Ministry of Economic Affairs, Agriculture and Innovation

Data requirements for policy and private decision making - case the Netherlands

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- The current policy environment
- Developments in some relevant policies
- Intermezzo: between policy and science
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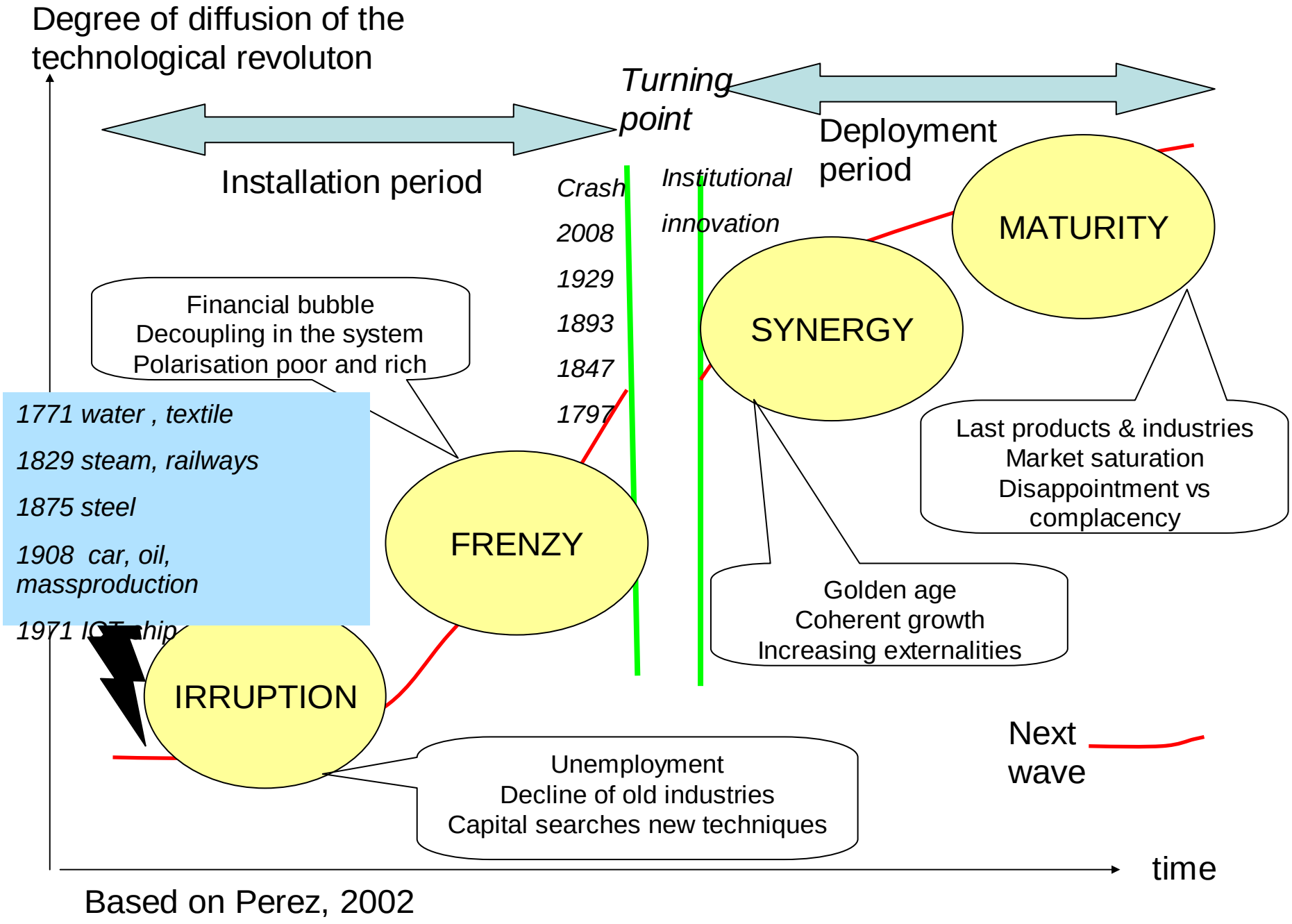
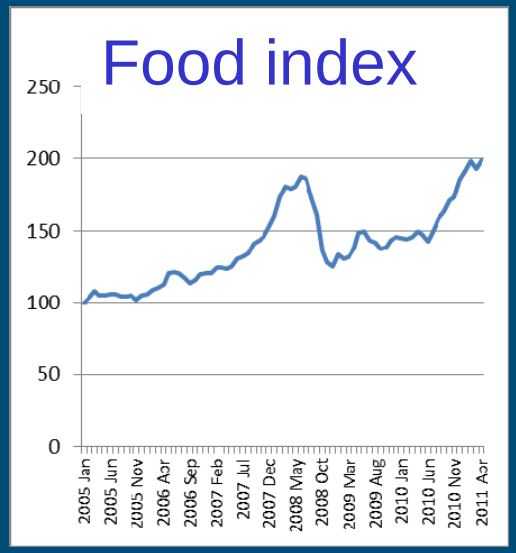
- Need for up to date concepts on farming
- Need for efficient monitoring

