

Structural changes in family and corporate farming in the New Member States of the EU (and in Eurasia)

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Some stylised facts

- Actual farm structures strongly differ from expectations
 - "western type" family farms play almost nowhere a particular role
- In general: dualistic farm structures
 - large and very large farms
 - relatively small in numbers
 - high share in land and capital intensive production (e.g. cereals, granivores)
 - often successors of former collective (and state) farms
 - subsistence, semi-subsistence and small farms
 - huge in numbers
 - high share in labour intensive production (e.g. potatoes, vegetables, dairy)
 - motives: self-employment, self-sufficiency
 - shares vary among countries
 - shares changed only gradually after first years of transition

Explanations

- Path dependence
 - farm structures change very slowly
 - sunk costs for assets and human capital, market frictions, ...
 - with the exception of "catastrophic" events (bifurcations)
 - institutional change is slow
 - new institutions "don't fall from heaven" but evolve
 - existing institutions in transition economies deviate from textbook assumptions
 - interdependence of structures and institutions
 - institutions and policies in favour of status quo
 - existing structures affect institutional change
 - structures are outcome of their history not of their superiority
 - surviving large farms
 - emerging (semi-)subsistence farms

Surviving large farms

- Profit orientation was necessary for survival
 - Employment reduction of successors of collective farms
 - abolishment of public services
 - reduction of hidden unemployment
 - reduction in livestock production
 - But employment reduction and profit orientation somewhat delayed
 - existing assets for livestock production (sunk costs)
 - identity of ownership and employment (sunk costs of human capital)
 - avoiding competition with newly/re- established farms
 - legitimisation strategy of managers
- Still many cooperatives
- Recent trend in CIS: Establishment of agro-holdings
 - partly as a response to corruption, bad policies and lack of capital

Small and subsistence farms

- Households continued farming as in socialist times
- Employment reduction of successors of collective farms
- Missing alternative employment opportunities in rural areas
 - Overaging of small farmers

Survey results Hungary (www.scarled.eu)

Farms between	4 and 10 ha	10 and 25 ha	25 and 60 ha	> 60 ha
Share	41 %	20 %	19 %	20 %
Mean age	53	54	52	47

Survey results Poland (www.scarled.eu)

Farms between	2 and 5 ha	5 and 10 ha	10 and 20 ha	> 20 ha
Share	31 %	22 %	29 %	18 %
Mean age	53	48	47	48

Small and subsistence farms

- a strategy to generate at least some income from own resources (particularly if land and local markets available)
- (in general) rather a by-product of transition than a perspective (limited land availability, financial resources and market access)

Where are we heading?

- Traditional problems
 - Existing inefficiencies (farm level, sector level)
 - Structural deficits

Productivity and profitability

Milk production costs and margins for milk specialised farms in EU NMS in 2006 **

Class of number of dairy cows	EU 15		Hungary		Poland		
	25< <=50	>=150	25< <=75	>=150	10< <=25	25< <=75	75< <=150
Milk yield - kg/cow	6.543	< 7.688	5.969	< 7.504	5.169	< 5.846	< 7.194
Total receipts from milk	306	296	280	275	238	255	275
Total operating costs	188	181	130	192	114	119	131
Total costs	384	304	280	290	224	205	197
Margin over total inputs with coupled payments	-78	< -8	-1	> -15	14	< 50	< 78

* in €/ton

** European Commission: EU DAIRY FARMS ECONOMICS - 2008 REPORT

- higher productivity of larger farms!
- but: profitability depends also on factor costs!

Where are we heading?

