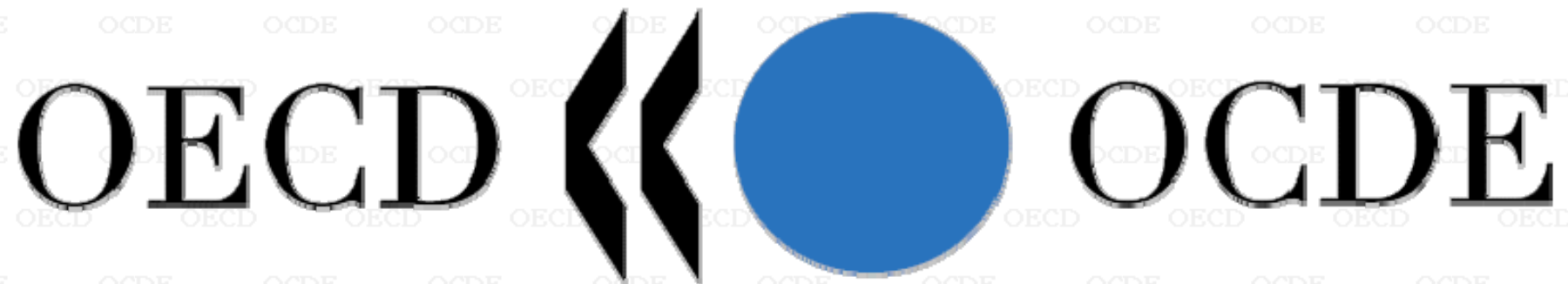


ORGANISATION DE COOPÉRATION ET DE DEVELOPMENT ÉCONOMIQUES



ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

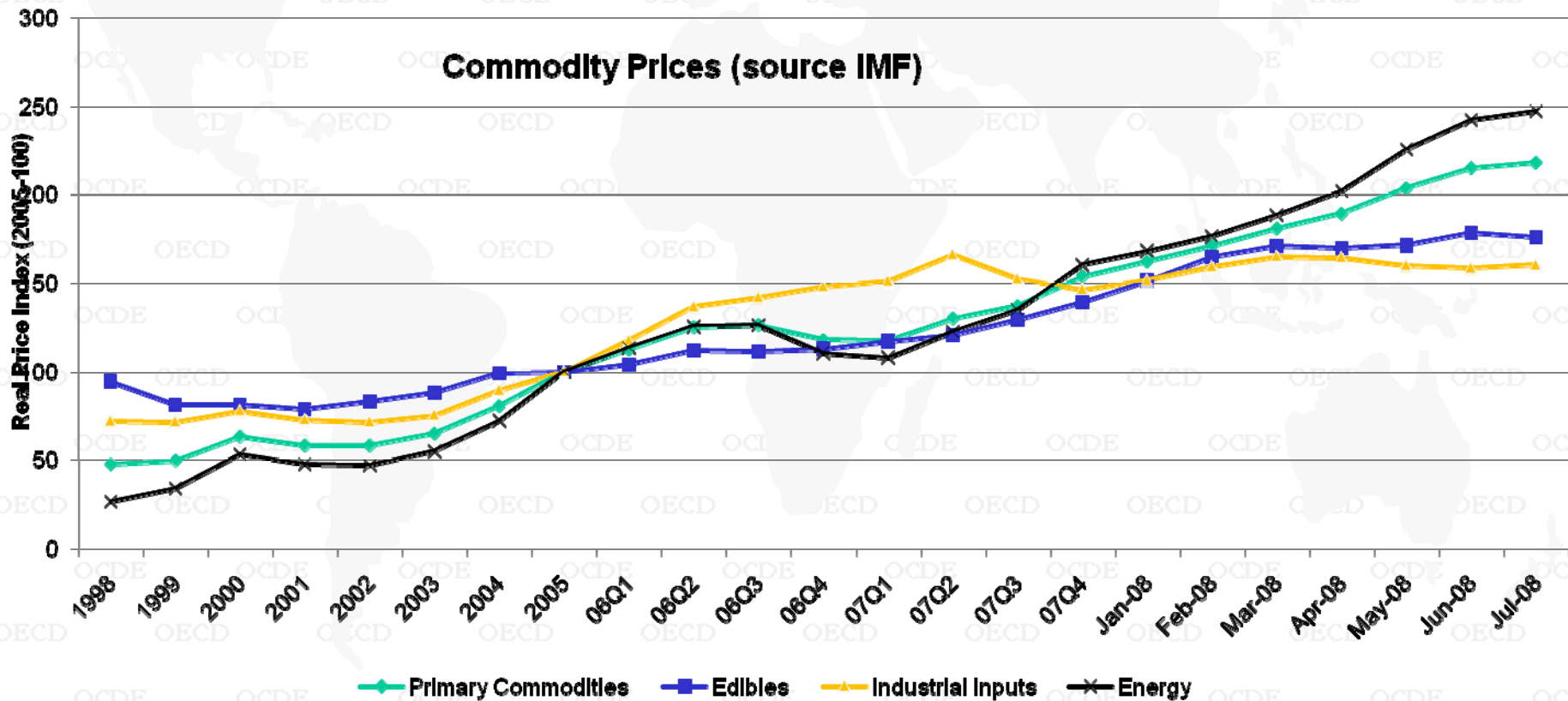
OECD Involvement

- Resources
 - Working Group on Economic Aspects of Biodiversity (formed in mid-1993)
 - Publication of a number of books and papers
- Climate Change