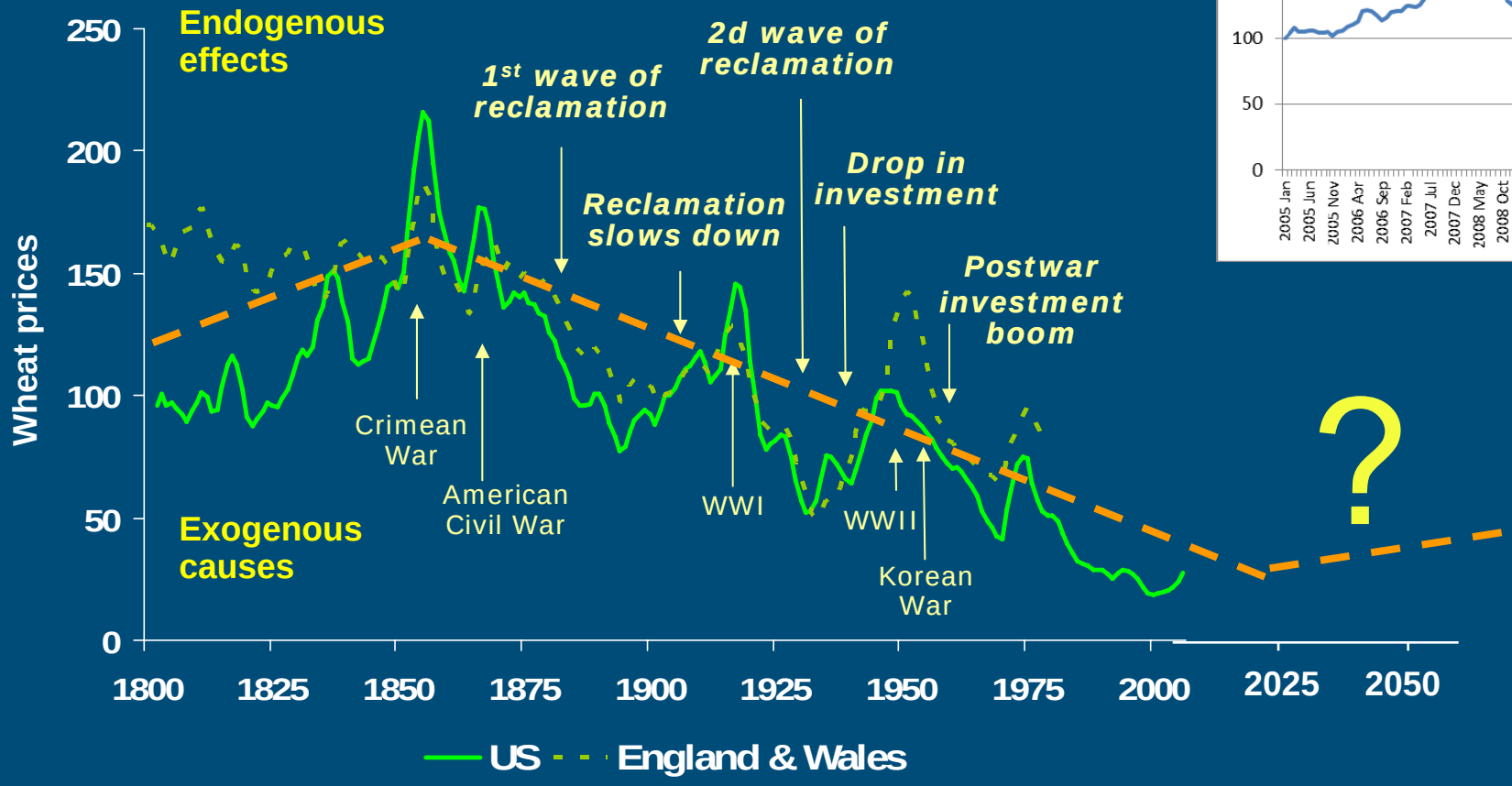
The opportunity for green growth



Based on Perez, 2002

The end of declining food prices?





Foresight(s) 2050: Scarcity & Transition

Can we feed 9 billion (with higher income levels) with less environmental impacts?

