

Nurturing the Livestock Farmers of the Future

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Background

- Key to the future of any industry in an aging Europe is the need to attract high calibre human capital.
- But: falling numbers of farmers: is that a problem, – what do we signal to young people ?
- The problems of young farmers ?
- What is the role of current policies, can policies be defined to help young people to enter the industry ?

Content of the presentation

- Frame the discussion with some economic theory
- Illustrate the theory with some data
- Discuss current 'crisis' in livestock farming
- Experiences of young farmers
- Role of policy

Cochrane's Treadmill



Farmers don't exit but try to reduce cost prices



Their lower cost price leads to lower market prices

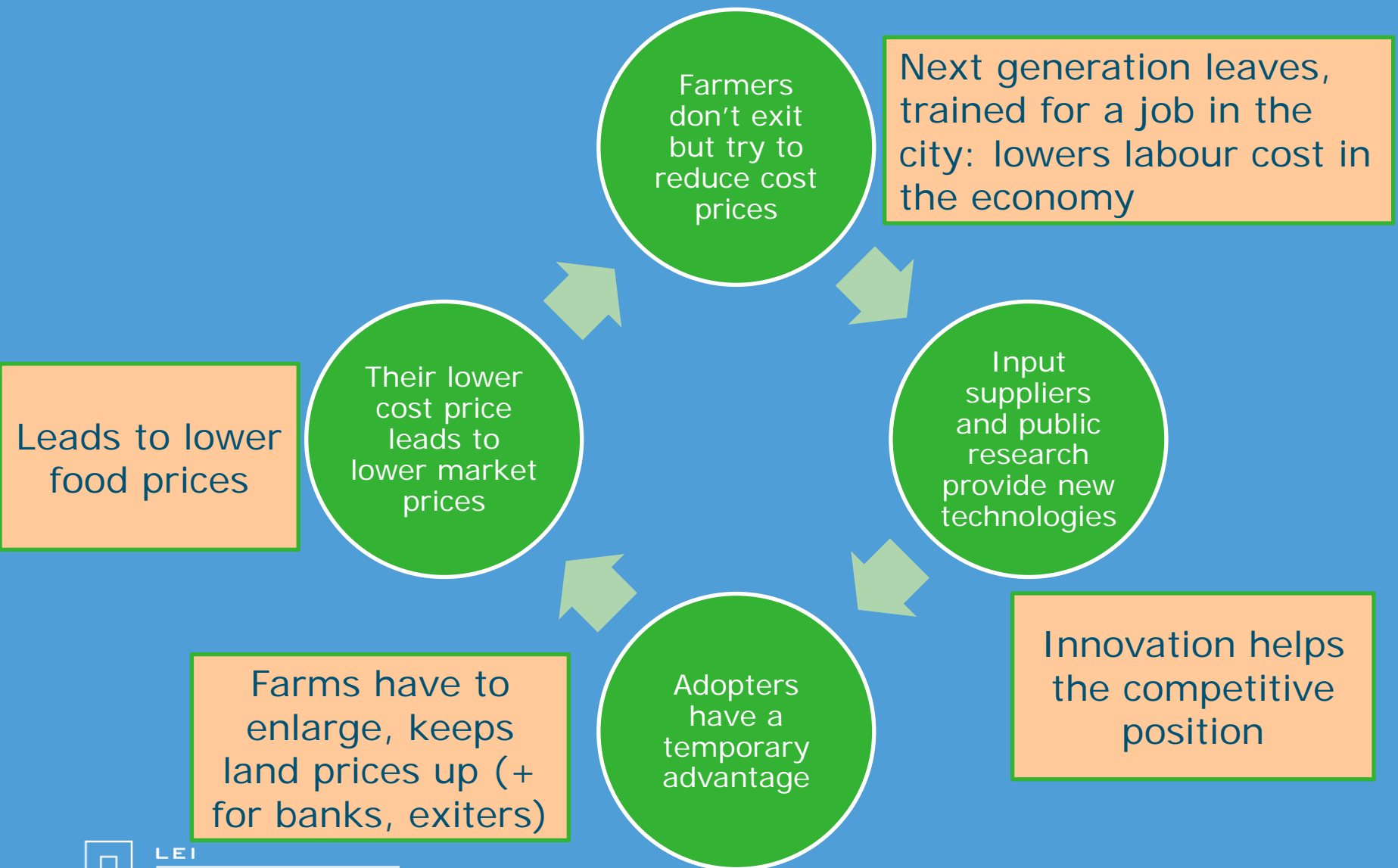


Input suppliers and public research provide new technologies

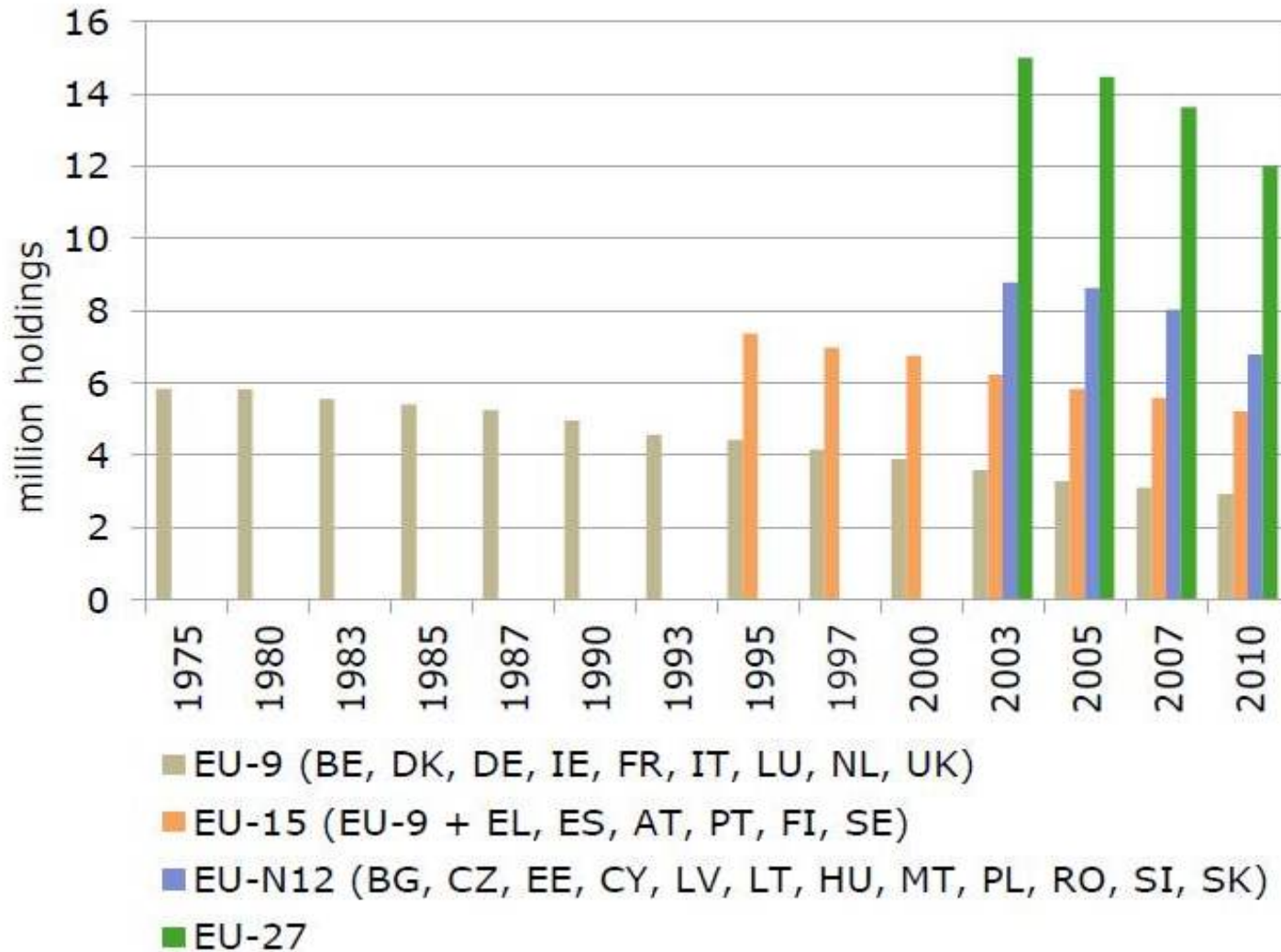
Adopters have a temporary advantage



.. Is good for the economy



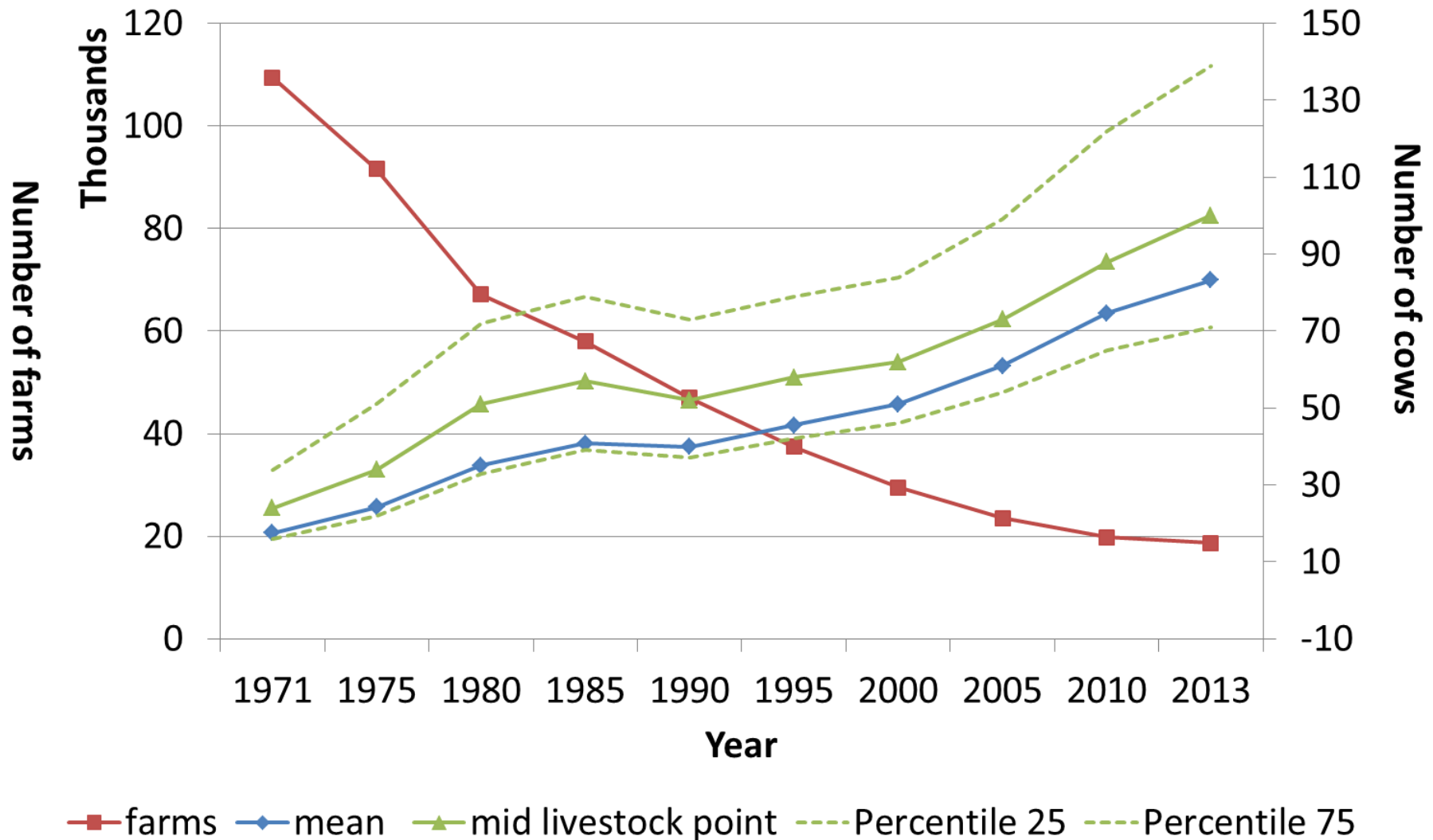
Graph 1 Number of EU holdings since 1975



2013:
10.8 mln.

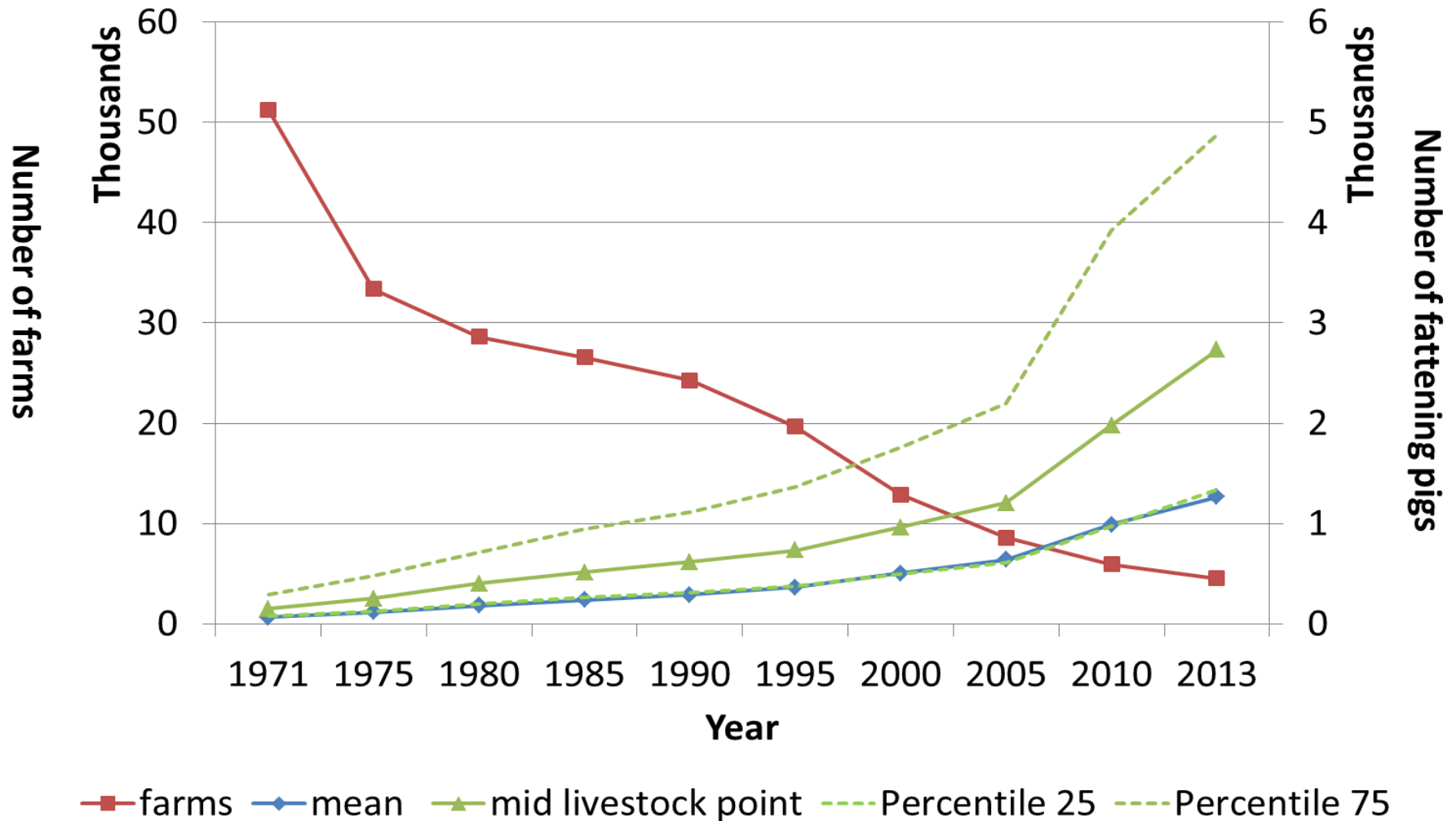
And the average farm size increases (NL):

