International workshop

CATTLE SECTOR DEVELOPMENT IN TRANSITION COUNTRIES OF CEE

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Workshop jointly organized by:
EAAP Cattle Network Working Group
EAAP CEEC Contact Working Group
EAAP Cattle Commission

POLAND

Jan Fałkowski
University of Warsaw

Co-authored with:

Agata Malak-Rawlikowska
Warsaw University of Life Sciences

Dominika Milczarek-Andrzejewska
University of Warsaw

What are the keys to inclusion of small-scale producers in dynamic markets?

Outline

The nature of the restructuring of dairy industry

Market channel choices of farmers

Determinants of modernisation at the farm level

Impact of farm modernisation on farm revenues

Conclusions

Main facts

• With its production of 11.7 billion litres Poland is the 4th largest milk producer in the European Union. As regards 2008, slight increase is expected.

• Export of dairy products amounted in 2007 to 1.14 billion EUR (23% increase compared to 2006). This happened notwithstanding strong appreciation of PLN.

• Average milk and dairy products consumption *per capita* amounted in 2007 to 173 litres (2% decrease compared to 2006)

• Average butter consumption *per capita* amounted in 2007 to 4.2 kg (3% decrease compared to 2006). As regards 2008, slight decrease is expected.

• Milk production very fragmented:
⇒ Changes observed on the market have important social repercusions
⇒ Small-scale farmers on the pedestal

Dairy sector restructuring

Changes taking place in 3 dimensions:

Production sphere
- new technologies
- taking advantage of economies of scale

Marketing sphere
- new marketing channels
- contracting

Institutional environment
- regulations: milk quota system, quality standards, subsidies
- market structure
- vertical coordination