The debate focuses on scarcities:

- Climate change (and the role of livestock)
- Environmental impact and biodiversity loss, eco system services
- Energy supply, biobased economy
- Phosphate supply
- Water availability
- Declining productivity
- Resistance to industrialisation of agriculture in Western countries (incl. animal welfare issues)

See the EU SCAR 3rd Foresight report

Trends in relevant policies

- Agricultural policy: CAP post 2013
- Rural policy
- Food Safety, including novel foods, gmo
- Environmental policies: nitrate, phosphate, soil, pesticides
- Animal welfare
- Nature management (decreasing in NL, but more incentives for farmers?)
- Chain management issues / Competition policy
- Energy policy (and renewables)
- Innovation policy (NL: 9 top sectors)

Policy coherence is not easy: trade offs, ‘silo’s’ in government

TRENDS in EU Ag. Policy

- CAP moves quite quickly to 'decoupled' payments (flat rate)
- And payments for eco-services
- plus rural development

- CAP data are in public domain

- More attention to impact assessments, monitoring and evaluation Rural devlopment plans

- New member states are integrated in *acquis communautaire*

- Less need for product data
- environmental data is needed
- (regional) subsidies on bio energy
- "cost prices" and WTP of eco-services (multi-functionality)
- total farm income (+ tax), investments, and role of direct payments on viability, poverty
- Other sectors in rural economy more important >> integration farm statistics and other sectors
- Regional input / output
- Is the rural area in the network (ict, roads, education, jobs) ?

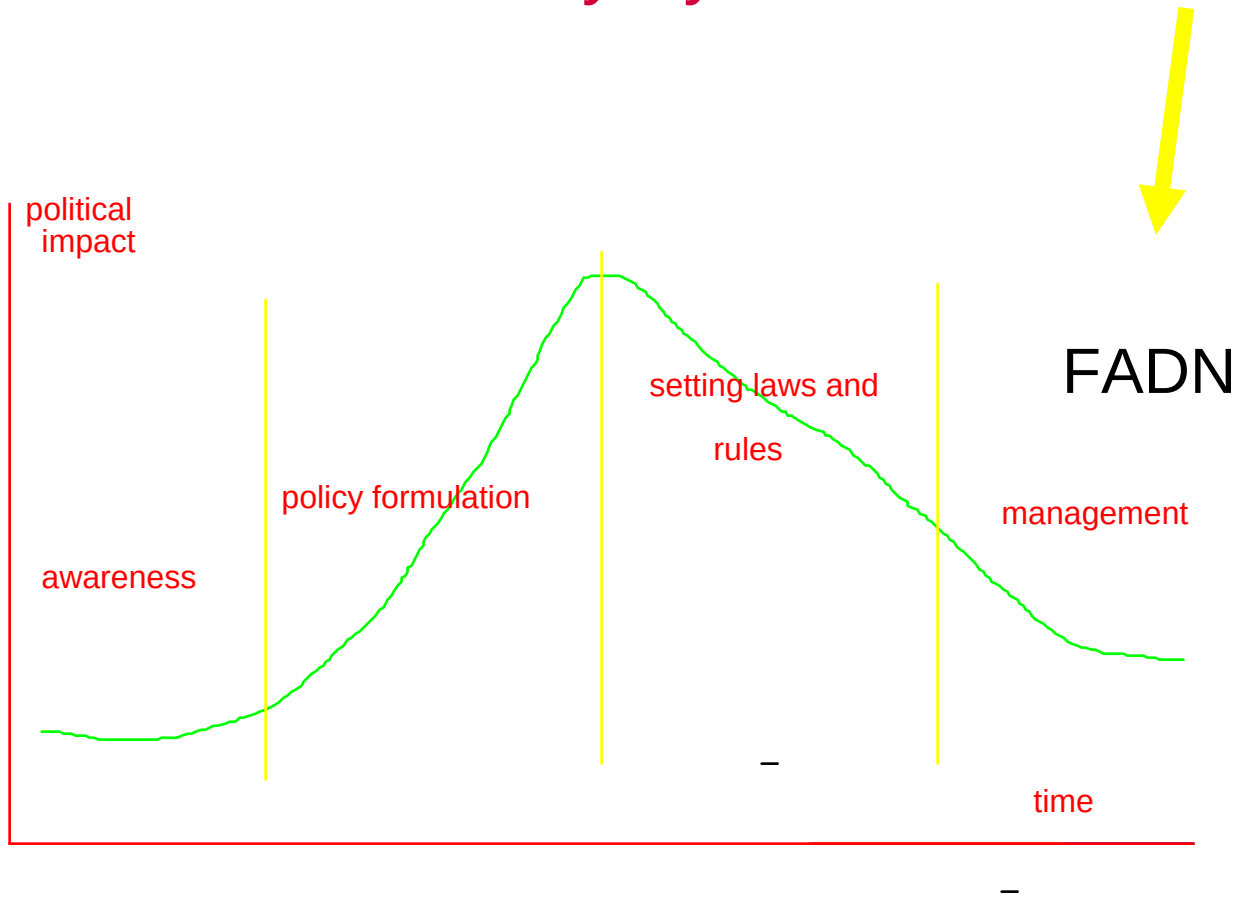
+ Smart, sustainable, inclusive growth: *Innovation Partnerships*

Intermezzo: between science and policy

- Policies have a policy cycle with different stages
  - Is FADN becoming a (too) mature product ?