Structural change in the dairy sector



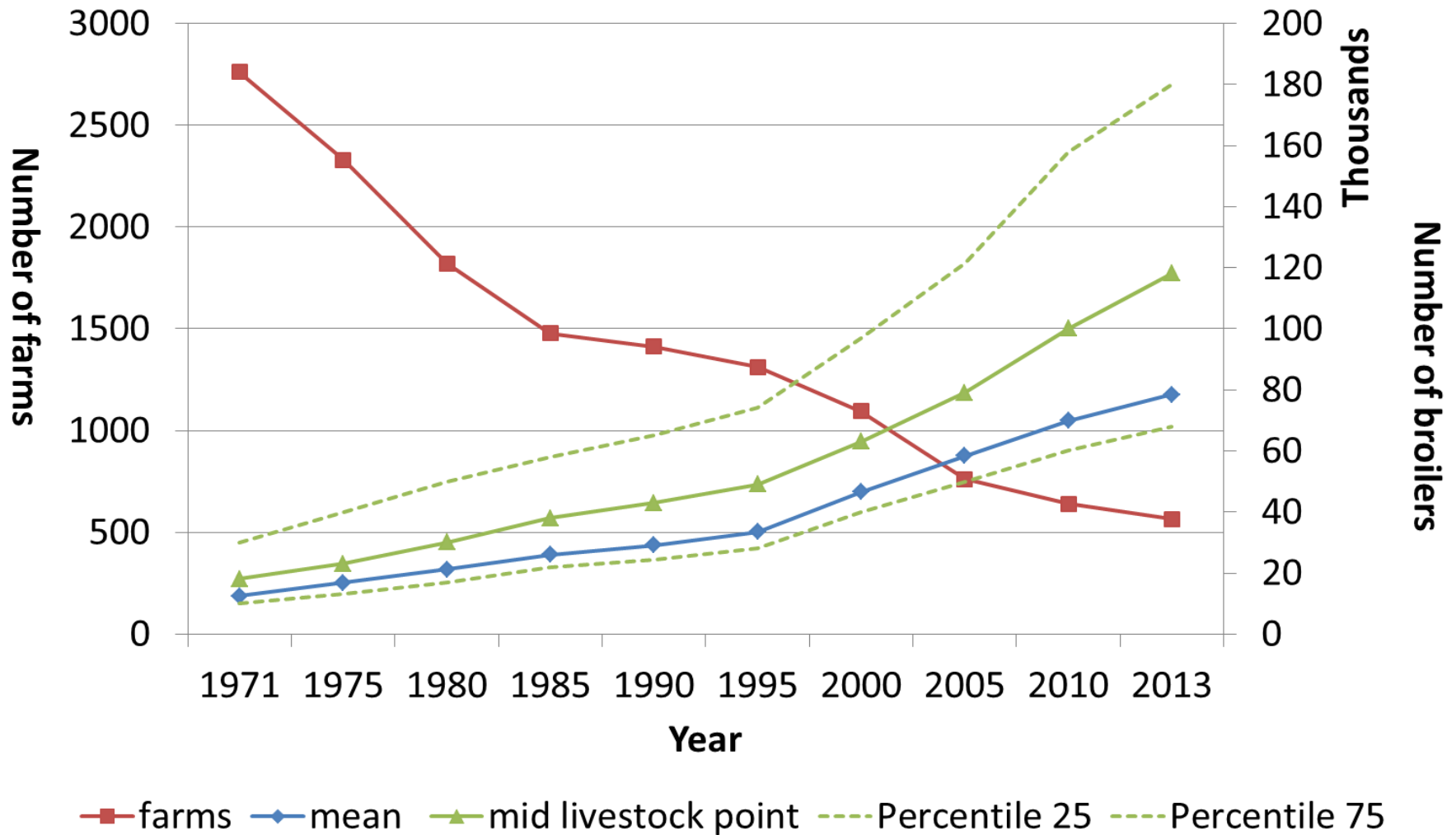
And it accelerates in pig meat (NL data)....

Structural change in the fattening pig sector

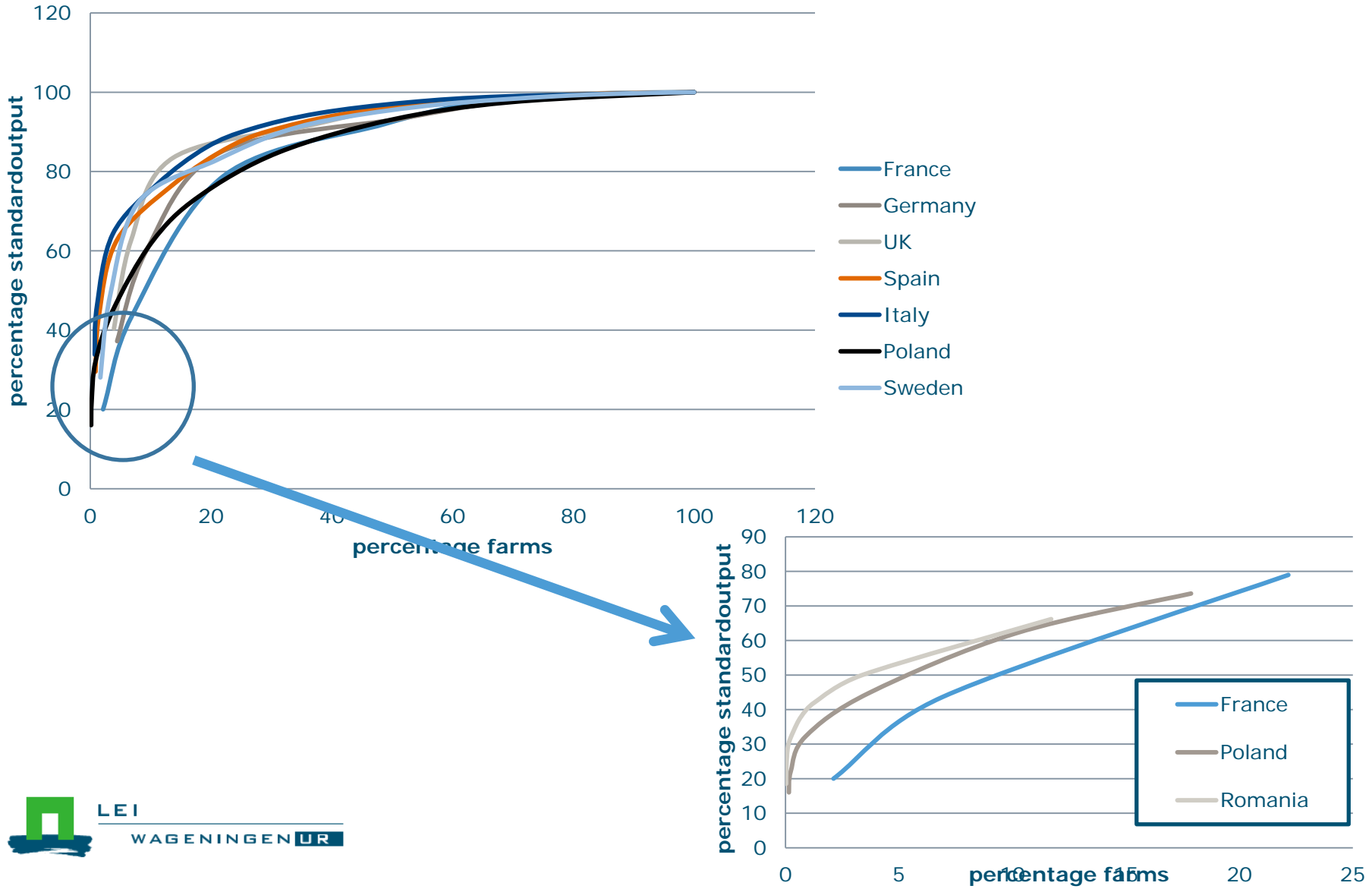


.... and in chicken meat (NL)