 - Economics Department and Environment Directorate working together
 - Annex I Expert working group
- Generally focused on institutional/foundation issues
 - How to ensure that “social” preferences prevail

Resources in a growing economy

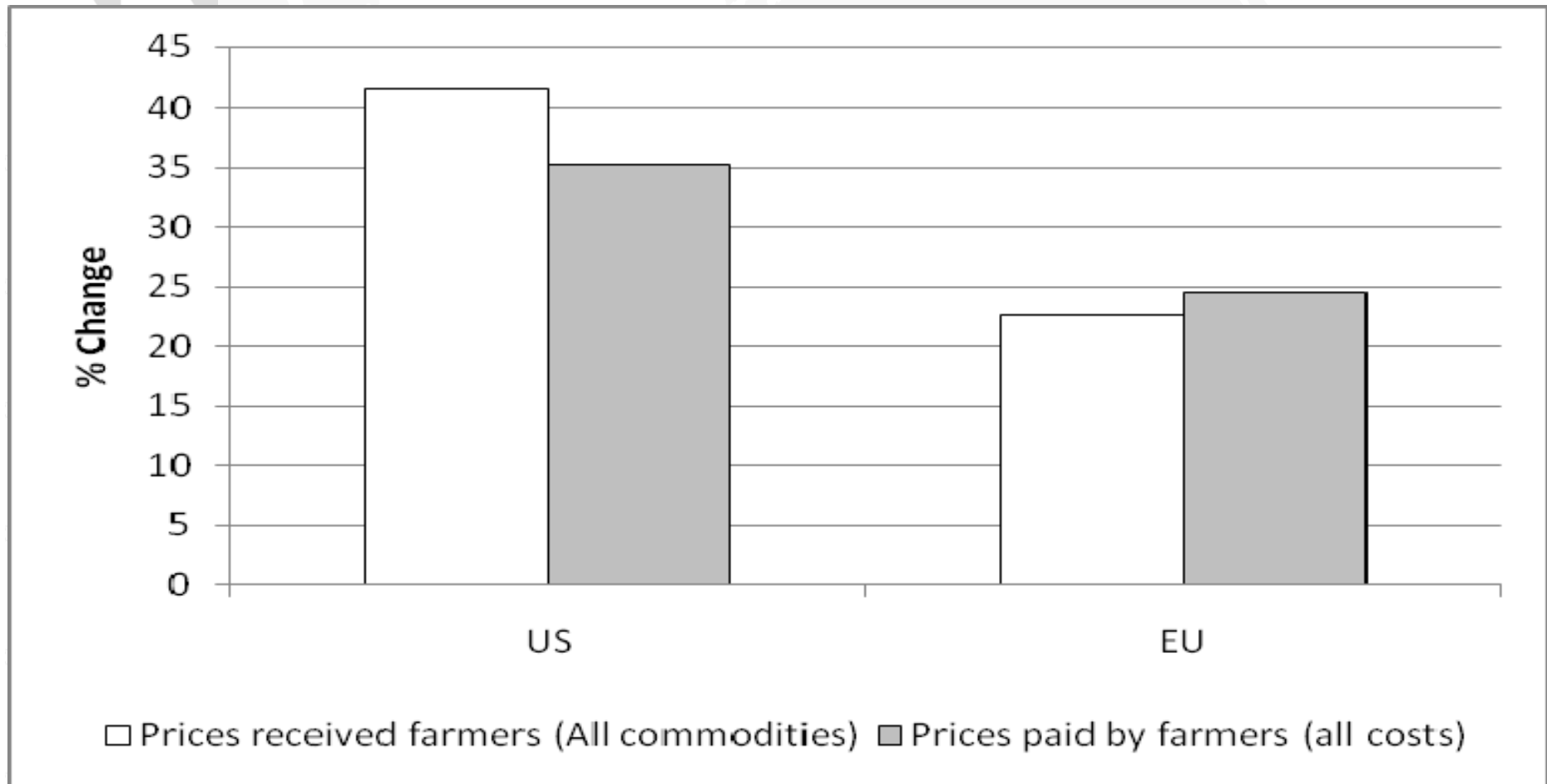
Economic growth and development: by 2030, 9 billion people, doubled global economy