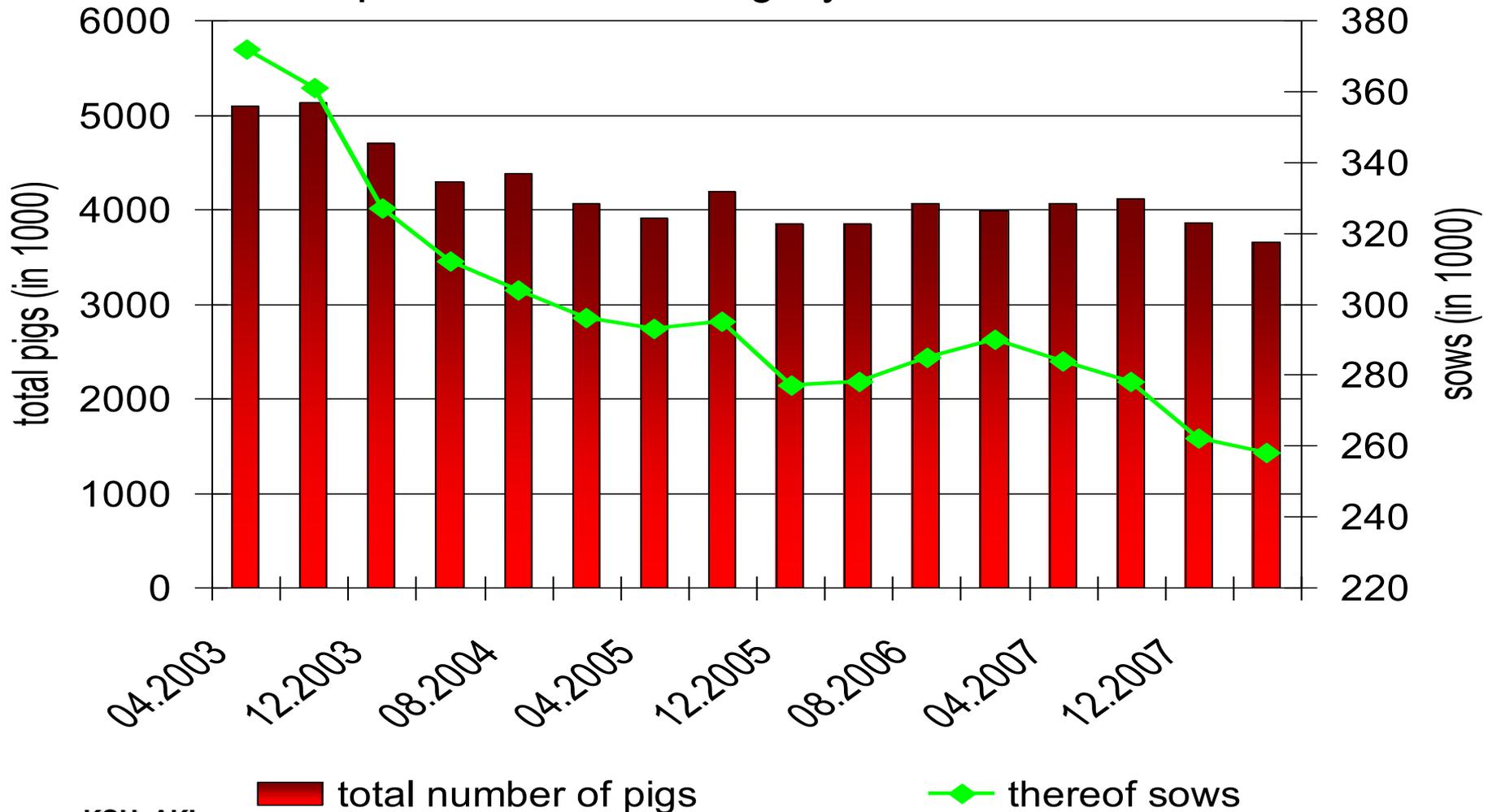
- Traditional problems
 - Existing inefficiencies (farm level, sector level)
 - Structural deficits
- Recent trends
 - Globalisation and verticalisation
 - Biological manufacturing
 - ...

International structural change in the pork chain

- Denmark (2007)
 - 34 % of all pigs in facilities with more the 5000 pigs
 - 20 % of all pigs in facilities with more the 10000 pigs
- US pork production (2008)
 - 90 % of all pork from vertically integrated systems
 - 61 % of all pigs in facilities with more than 5000 pigs
- Smithfield Foods
 - USA: ~1 mill. sows
 - Poland: about 83.000 sows, >1 mill. hogs in 2008 produced
 - Romania: investments in pork chain with capacity for 4 mill. hogs

Globalisation and verticalisation

Pork production in Hungary after EU Accession



Increasing knowledge intensity of modern agriculture

- Example: farrowing / piglet production in Saxony
 - In 2006 average profit per sow was 300 € higher for farms with more than 1000 sows compared to farms with less than 600 sows
 - Success factors
 - lower costs + higher revenues
 - strong positive correlation of number of sows and piglets per sow

Increasing knowledge intensity

- Economies of size
 - result from better managing human capital and know how rather than just from decreasing average costs for facilities
 - division of labour
 - competent managers
 - specialised employees
 - knowledge transfer through supply chain

Increasing capital intensity

- Financial needs to create one job in livestock production in Germany
 - hog feeding: 1 125 000 €
 - facility per 2500 places at 350 € each, current assets 100 € per place
 - farrowing: 675 000 €
 - facility per 250 sows at 2300 € each, current assets 400 € per place
 - dairy farming: 300 000 €
 - facility per 50 cows at 4000 € each, current assets 2000 € per place

Conclusions

- Subsistence, semi-subsistence and small farms in NMS
 - a strategy to generate at least some income from own resources (particularly if land and local markets available)
 - but (in general) rather a by-product of transition than a perspective (limited land availability, financial resources and market access)
- Structural change is path dependent
 - transferring western "paradigm" to transition economies misleading
- Relevant question for small farms in NMS
 - is not, whether they can compete with large farms,
 - but, whether they can benefit from strong value chains!