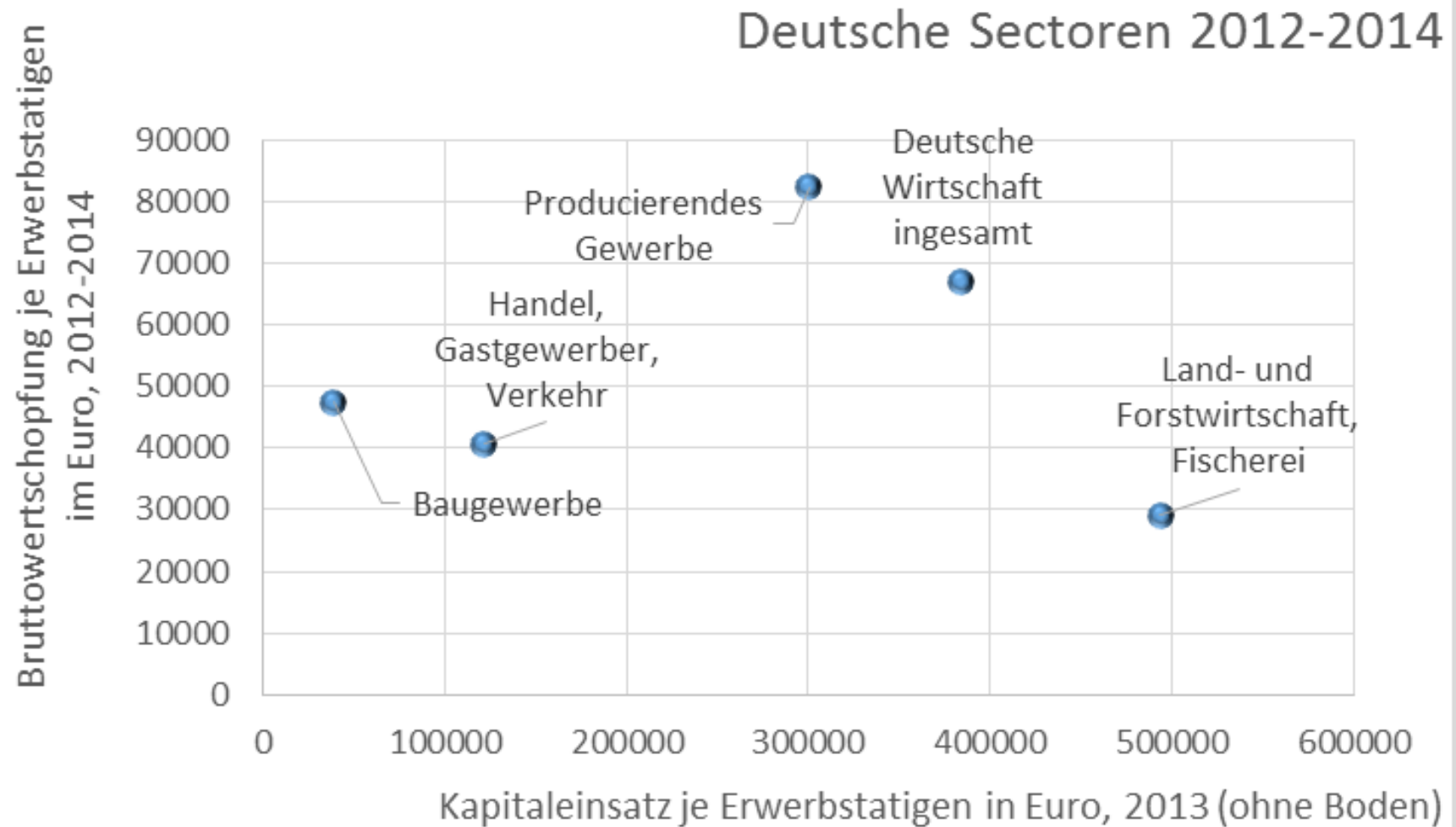
Structural change in the broiler sector



Strong concentration in farming: 5 mln farms matter



Agriculture is a low income sector..

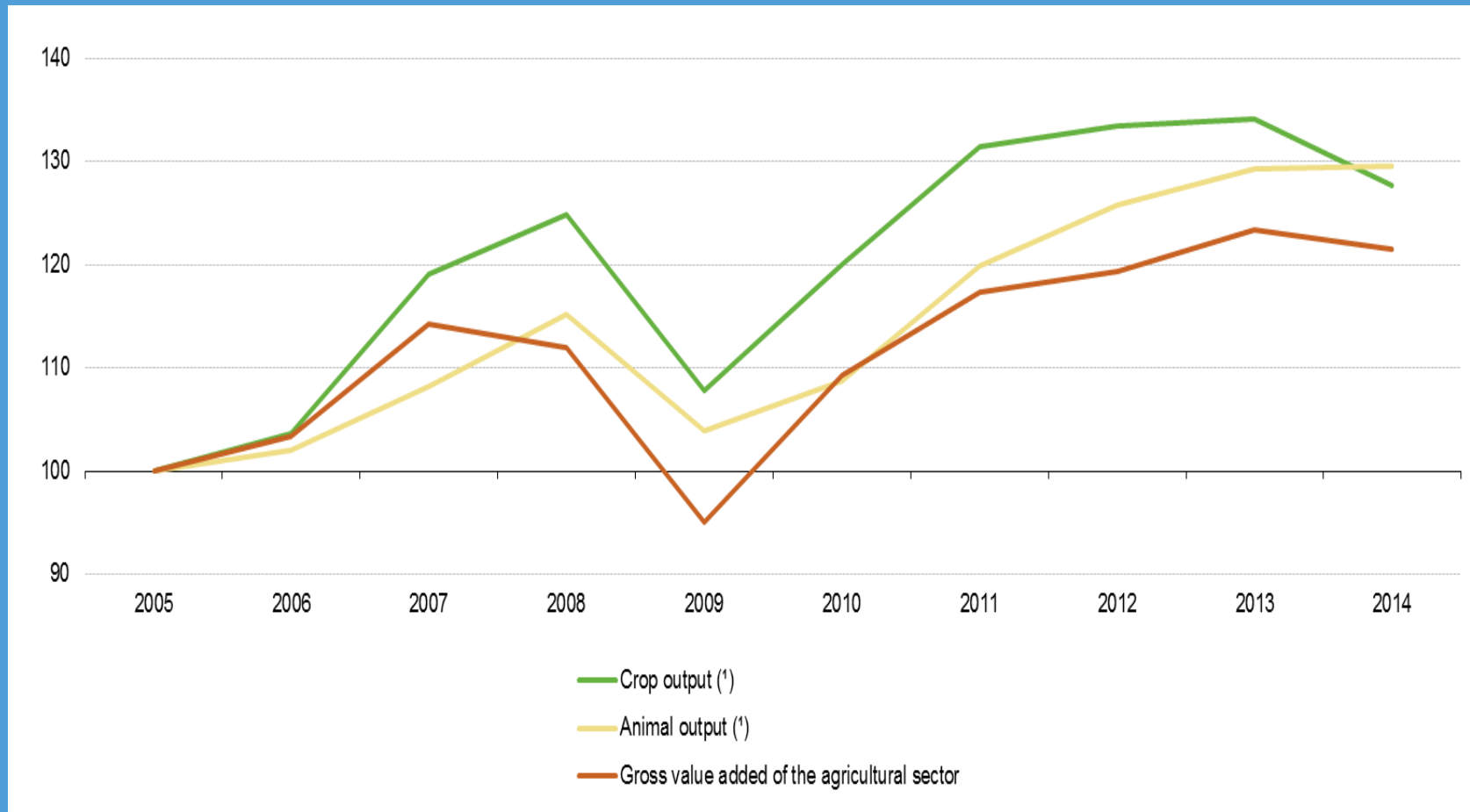


Income gap makes the city attractive

Nordin, Blomquist & Waldo (ERAE July 2016):