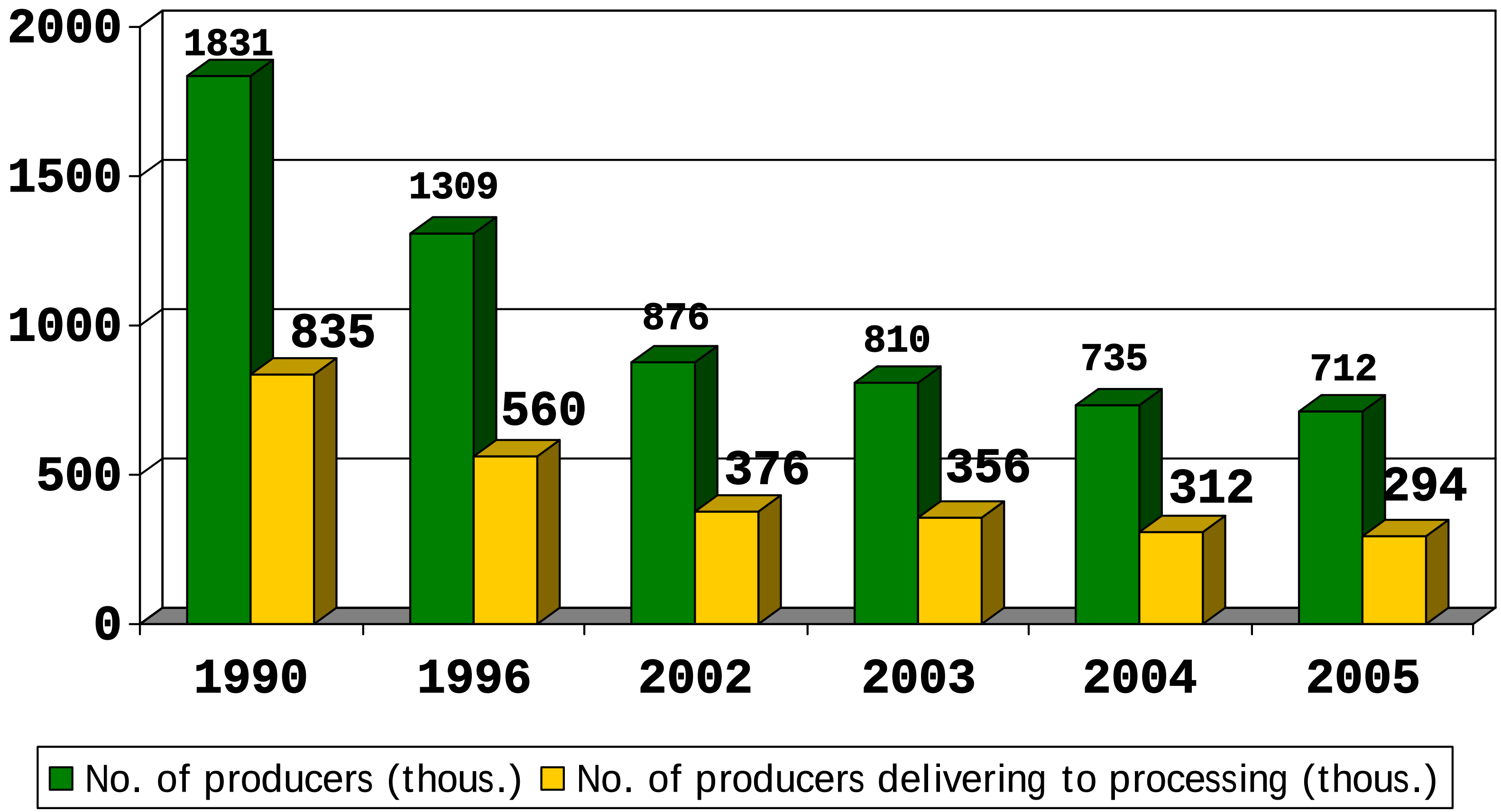
Main developments in dairy supply chain

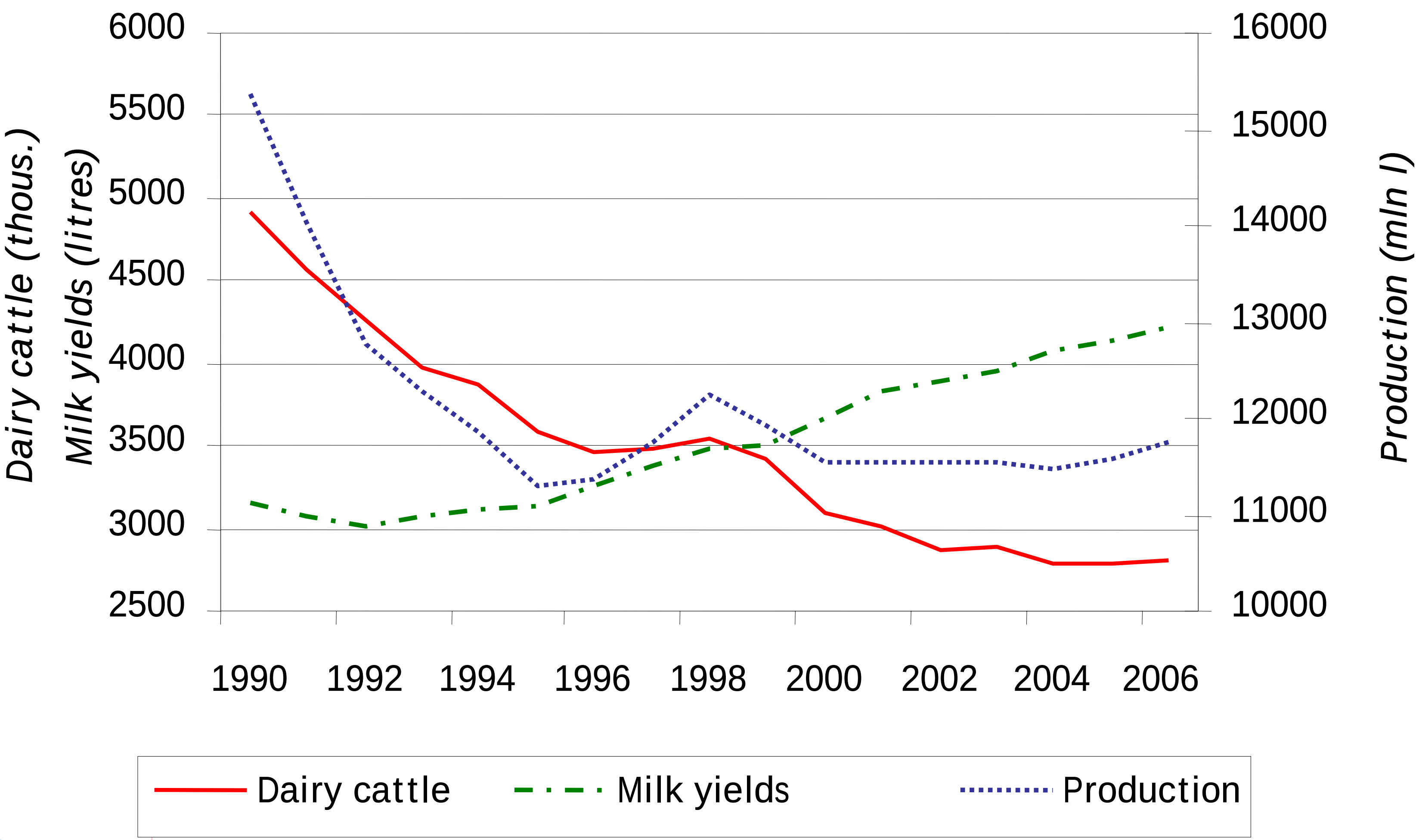
- Decrease in number of agents operating in dairy industry:
    - households having cows
    - farms delivering milk to the market
    - number of dairy processors
    - wholesalers

