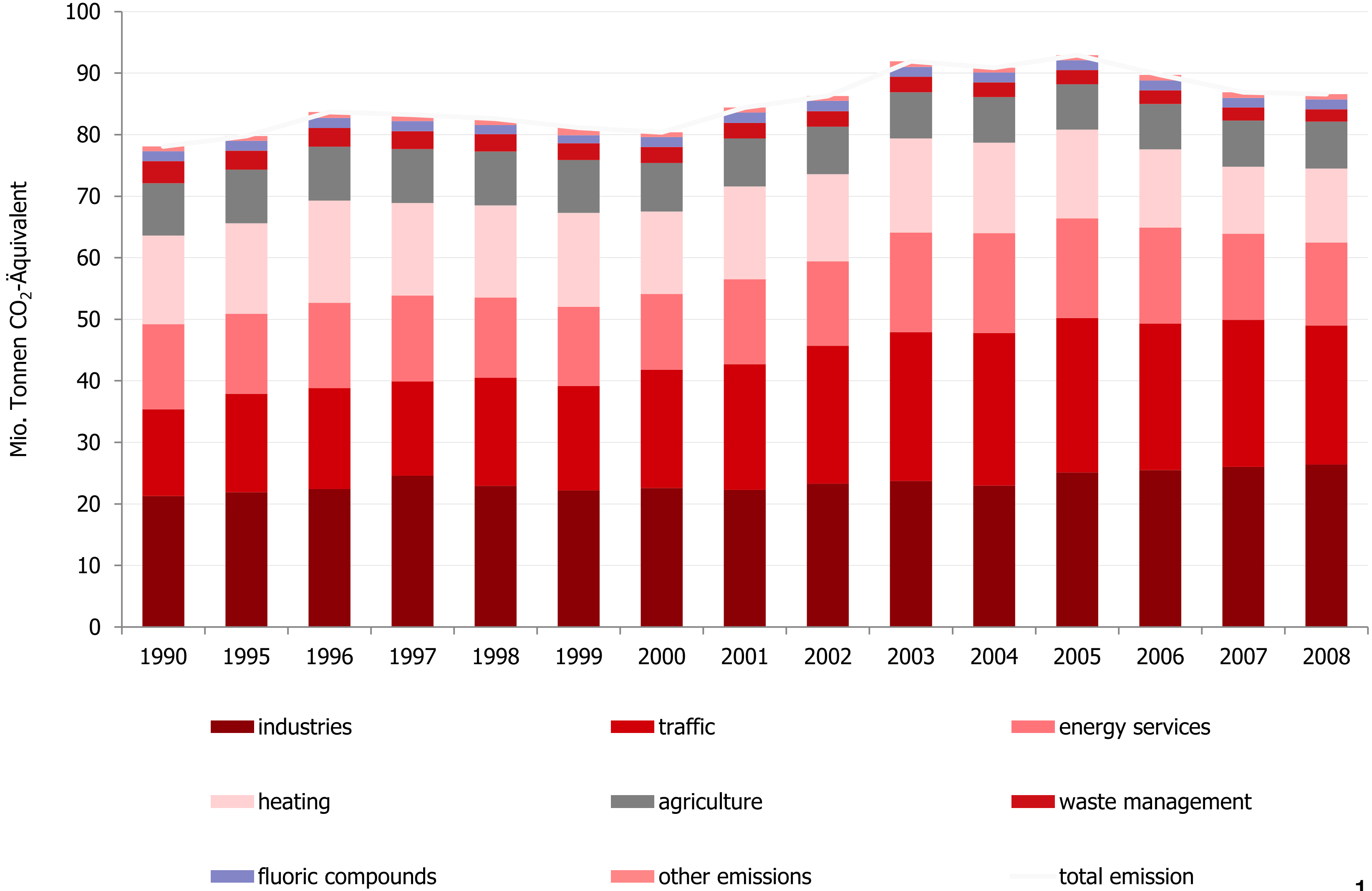
environmental outcomes nitrate pollution