- Were able to compare income of farmers with those of their brothers and sisters outside farming (and corrected for age, education etc.)
- Swedish farmers (m.) take an “income penalty” of 28%
- but probably equity rich, lower living costs, informal income, which partly compensate
- Their comment on the future: inflow of high skilled farm managers needed, if such skills resemble those in other sectors, income penalty means loss of competitiveness

This economic system works well



...but with a 'crisis' in livestock farming

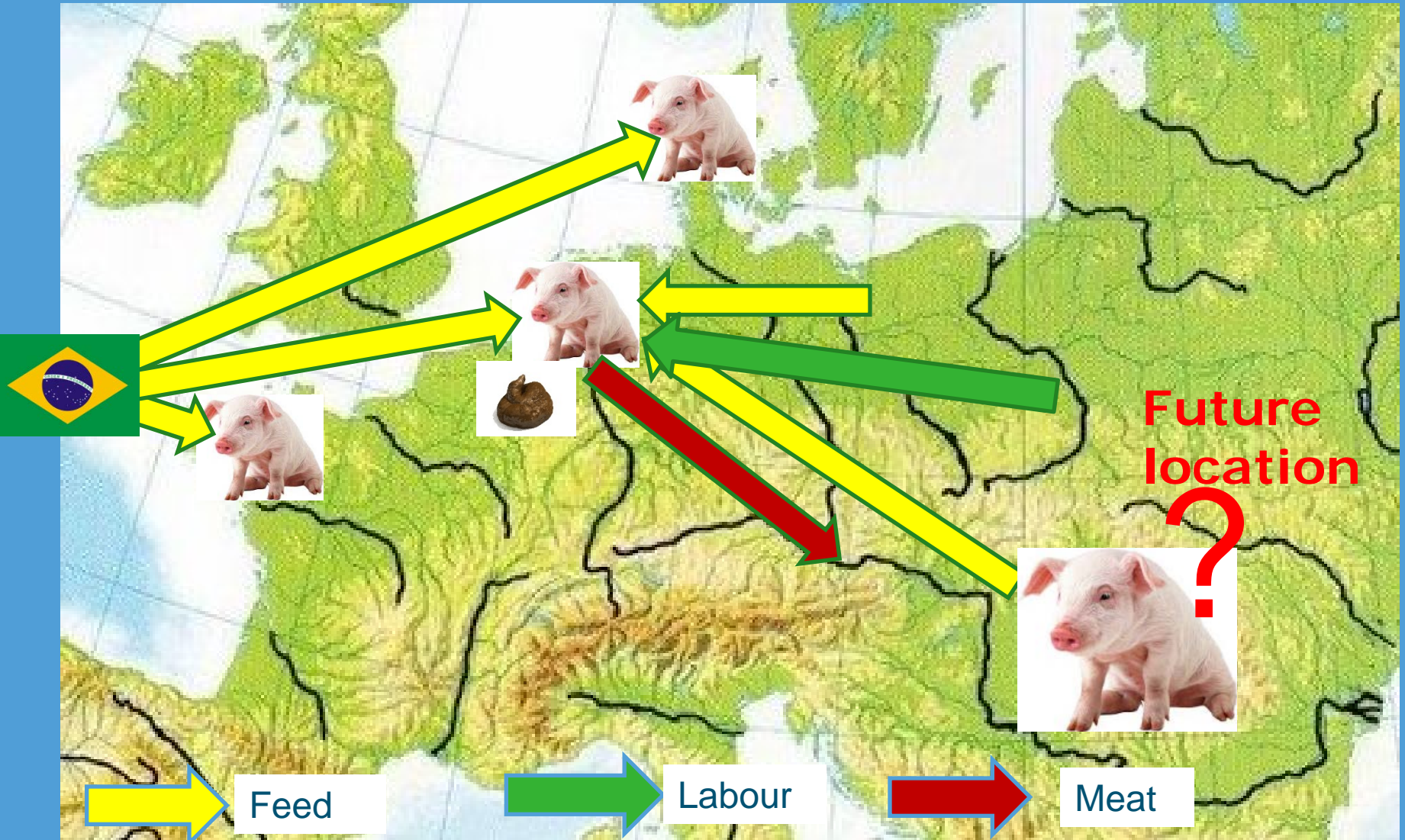
■ Dairy

- The quota system has partly frozen structural change for 30 years, now production flows to the European Milk Belt (from Ireland to Estonia)
- At the time of pressure on demand (Russia, China, Middle East) and high supply US, New Zealand

■ Pigs

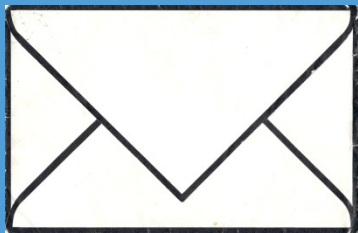
- Strong structural change (role of ICT ?)
- A structural problem: we created the industry around the ports of Western Europe based on trade protection and with high environmental costs and animal welfare discussions in the cities nearby

Relocating pig production?



How many livestock farmers do we need?

- Svend Rasmussen on Denmark (2011)
- Optimal farm size, according to FADN data (and DEA):
 - 2000: 174 cows; 712 sows
 - 2007: 229 cows (on 258 ha); 1022 sows
- Eurostat 2013
 - 23.6 mln cows on 878,215 farms (27 cows/farm)



Assume optimal size in 2020: 300 cows

Then we need

- 80.000 dairy farms (= 9% of today)
- and 3.000 new entrants per year

Strong ICT trends: less farm labour needed or making farming attractive ?