- Concentration at every stage of dairy supply chain
    - Farm level – in 2004-06 average milk delivery increased by 47%
    - Processing level – no. of processors decreased in last decade by~30%
    - Retail level – increasing importance of super- and hyper-markets

- Specialisation
    - farm level – dominance of dairy production
    - processing level – large companies having specialized dairy plants
    - regional level (dairy production most important e.g. Podlaskie region)

Number of dairy producers in Poland during transition




6000
5500
5000
4500
4000
3500
3000
2500
16000
15000
14000
13000
12000
11000
10000
Dairy cattle (thous.)
Milk yields (litres)
Production (mln l)
1990
1992
1994
1996
1998
2000
2002
2004
2006
Dairy cattle
Milk yields
Production

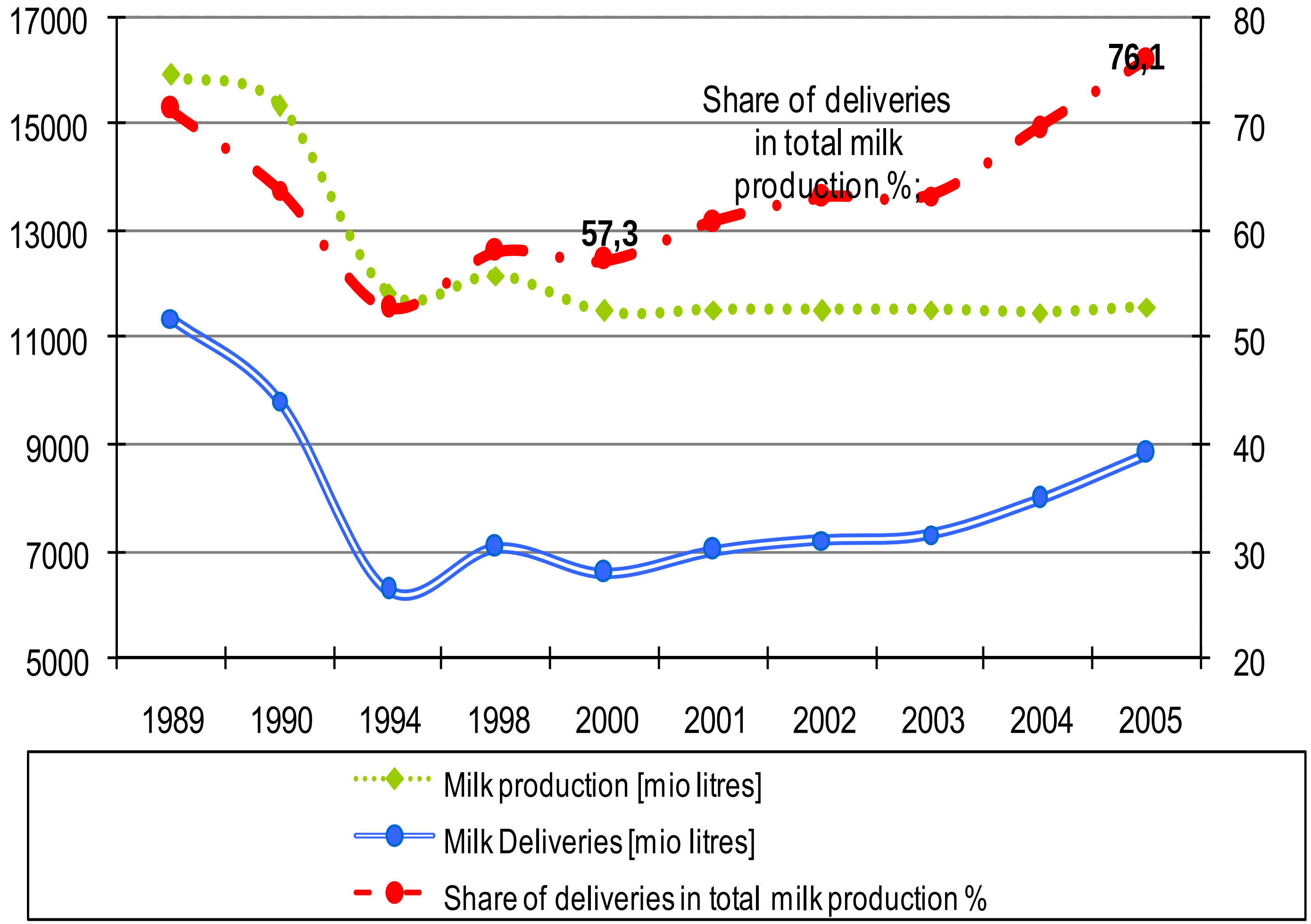
Main developments (2)