- Evidence-based policy or policy-biased evidence?

Where are we now in the Policy cycle



Need for most efficient monitoring: recommendations for data managers

- Policy research seldom needs yearly census data; yearly income and other data from a panel is enough
- Econometrics (like panel technics) can substitute for data gathering
- Collaborate with industry (and their datasets)
- Use up to date IT to get electronic data (EDI, bank data, XBRL, remote sensing, precision farming data, social media?)
- Use standard definitions in the 90% of the cases where this is possible, also internationally in OECD, or even global (Wye group etc.)
- Develop those standards where needed (sustainability?)
- Set up data exchange in Era-Nets or Joint Research Planning Initiatives or OECD Network groups if official statistics are slow

Evidence-based policy or policy-biased evidence?

- Politics versus science
  - Values <> facts
  - Interests <> neutral, independent
  - Subjective <> objective
  - Ideology <> truth
  - Opportunistic, negotiating <> standard methodology

- 4 potential roles for policy oriented scientists / brokers
  - Pure scientist
  - Issue advocate
  - Science arbiter
  - Broker of policy alternatives

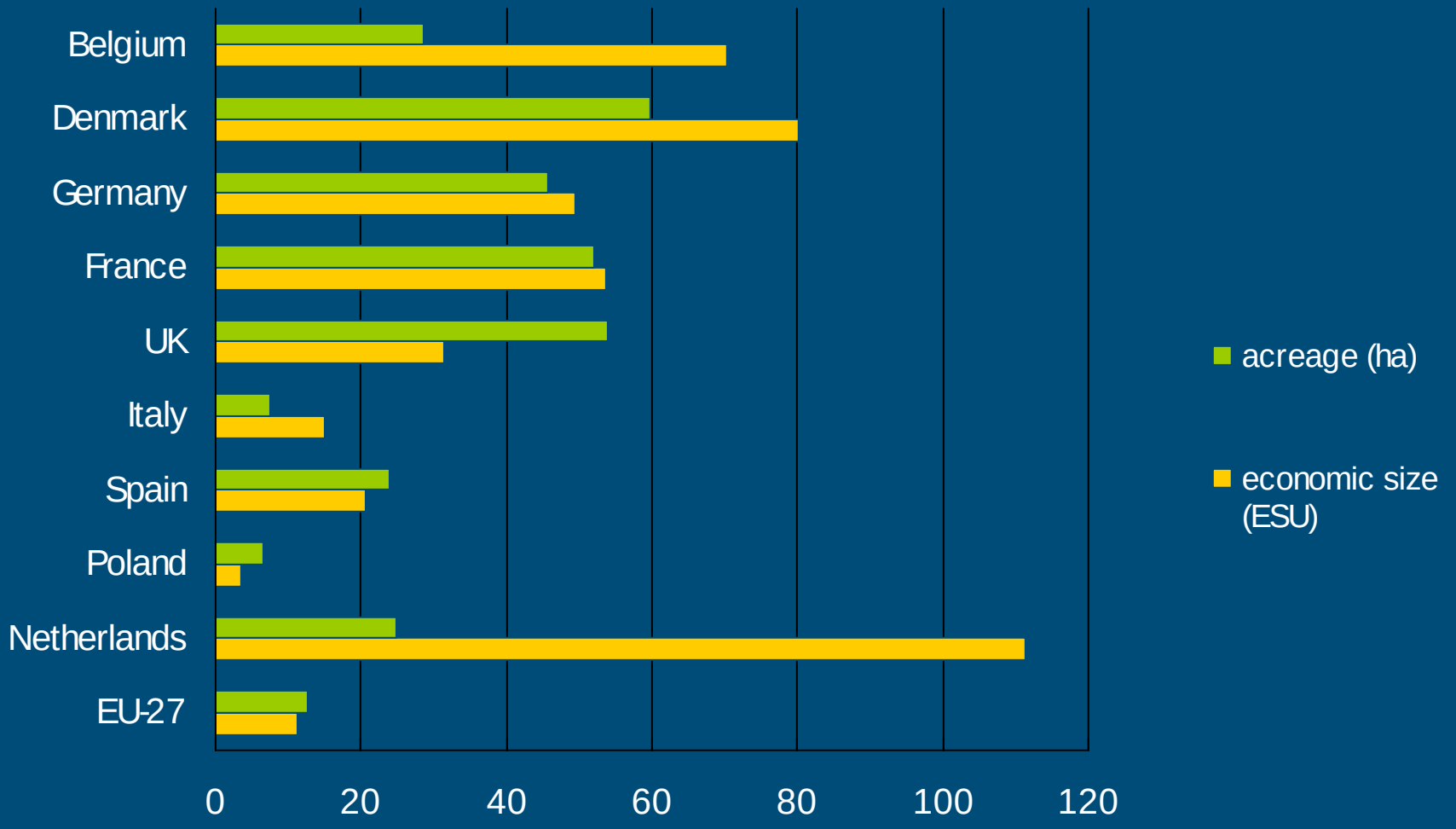
source: Huitema & Turnhout, 2010

Need for micro data

- Evidence-based policy needs policy evaluation with ‘true and fair’ models and data on the behavior of people (and sometimes animals or soils), on which the effect of an intervention can be calculated / simulated
- Farms are getting more heterogeneous (income levels, niche markets, individualisation, less directive agricultural policy)
- With cheap computer power data are easier to handle
- Better to understand by non-economists than aggregates

- Don’t use them only to calculate averages, but show distributions
- Some best practices in the next slides:

Farm size in the EU, 2007



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Farm Strategies

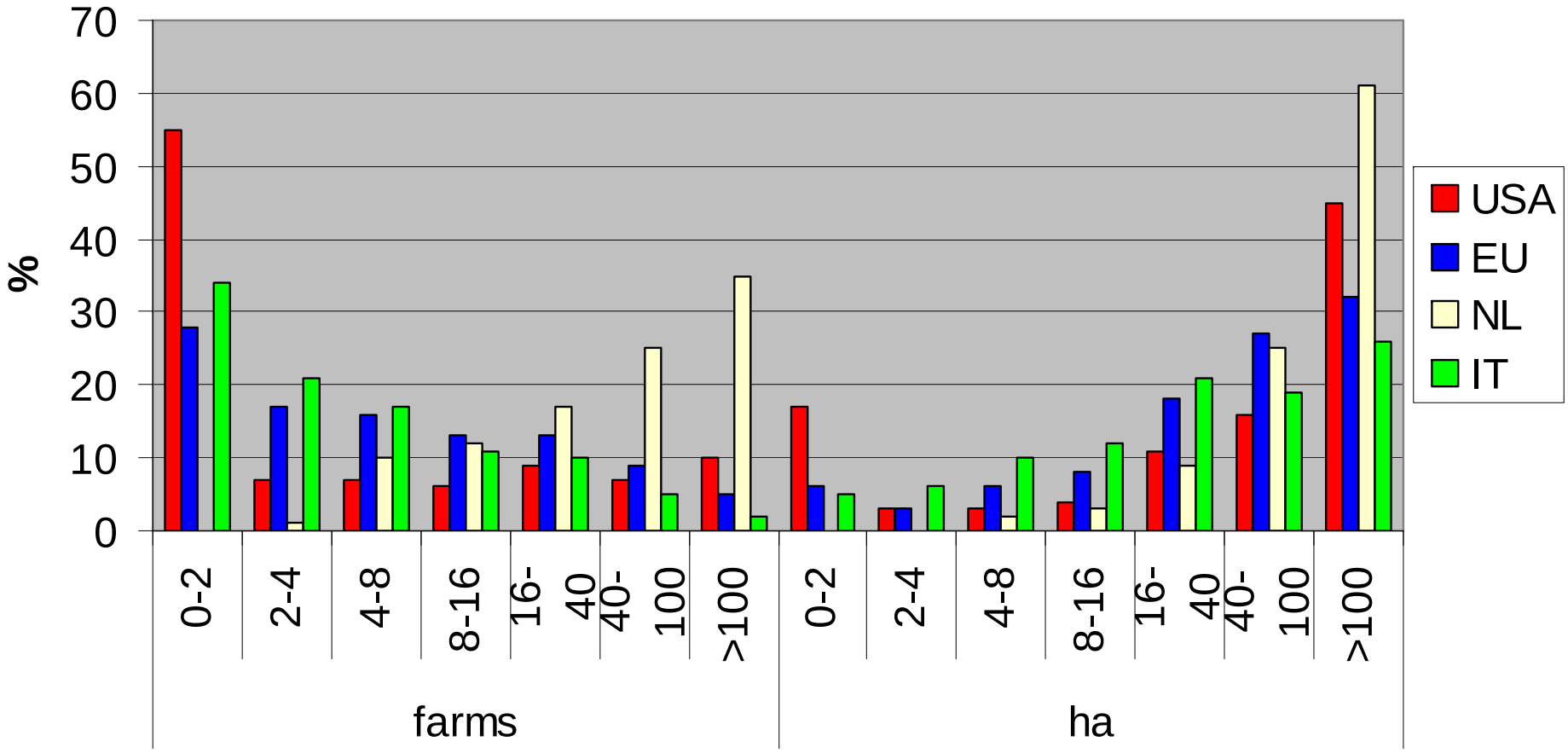
Drivers for change

- Technology and demography demand scale
- Pressure from the food chain to optimize
- Changing CAP

Strategies based on competences or location:

- Bigger: efficiency of scale
- Better: improve management
- Different: value added, part-time, multi-functional

Figure 3 Share (%) of farms (left) and land (right) per size class in ESU, 2007



size class in ESU (European Size Units)

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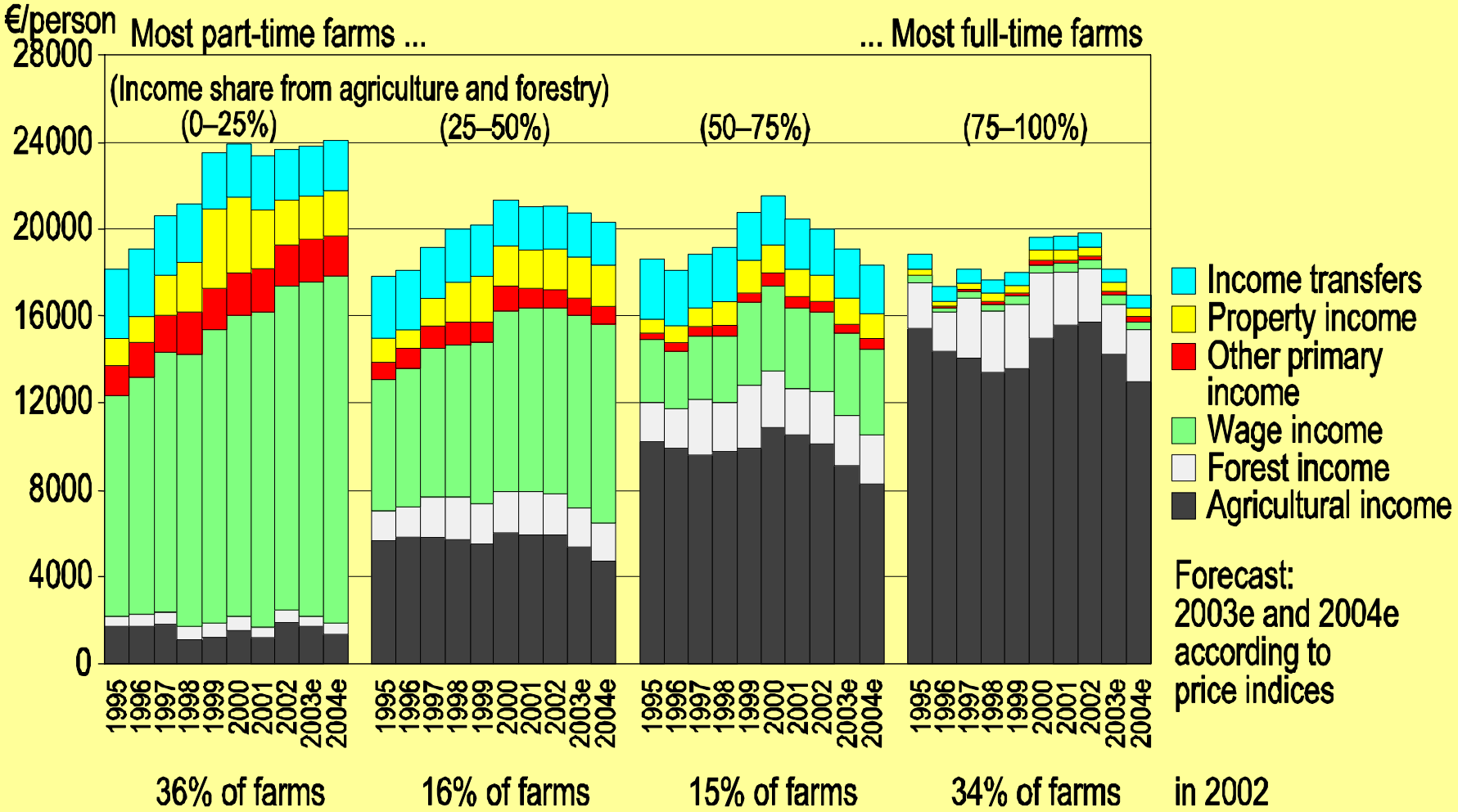
Total income farmer and spouse, Finland