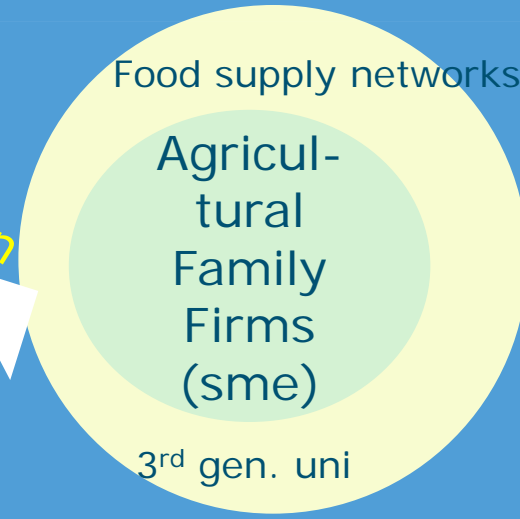
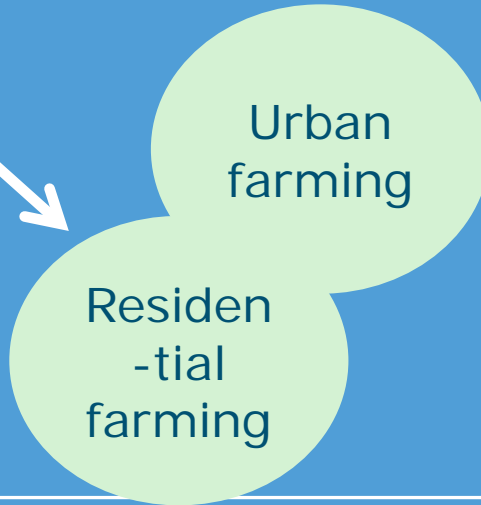
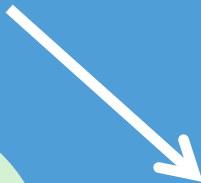
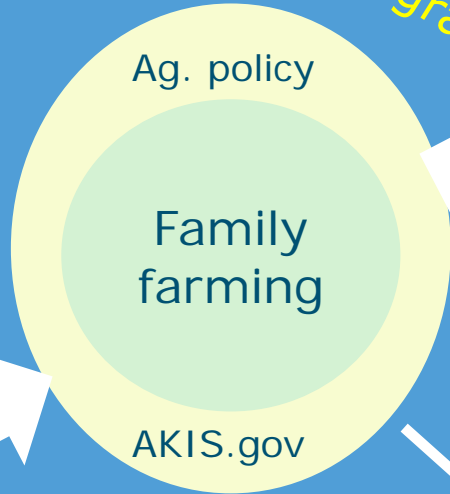
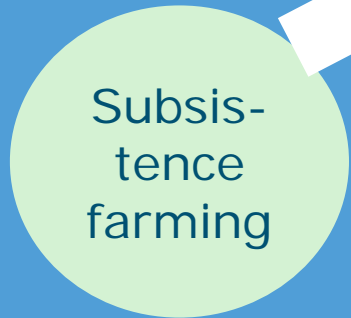


