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.

Input suppliers and public research provide new technologies.

Adopters have a temporary advantage.

Their lower cost price leads to lower market prices.
Is good for the economy

Farmers don’t exit but try to reduce cost prices

Input suppliers and public research provide new technologies

Adopters have a temporary advantage

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Leads to lower food prices

Farms have to enlarge, keeps land prices up (+ for banks, exiters)

Next generation leaves, trained for a job in the city: lowers labour cost in the economy

Innovation helps the competitive position
Graph 1  Number of EU holdings since 1975

2013: 10.8 mln.

Source: Eurostat FSS
And the average farm size increases (NL):
And it accelerates in pig meat (NL data)....
.... and in chicken meat (NL)
Strong concentration in farming: 5 mln farms matter

- France
- Germany
- UK
- Spain
- Italy
- Poland
- Sweden

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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 ....

Source: Eurostat
...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?

Future location

Feed

Labour

Meat
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

Time

Development of farm systems:
- Subsistence farming
- Family farming
- Latifundia socialist state farms
- Ag. policy
- AKIS.gov
- Agricultural Family Firms (sme)
- 3rd gen. uni
- Food supply networks
- Urban farming
- Residential farming

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

Inputs                         End product

- Shops
- Lead company
- Turnkey supplier
- Relational supplier
- Captive company
- Complete Integration

Market           Modular      Relational      Captive      Hierarchy

Low         Degree of explicit coordination and power asymmetry            High

Farmers
Average growth hides dynamics (NL dairy)

source: J.D. van der Ploeg, 2016
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).
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

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

- Support young farmers
- Retirement support
- But high land prices also due to pillar 1
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
Thanks to Hans Vrolijk (LEI Wageningen UR) for some graphs and data handling

Literature:

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- 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
Thanks for your attention

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