



Analysis of dairy farmers' and stakeholders' expectations and challenges in four European countries

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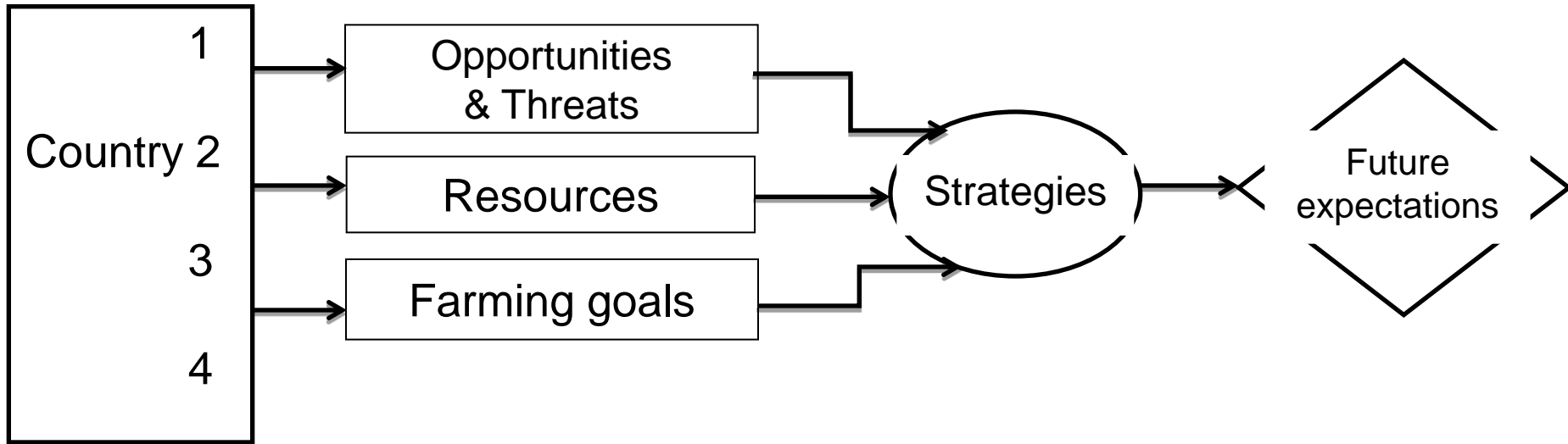
Content

- Which development paths do dairy farmers and stakeholders in Europe choose?
- Which economic and social factors influence this?
 - ⇒ Availability of resources
 - ⇒ Opportunities and threats
 - ⇒ Future expectations



Erasmus+

Research model used



Analysis using questionnaires

Countries involved

Poland



The Netherlands



Lithuania



Slovenia

Farmers study

- In year 2011/2012
- 1.028 questionnaires from Poland (334), Lithuania (339), Slovenia (355)
- 49 main questions and many sub-questions
- **Factor analysis** (to reduce no. of questions before cluster analysis)
- **Cluster analysis** to form segments
- **Means** to describe segments

Characteristics of dairy farms in sample

Situation 2010/2011

Characteristics	Lithuania	Poland	Slovenia
Ha land owned	41	32.6	14.5
Ha land rented	56	8.5	21.0
Number dairy cows	33	24	34
Milk production per cow (2010)	5,441	5,216	6,745
Cubicle/loose housing (in %)	21	17	47
Grazing (% yes)	95	75	40
Number of parcels of agric. land	15	15	31

Seven farmers' segments identified per country (%)

Country	Farmers who Wait & See	Movers	Cooperating specialists	Independent specialists	Chain integration	Cooperating diversifying farmers	Independent diversifying farmers
Lithuania	19	6	8	45	4	3	15
Poland	11	2	15	49	20	1	4
Slovenia	10	7	16	31	14	12	10
Total (%)	13	5	13	41	13	6	10

Diversification

- **Agricultural activities**

- Suckler cows
- Beef/pigs/sheep/goats
- Horses / bees
- Vineyards/horticulture
- Forestry...