Development of farm systems

Net value / ha

Market integration

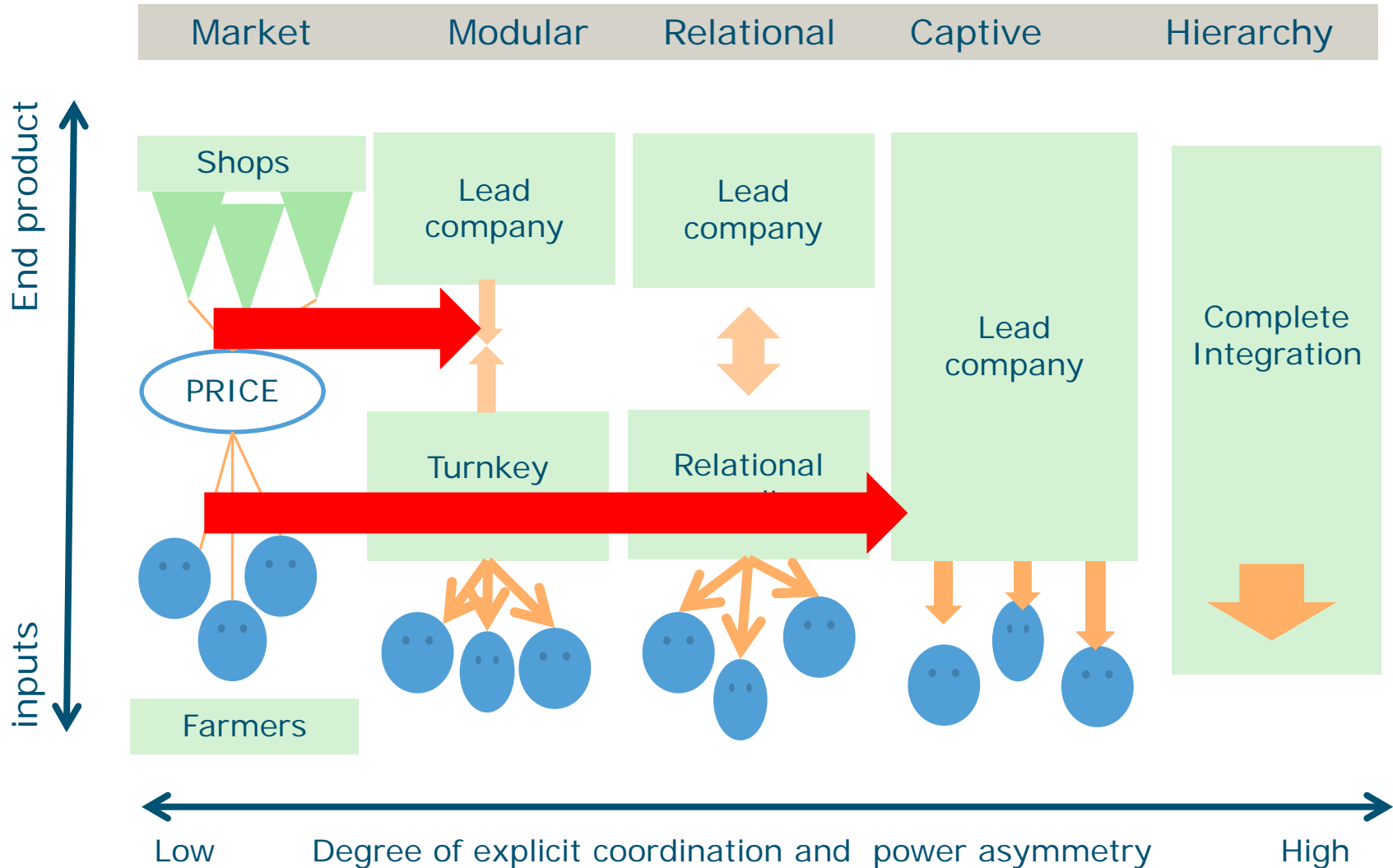
Supply chain integration



Metropolitan agriculture

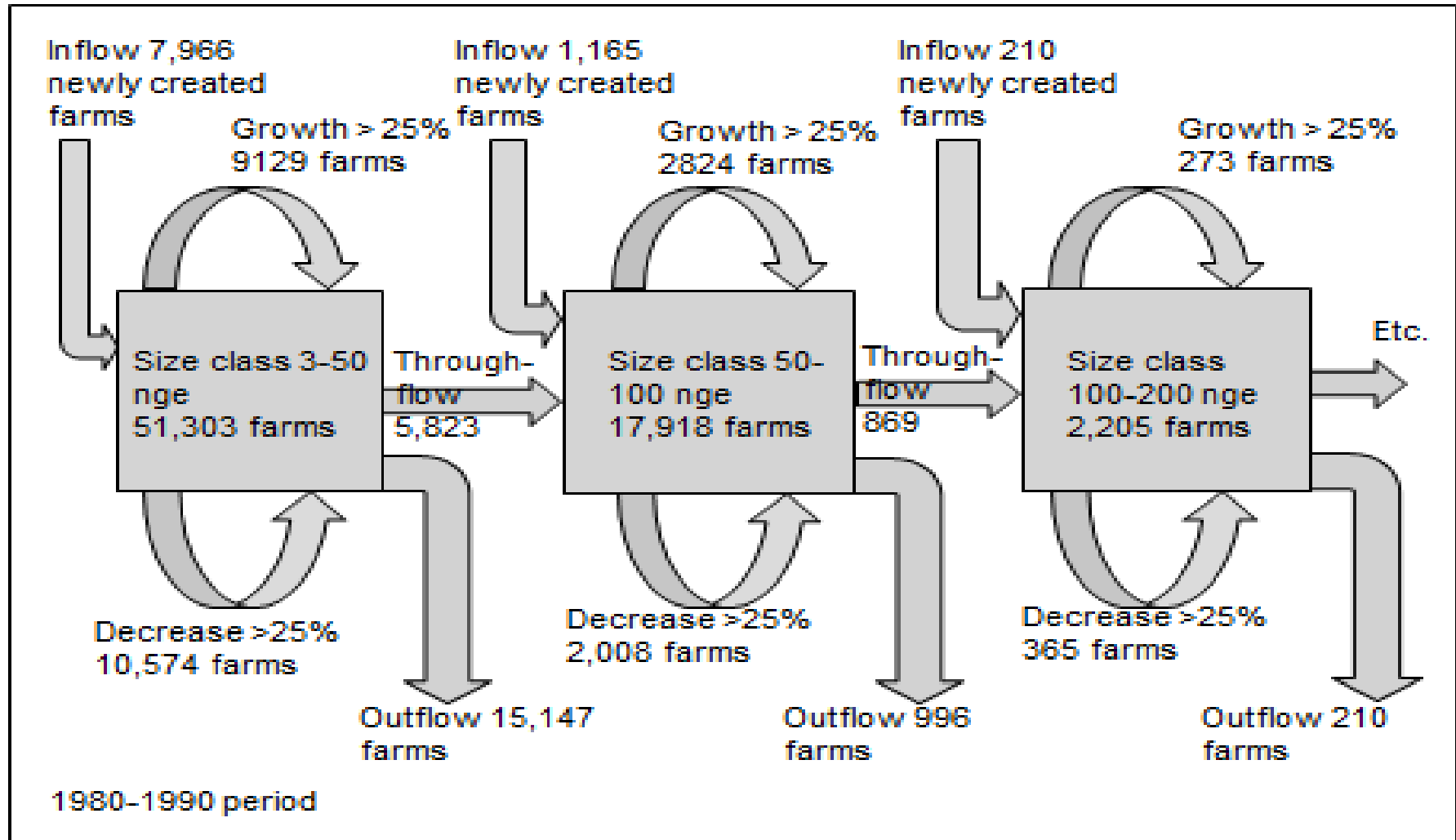
Time

Chain organisation changes (©Gereffi et al., 2005)



Average growth hides dynamics (NL dairy)

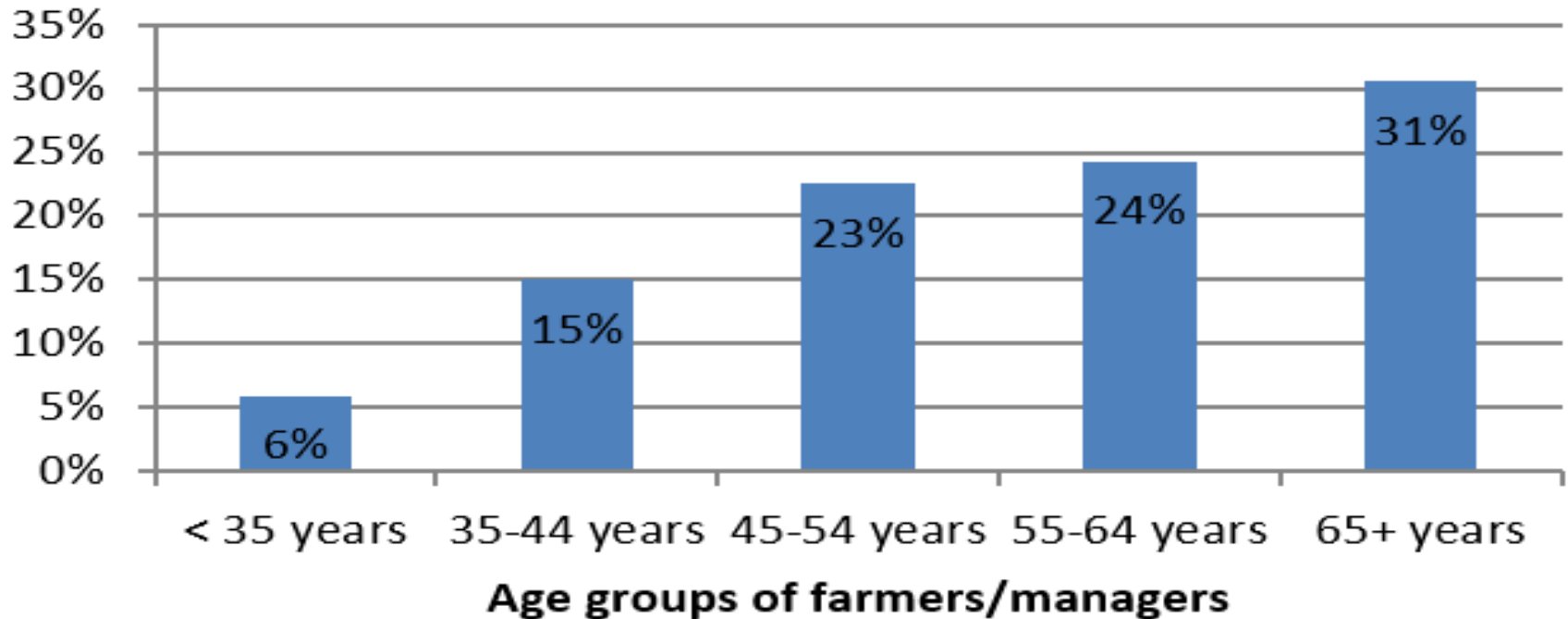
source: J.D. van der Ploeg, 2016



Dynamics are hidden behind averages - 2

- Growth does indeed occur over time and there is also shrinkage, while some farms are completely deactivated.
- These tendencies are not specifically, or narrowly, related to different size classes.
- It is true that some small farms do disappear, *but this is also true of large farms: some of them also shrink or even close down altogether.*
- *Many small farms develop into medium-sized farms, and subsequently into large farms*
- (a process that cannot be 'captured' from an analysis based on census data).

EU farmers by age group, 2013 – Is there a young farmer problem ?



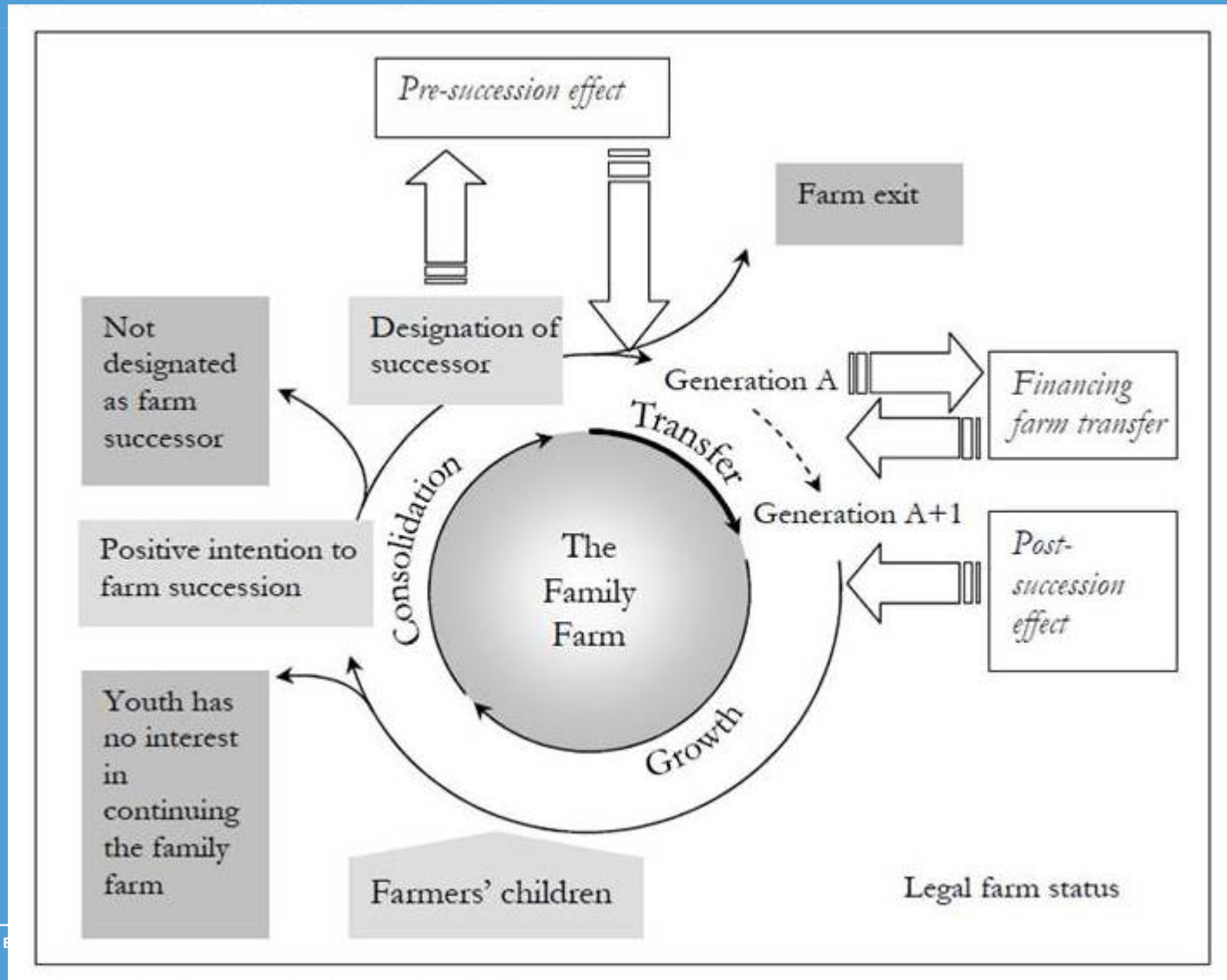
The relationship between lack of young sole holders and high levels of small-scale agriculture suggests a considerable structural component to the young farmer problem (Zagata and Sutherland)