Club of Rome this in not, but rapid economic growth is/will increase demand (and prices)



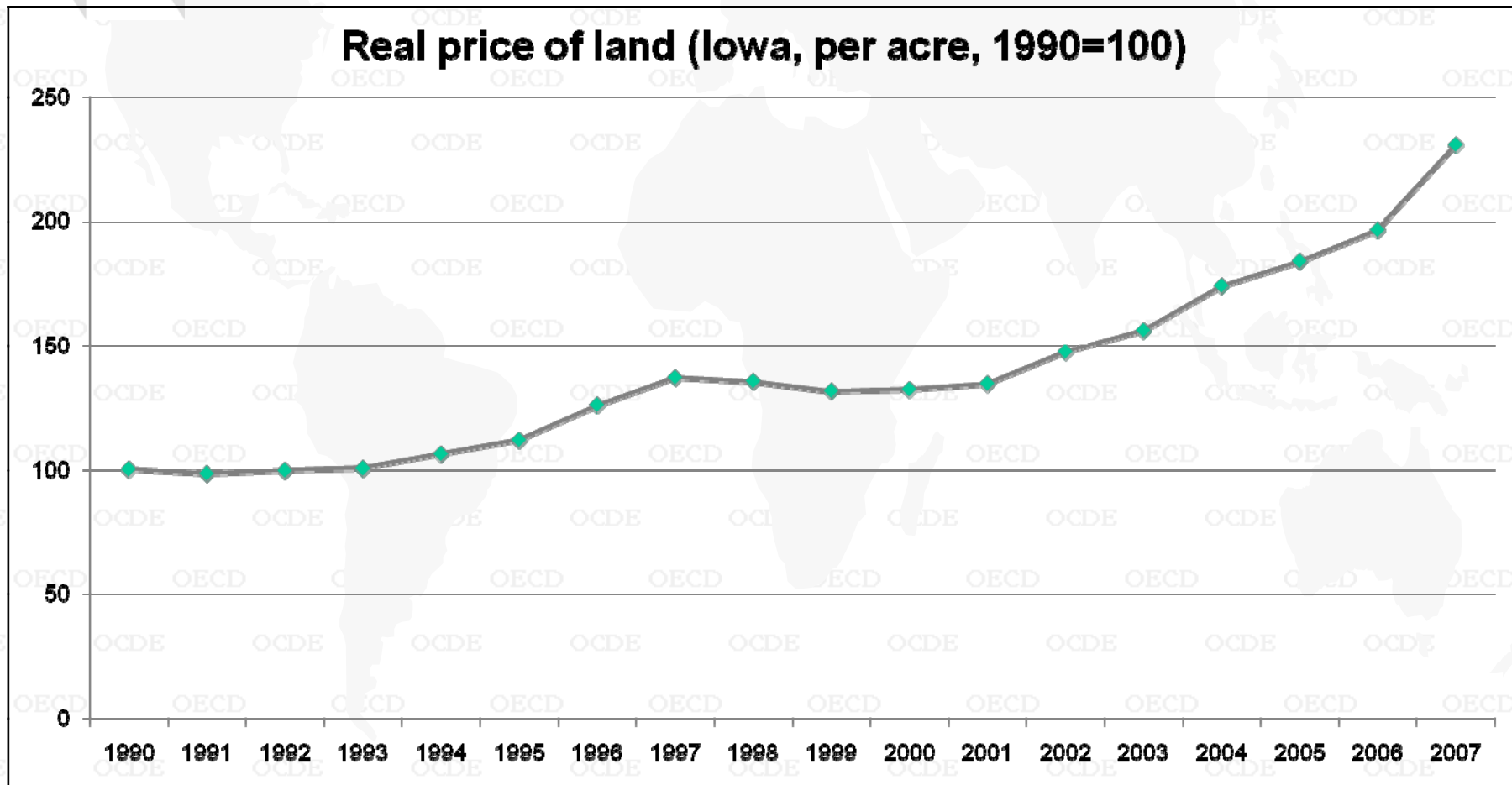
Resources in a growing economy

Agriculture – we see it already (2000-2007 prices)



Resources in a growing economy

Real land prices confirm it: growth since 2001



Natural Resources (biodiversity)/ Agriculture

- Higher land value means more land drawn into production (pressure on biodiversity)
 - corn production in the US has expanded into wheat areas, pressure on wheat prices: CRP loss
- Why should we care?
 - Economic
 - System Resilience
 - Ecosystem Services
 - Aesthetic
 - Ethical
- Need for strong institutional frameworks
 - Use of resources (biodiversity) has to reflect “social” preference

Environmental policy: Institutional context

- General principles in environmental policy
 - Economics of externalities
- An economic approach is anthropogenic in orientation. It gives clear guidance on how to correct a problem from the basis of our collective wishes. Different from voting systems.
- Private markets generally achieve good outcomes, particularly in services sectors; not always in manufacturing; and arguably less so in resource-using sectors.

Instruments and Objectives

Achieving goals in social welfare (broadly defined)

Positive Incentives

- Purchasing biodiversity outcomes (e.g. auctions)
- Privately held public goods

Negative Incentives

- Penalising externalities

Removal of perverse incentives

- create a level playing field

Information provision

Market creation can be an important organising principle around their application

Institutional setting for markets

- Are impacts on future generations taken into consideration?
 - In principle they are (we care about our children)
 - But inter-temporal planning is often flawed and discounting may be myopic
 - Market vs social discount rates
 - Accounting for heterogeneous generations
 - Uncertainty (unknown unknowns)
- Markets will fail to achieve sustainability in a dynamic context with externalities: non-exclusive, non-rival

Create Markets

Creating context for private gains to contribute to social benefit

What makes markets work?

- Property rights