deterioration

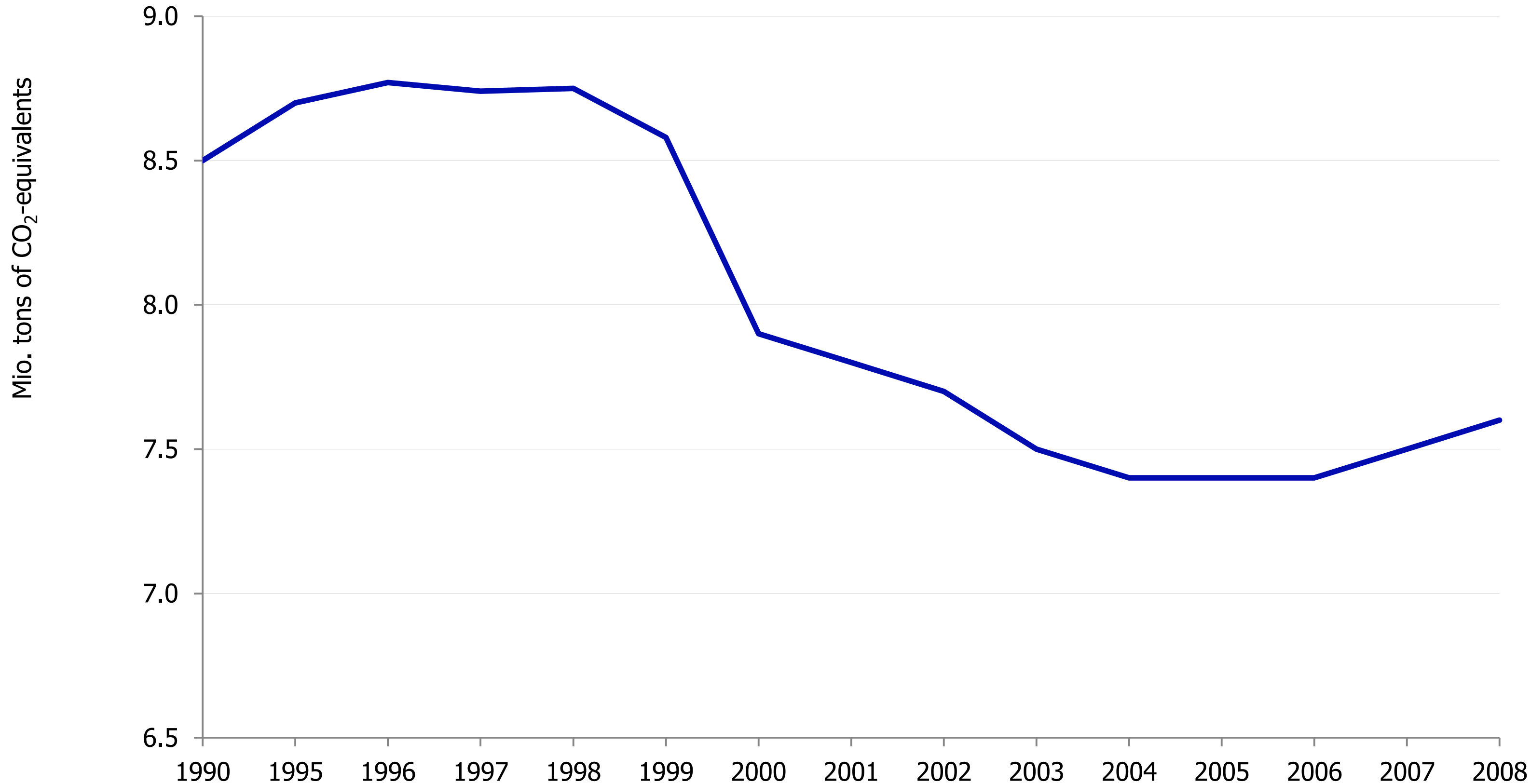
improvement



environmental indicator: Austrian greenhouse gas emission



environmental indicator: agricultural greenhouse gas emission



summary and conclusions

- models
  - results suggest an improvement of environmental outcomes
  - dis/advantage of models: details of instruments and complexity of relationships
- observations
  - environmental indicators / outcomes improved
- policy
  - there are still subsidies on the agenda
  - unintended environmental outcomes of environmental measures