Young farmers report difficulties in entry

- Land to buy or rent are most important bottlenecks
 - Mostly due to legislative issues, institutional issues, issues related to inheritance or land prices
 - Less an issue in specialised intensive sectors, where knowledge and insurance are (also) important
 - Subsidies, credit and qualified labour are other concerns for young farmers
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- Source: M.J. Zondag et al, 2015

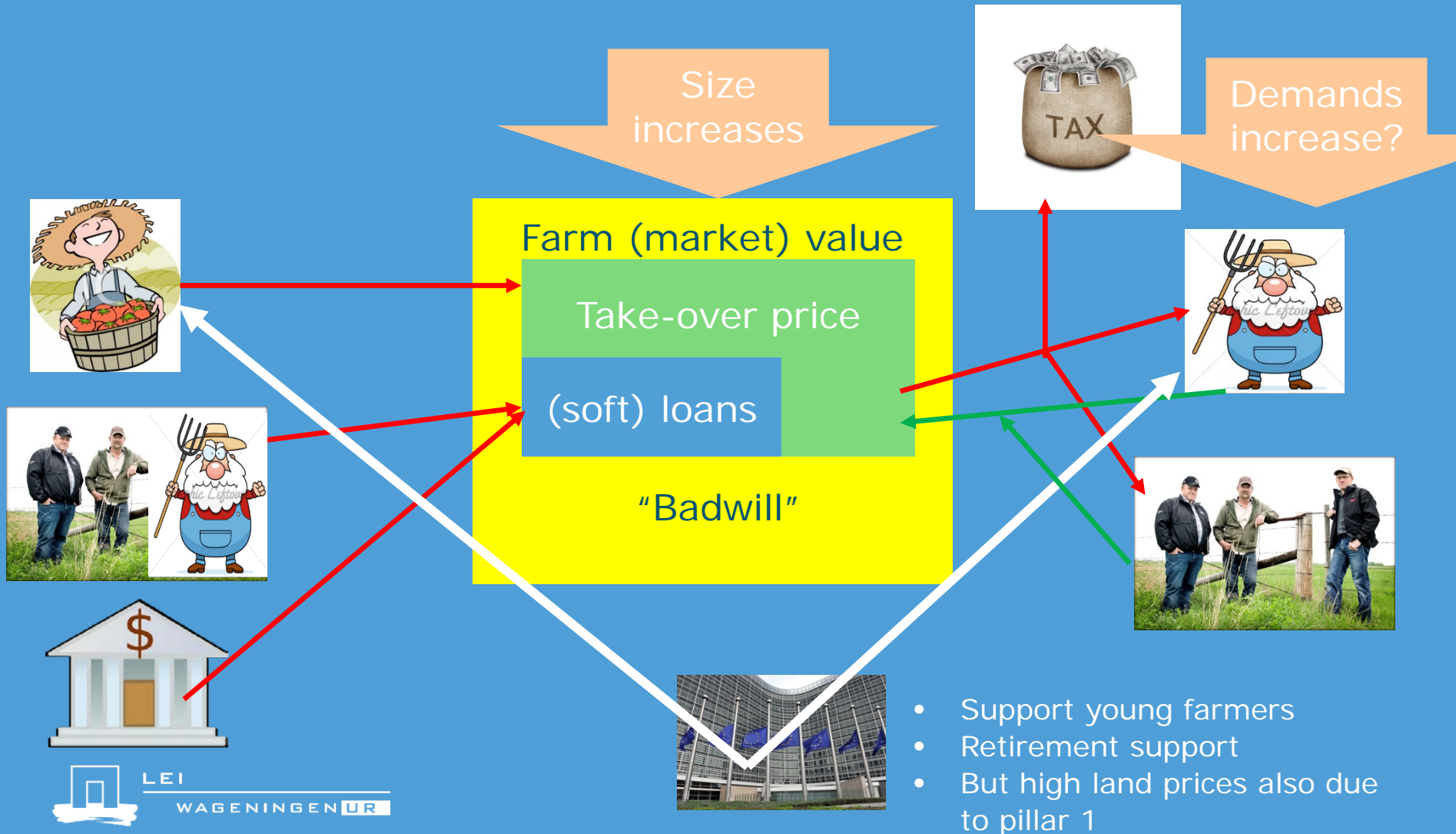
The intra-generational farm transfer process

source: Mieke Calus, Un. Gent, 2009



Can policy intervene in farm transfer?

Source: Venema and Overgaauw, LEI, 1994



Take home messages

- There is a strong process of structural change
- This brings societal welfare (but not for all involved)
- It signals that agriculture is not an attractive sector
- Where in reality some run nice farms with a good income and are wealthy farm owners
- Transfer of those farms is not getting easier
- And with demographic changes there is a war on talent
- New entrants (< > young farmers) can help innovation
- But intervening in the farm transfer to young farmers is relatively difficult, certainly for the EU with no knowledge on tax and inheritance systems

references

- Thanks to Hans Vrolijk (LEI Wageningen UR) for some graphs and data handling
- Literature:
 - Martin Nordin, Johan Blomquist and Staffan Waldo: The income penalty of farming and fishing: results from a sibling approach , ERAE July 2016.
 - Gereffi, G. et al. The governance of global value chains, Review of International Political Economy, 2005
 - Mieke Calus: Factors explaining farm succession and transfer in Flanders. University of Gent, 2009.
 - Venema, G.S. en J.G.A. Overgaauw: Bedrijfsovername in de landbouw – een rekenmodel, LEI, The Hague 1994
 - J.D. van der Ploeg et al : Farm structural change in Western Europe and the CAP, study for European Parliament, 2016
 - Svend Rasmussen: Estimating the technical optimal scale of production in Danish agriculture. In: Food Economics, April 2011
 - Lukas Zagata and Lee-Anne Sutherland: Deconstructing the 'young farmer problem in Europe'- Towards a research agenda in Journal of Rural Studies, 2015
 - Zondag M.J. et al. Exchange programmes for young farmers, Ecorys with LEI Wageningen UR and Aquator, study for DG Agri, 2015

Thanks for your attention

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