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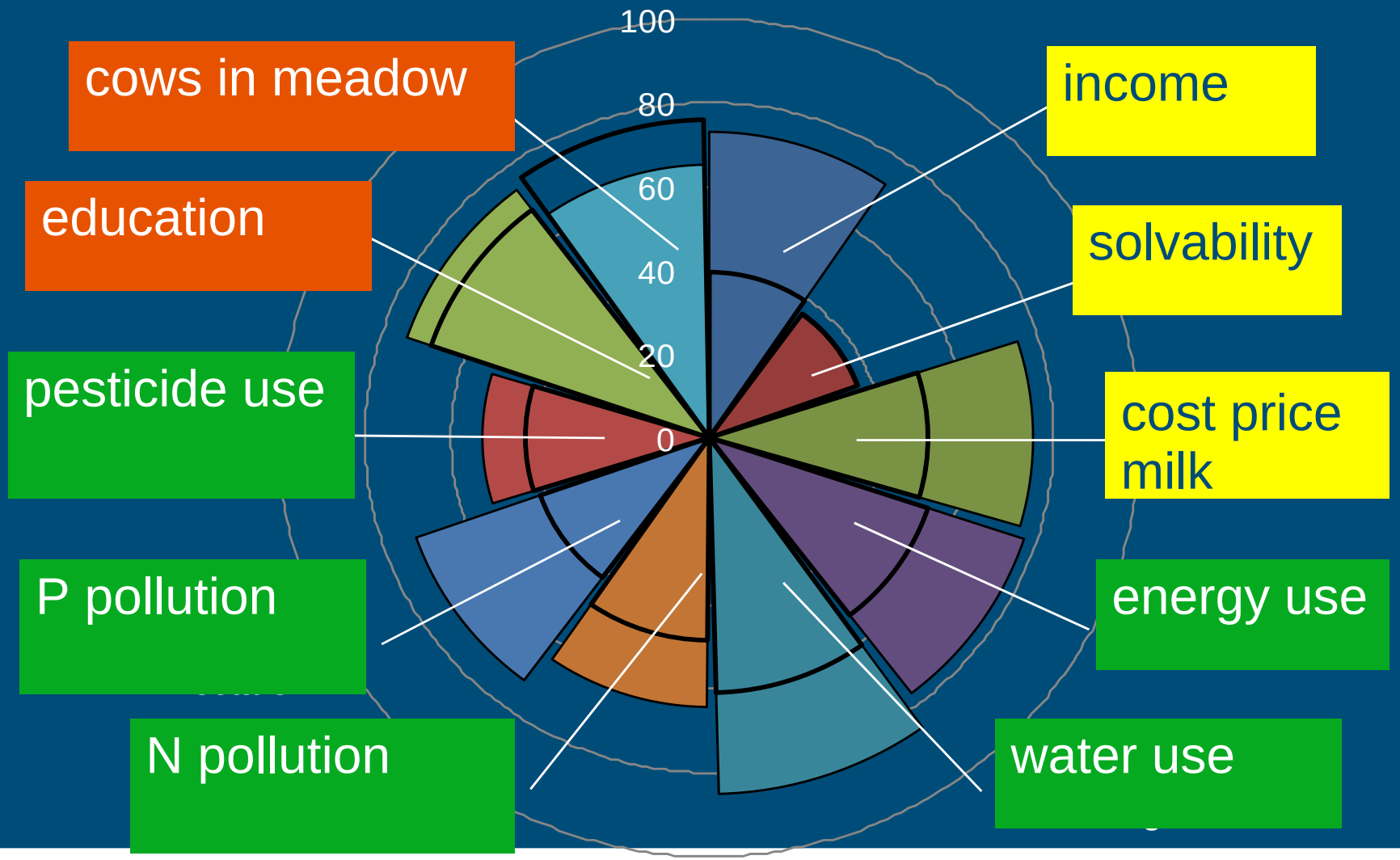
Benchmark top dairy farms with the average



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25% most sustainable dairy farms (coloured areas) compared to the average Dutch dairy farms (black lines), 100 = sustainable, 2006-'08

Need for up to date data concepts

Macnamara fallacy:

1. Measure whatever can be easily measured >> OK as far as it goes
2. Disregard that which can't be measured, or give it an arbitrary quantitative value >> artificial and misleading
3. Presume that what can't be measured easily really isn't important >> blindness
4. Say that what can't be measured really doesn't exist >> suicide

Yankelovich, 1972

Need for up to date data concepts: the nature of the farm

Definition of the farm:

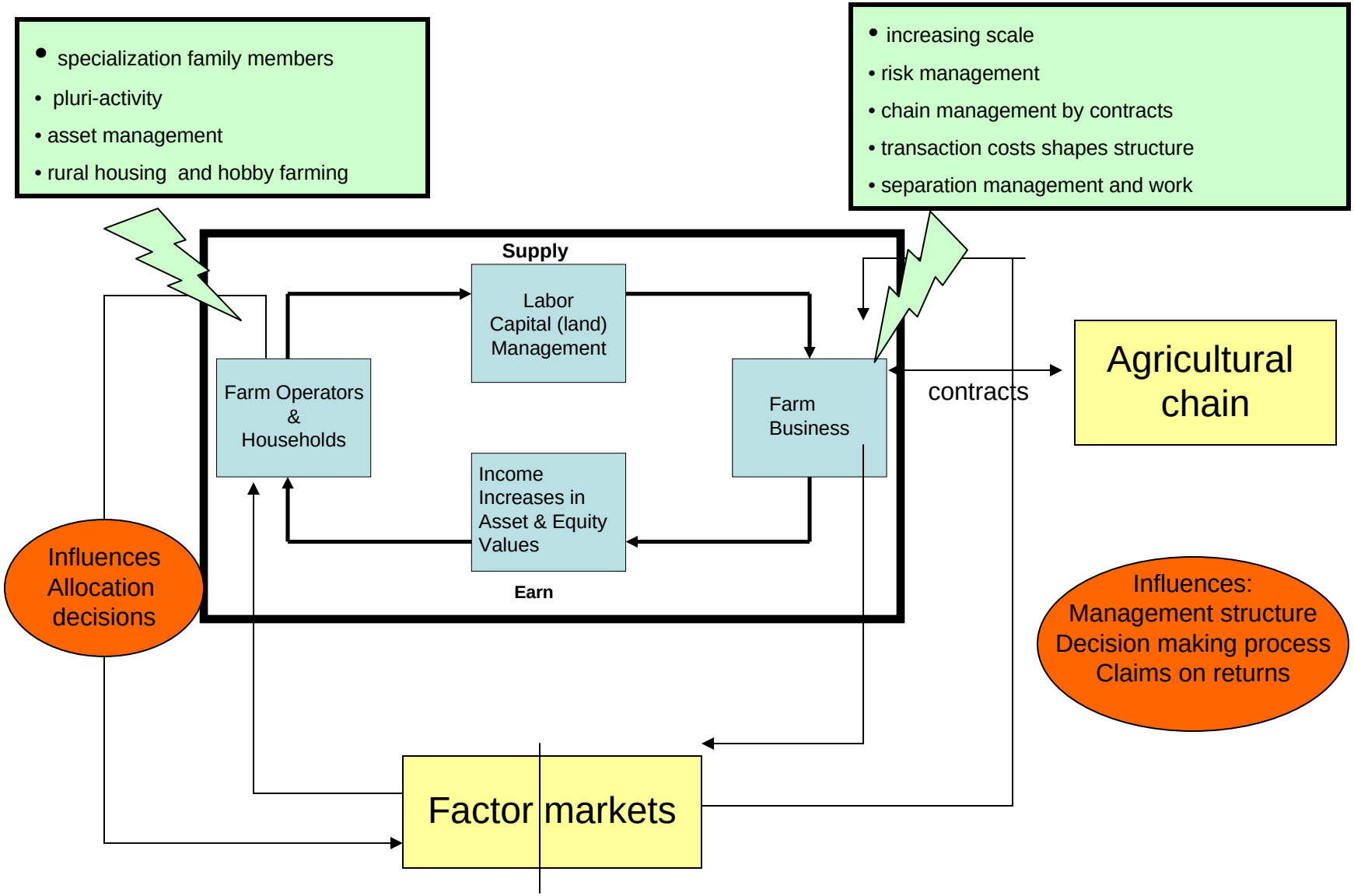
- threshold: is every household with 3 cars a car dealer?
- is a farm a firm (sme), a single unit (“, both technically and economically, which has single management and which produces agricultural products” – Eurostat), a location with farm buildings?
- Standardisation of subcategories possible? (subsistence, hobby, part-time, family farm, farm business // ERS classification?)

Integration in the food chain (contracts, franchising, farm shops etc.)

Integration with rural activities (energy, services from nature management to care farming)

Is the household a better unit of analysis than the farm?

Figure 5. Farm-households allocate resources to farm and non-farm uses and source inputs from multiple farm, household, and non-farm businesses



From: Krijn Poppe, James Johnson, Mitchell Morehart, David Culver, Cristina Salvioni, 2009

Need for most efficient monitoring

Costs should be judged in relation to policy expenditure and welfare effects, not on a cash basis:

- NL hands out circa € 1 bln a year on CAP payments. 1% monitoring cost equals € 10 mln. (FADN costs less)
- The derogation in the Nitrate directive had a value for farmers of circa € 0.5 bln. The monitoring obligation for the NL to the EU is less than 1%. Cost recovery could be an issue here.

Nevertheless efficiency gains are needed, seen austerity plans

Need for most efficient monitoring: recommendations for data managers

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Need for most efficient monitoring: recommendations for policy makers

- Have an M&E section with data gathering needs in a policy regulation (not separate in a statistical or special regulation)
  - better link to budget, more innovative.
- Coordinate data gathering in a limited sets of multi-purpose panels (FADN, Food Chain panel, Consumer panel)
  - cheaper than ad hoc data gathering in each research project
  - much better integrated impact assessment / policy coherence
- Create / invest in IT standards like XBRL to lower costs of data exchange, for these panels but also within the food chain.
- Take an open data approach (website with data, smart phone app):
  - Breaks down monopoly of the agency that manages the data
  - Use of data in universities will increase, extra research for free
  - Use of data in food chain and with farmers will increase

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Thank you for your attention

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