- Outstanding improvement in milk quality
    - in 1999-2005 share of 'extra' class milk in total deliveries increased from 32% to 95%

- Improvement in variety of dairy products (higher added-value products, private label products)

- Compared to other CEE countries, foreign owned dairy companies of relatively minor importance
    - domestic companies having 70-80% of market share

- Increase in commercial production


17000
15000
13000
11000
9000
7000
5000
80
70
60
50
40
30
20
76,1
Share of deliveries
in total milk
production %;
57,3
1989
1990
1994
1998
2000
2001
2002
2003
2004
2005
Milk production [mio litres]
Milk Deliveries [mio litres]
Share of deliveries in total milk production %

Main developments (3)

- Emergence of modern marketing channel
  - traditionally milk delivered to collection points
  - modern way: milk collected at the farm

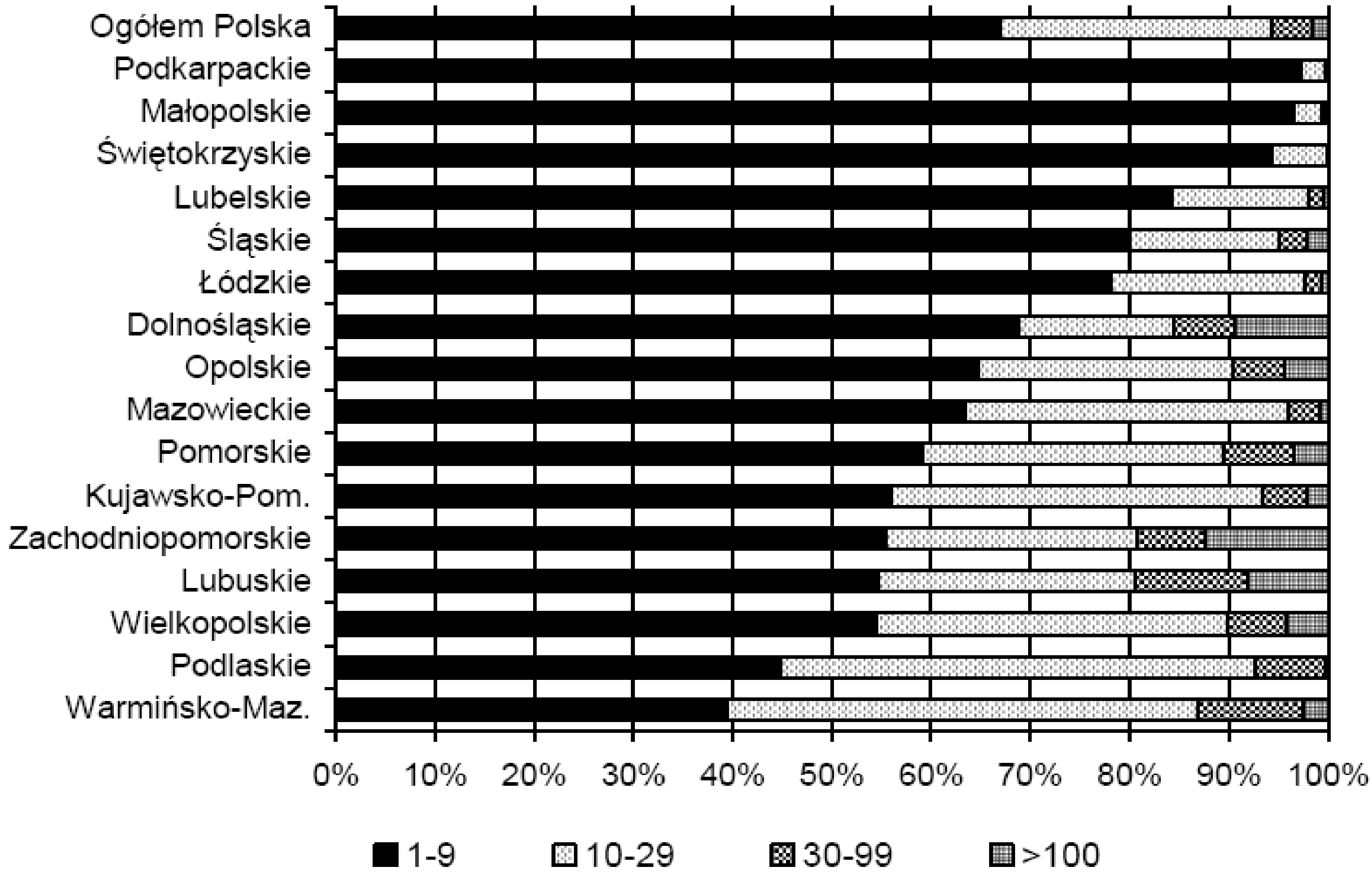
- Increase in direct collection from the cooling tank at the farm (65-100% of deliveries)