- Legal framework that builds certainty and nurtures trust
 - Transparency in the transaction
- Lowering transactions costs
- financial markets have billions of trades daily, they are highly regulated (but need even more)
- ensuring private gains from trade (that also benefits the environment)

Improvements through markets: Australia

BushTender program

Farmers were invited to “bid” for payments for biodiversity improvements

Rated for two scores by knowledgeable people:
avoid strategic behaviour

Highest biodiversity-value bids were accepted

Better value than earlier programs

Potential auction system in other areas

Improvements through markets: US

Payments for endangered species

Red-cockaded woodpecker

Wetland banking

Defenders of Wildlife's program to assist in the re-introduction of wolf populations in mid-west states

Tradable-permit schemes for fish and wildlife

Distributive impacts

Two main reasons for concern regarding distributive impacts

- Moral imperative: don't conserve biodiversity at the expense of the less fortunate
- Political economy: policy may fail if impacts give rise to strong reactions

Market corrections for non-market impacts create gainers and losers

- Paying for a good that used to be free
- When the benefit is a public good, any policy automatically is redistributive (Lindhal-Samuelson)

Scope of impacts

Local

- Policy affects property values

Regional

- Policy engages taxation that is uniform regionally, even though impacts differ regionally

Global

- Policy leads to some countries providing “existence value” and eco-tourism options to other countries

Measurement

Need to measure both costs and benefits of prospective policy across groups: new dimension

- Welfare economics gives many tools for achieving this: income equivalent analysis; other non-income measures; multidimensional analysis
- Not always free of controversy regarding rigour, but alternative of doing nothing is worse

More detail

Published material at:

www.oecd.org/env

Distributive Issues Concerning Biodiversity

(<http://213.253.134.43/oecd/pdfs/browseit/9708031E.PDF>)

Market Creation For Biodiversity

(<http://213.253.134.43/oecd/pdfs/browseit/9704141E.PDF>)

(Can be read free online)