- Gradual disappearance of collection stations (free rider problem)

- Decrease in direct sales (quality requirements)

- Vertical coordination between processing industry and dairy farms
  - various froms of support (consultancy, credit, provision of machinery)
  - milk production still enormously fragmented =>
  - assistance programmes directed also to small-scale producers

COW HERD STRUCTURE



Main drivers behind the observed changes

- The EU accession and integration process **as the main driving force**
    - pre-accession investment assistance, quality requirements, the introduction of a milk quota system, etc.

- Changes in **the processing sector** accelerated the restructuring process at the production level.
    - assistance programmes for farmers

- The process of policy-driven restructuring will continue in the near future (decisions concerning WTO negotiations and the future of dairy sector in the EU)

Implications for farmers

Increase in quality requirements for dairy processors

→

Importance of the role of direct procurement from farmers

→

Investment requirements for farmers (equipment, land, herd size)

→

Specialisation in milk production

Market channel choices of farmers

Delivering to processing industry:

- **Modern:** direct collection from the cooling tank at the farm;
- **Traditional:** milk delivery to a collection station operated by the dairy company

Delivering directly to the market:

- **Direct sales** to final consumers

Barriers to farm modernisation

- High entrance costs to modern channels for producers
  - Quality requirements
  - Sanitary and veterinary requirements
  - Land prices
  - Lack of own resources and access to external funding
  - Quota system
- Skills and knowledge
- Mentality (reluctance to cooperate)

Research questions

Which small farms can make the switch from the traditional to the modern marketing channel and how can this switch be facilitated?

Does this switch really pay? What is the impact of switching the channel on farm revenues?

Data

Qualitative research:

May and August 2006

36 **semi-structured interviews** with representatives of chain segments and experts

5 **focus groups** with farmers

Quantitative research:

January and February 2007

survey: 397 interviews at the household level

Results of quantitative research

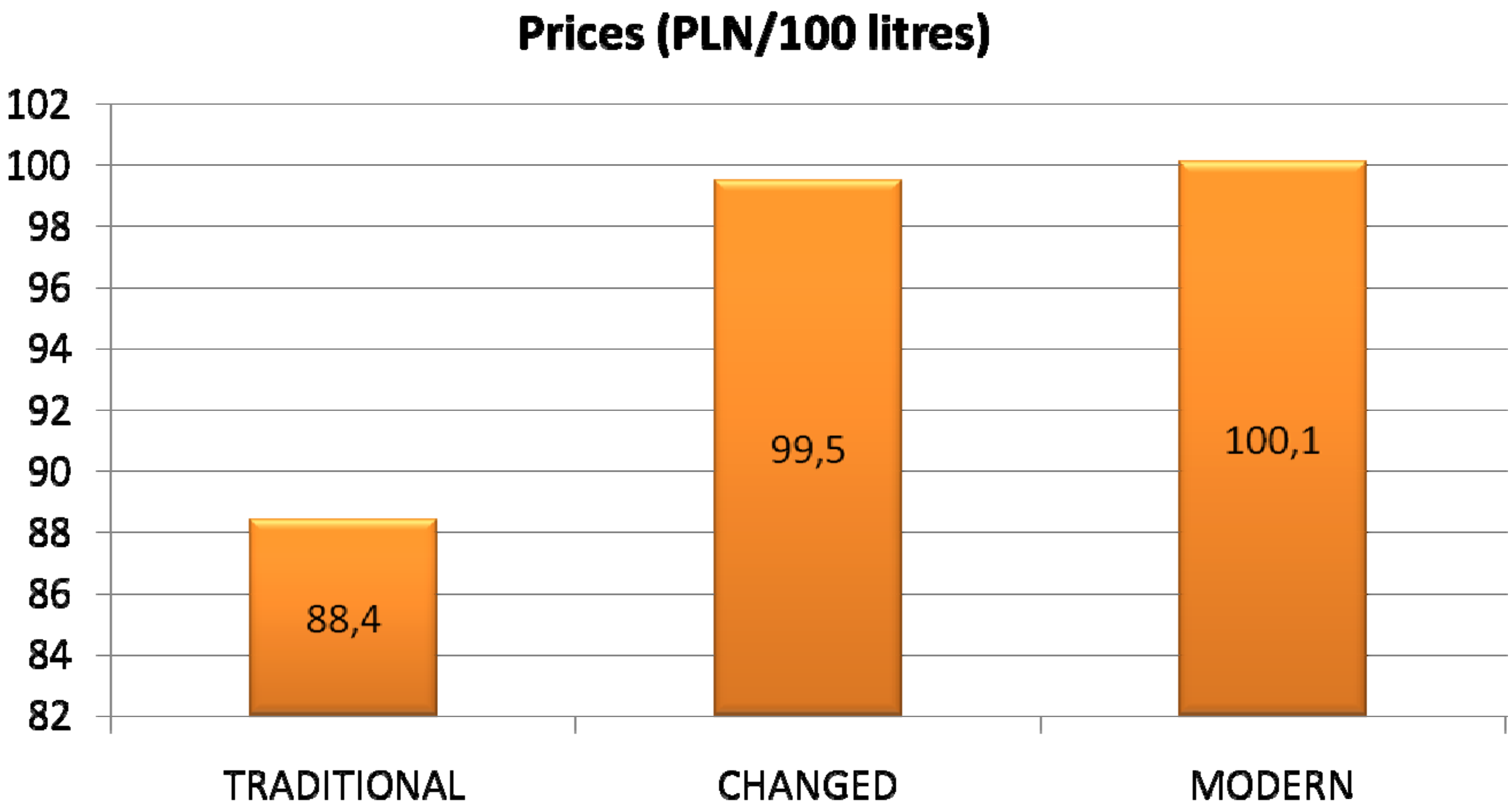
What facilitates entering to the modern marketing channel?

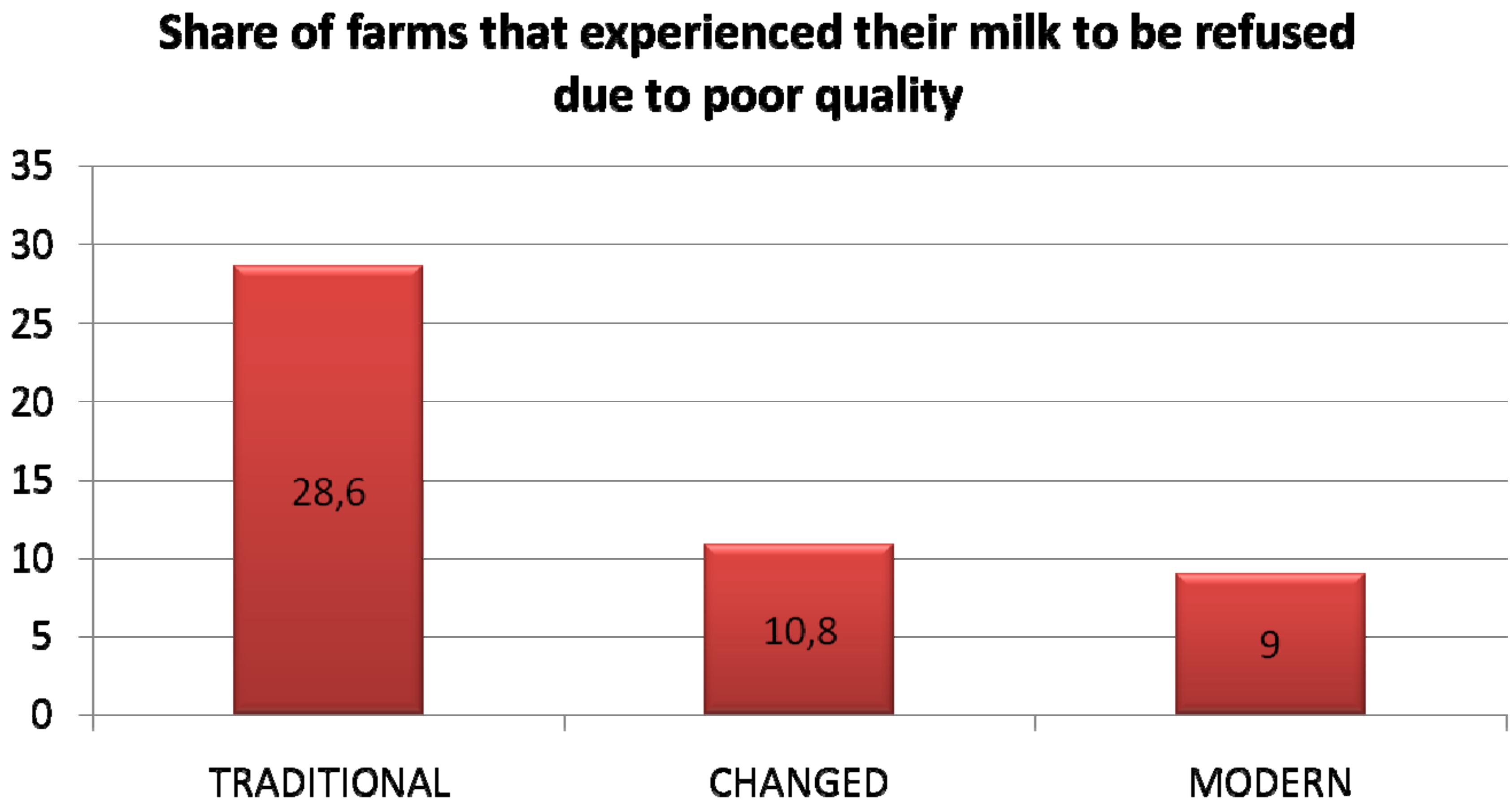
- Human capital & initial physical-capital endowments are not decisive factors
- It is rather access to funds allowing for adjustments that matters here
- => the role of dairy processors providing access to external financing appeared to be crucial
- Joining the modern channel is facilitated by having larger cow herds and breeds of better quality
- However, no systematic evidence for small farms’ exclusion was found
- Surprisingly negative impact of ‘cooperation’

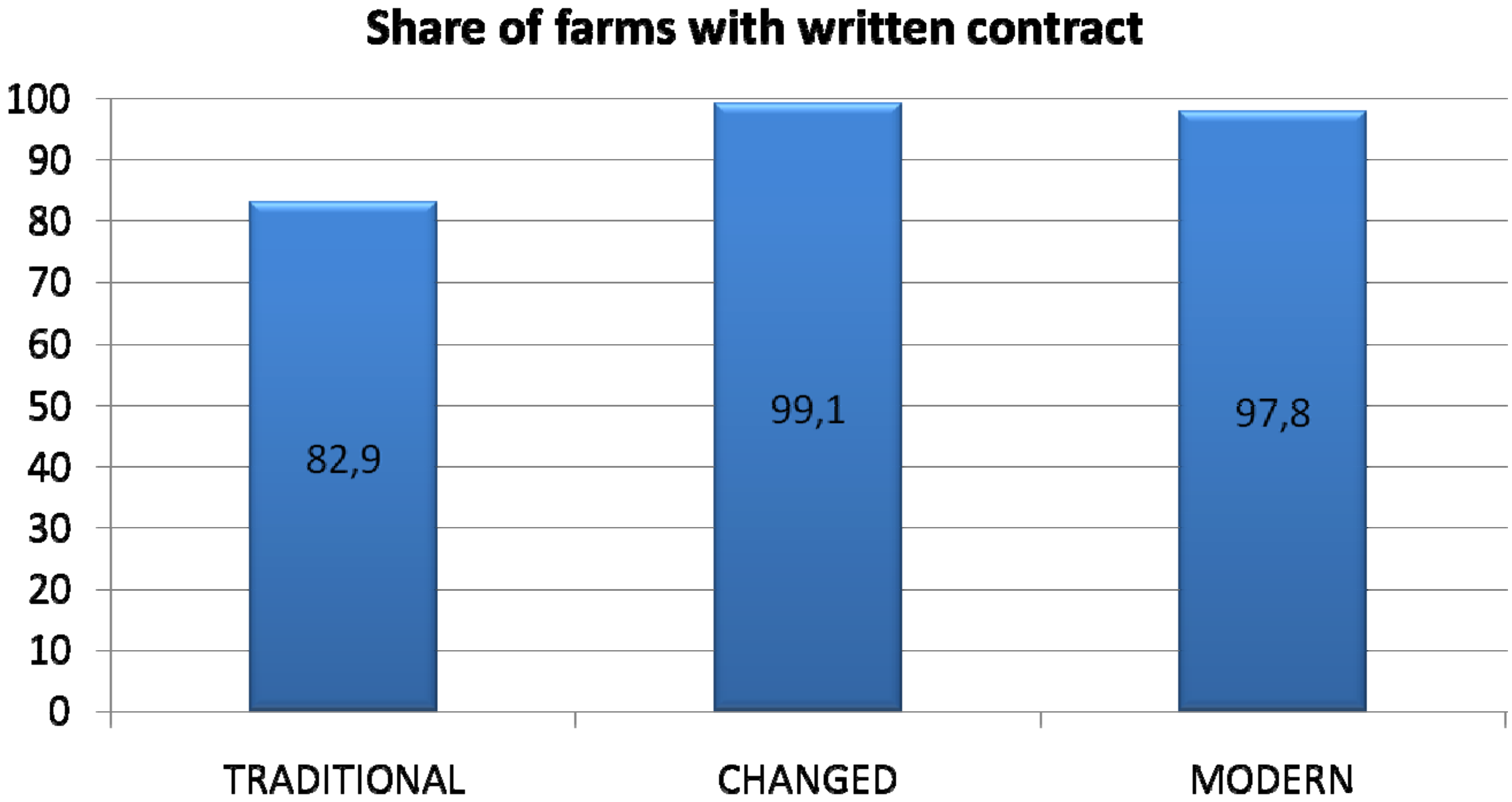
Results of quantitative research (2)

What is the impact of entering to the modern marketing channel?

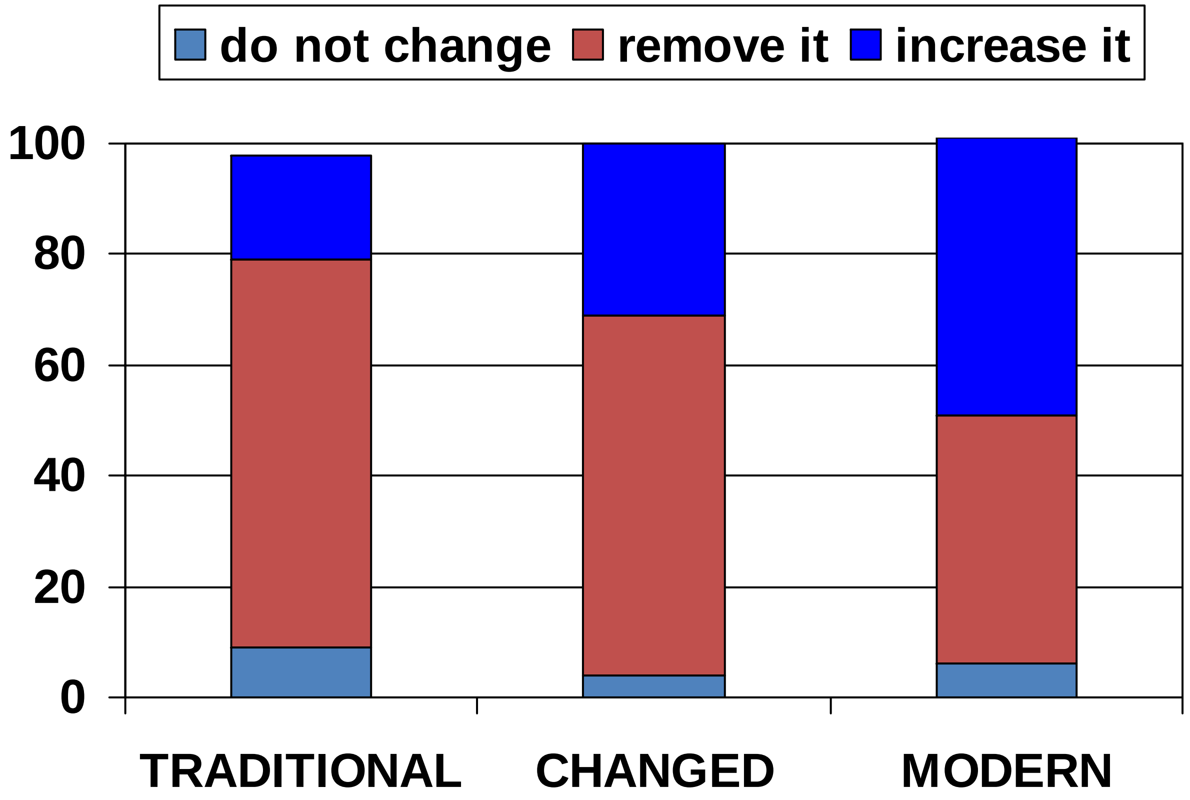
- Positive effect on farms' revenues
  - regardless of the farm size, though for smaller farms the effect is of lesser magnitude
- Increased farms' specialisation in milk production
  - larger farms relying on agricultural income alone
  - smaller farms combining 'dairy income' with some other non-agricultural income sources


Prices (PLN/100 litres)
102
100
98
96
94
92
90
88
86
84
82
88,4
99,5
100,1
TRADITIONAL
CHANGED
MODERN


Share of farms that experienced their milk to be refused due to poor quality
35
30
25
20
15
10
5
0
28,6
10,8
9
TRADITIONAL
CHANGED
MODERN


Share of farms with written contract
100
90
80
70
60
50
40
30
20
10
0
82,9
99,1
97,8
TRADITIONAL
CHANGED
MODERN

What should be done about the milk quota system



Policy recommendations

- further restructuring should be encouraged since it is beneficial to farmers and reduces rural poverty

- access to external funding crucial => microcredit programmes

- number of farms will withdraw from dairy production => financial education & non-agricultural income sources

- more market-oriented dairy policy in the EU expected => informational actions

- closer look should be given to the issue of farmers' cooperation

Thank you for your attention