- **Non-agricultural activities**

- Special local products
 - Milk & meat products
 - Oil, honey, ...
- Energy production
- Machinery services
- Agro-tourism
- Cottage industry
-



Farming goals between countries

1 = very unimportant

7 = very important

Farming Goal	Slovenia	Poland	Lithuania
Maximize profit	6.53 (1)	6.24 (1)	6.43 (1)
Sustainable	<u>6.30</u> (2)	5.95 (2)	6.13 (2)
Dairy farming	<u>6.07</u> (3)	5.44 (4)	5.86 (4)
Work environment	5.86 (4)	5.39 (5)	5.94 (3)
Improve management	5.45 (5)	<u>5.77</u> (3)	5.56 (5)

Underlined significantly higher; **Bold** significantly lower

Availability of resources between countries

1=very difficult to get

7=very easy to get

	Slovenia	Lithuania	Poland
Land	2.53 (1)	2.48 (1)	<u>2.88</u> (2)
Labour	<u>2.91</u> (2)	2.56 (2)	2.55 (1)
Capital	3.77 (3)	4.70 (3)	<u>5.23</u> (3)
Quota	3.95 (4)	4.81 (4)	<u>5.33</u> (4)
Know-how / Info	4.84 (5)	5.69 (5)	<u>6.00</u> (5)

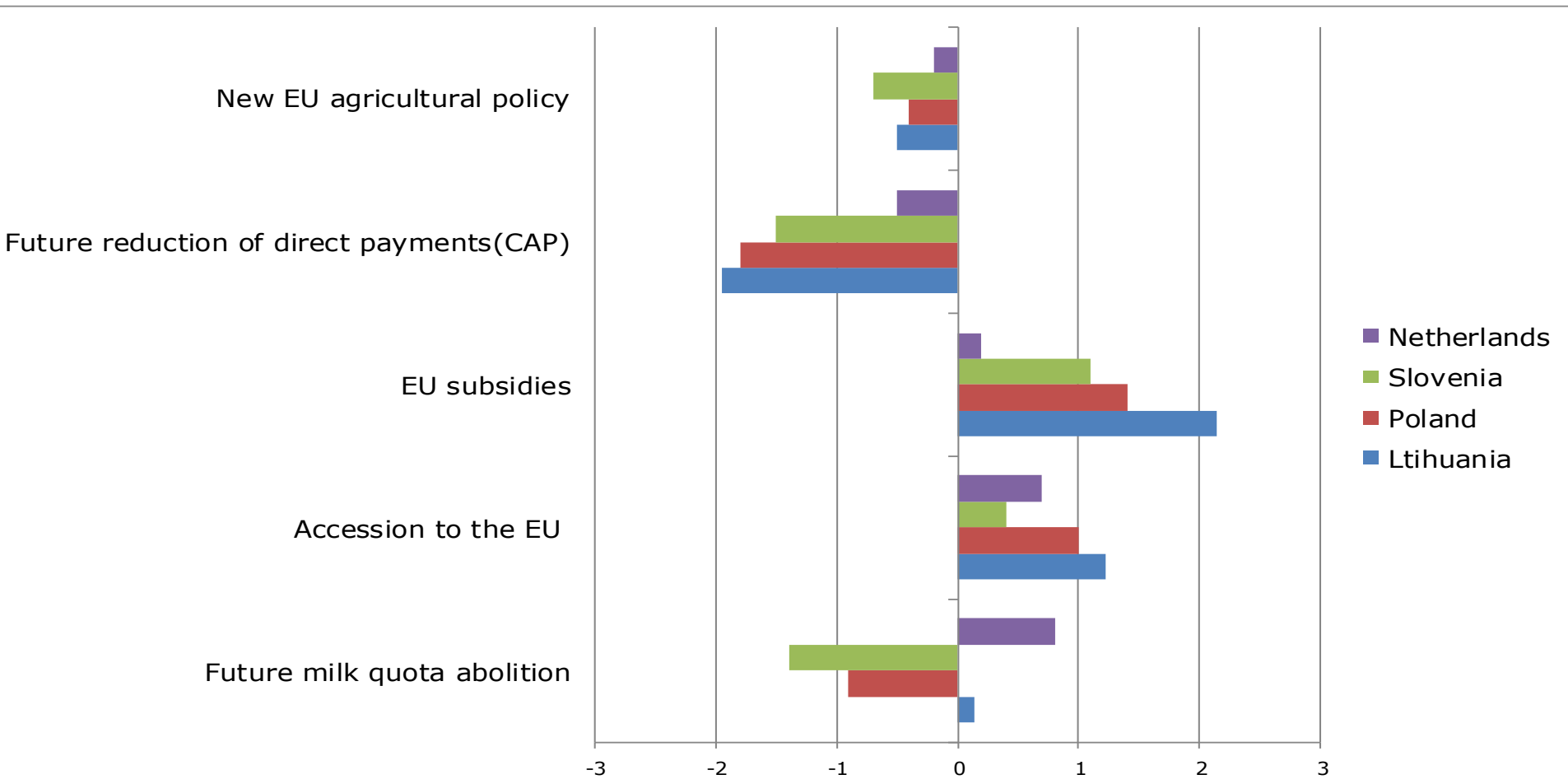
Underlined significantly higher (i.e. lesser problem;

Bold significantly lower (i.e. bigger problem),

using LSD/SNK test ($P < 0.05$)

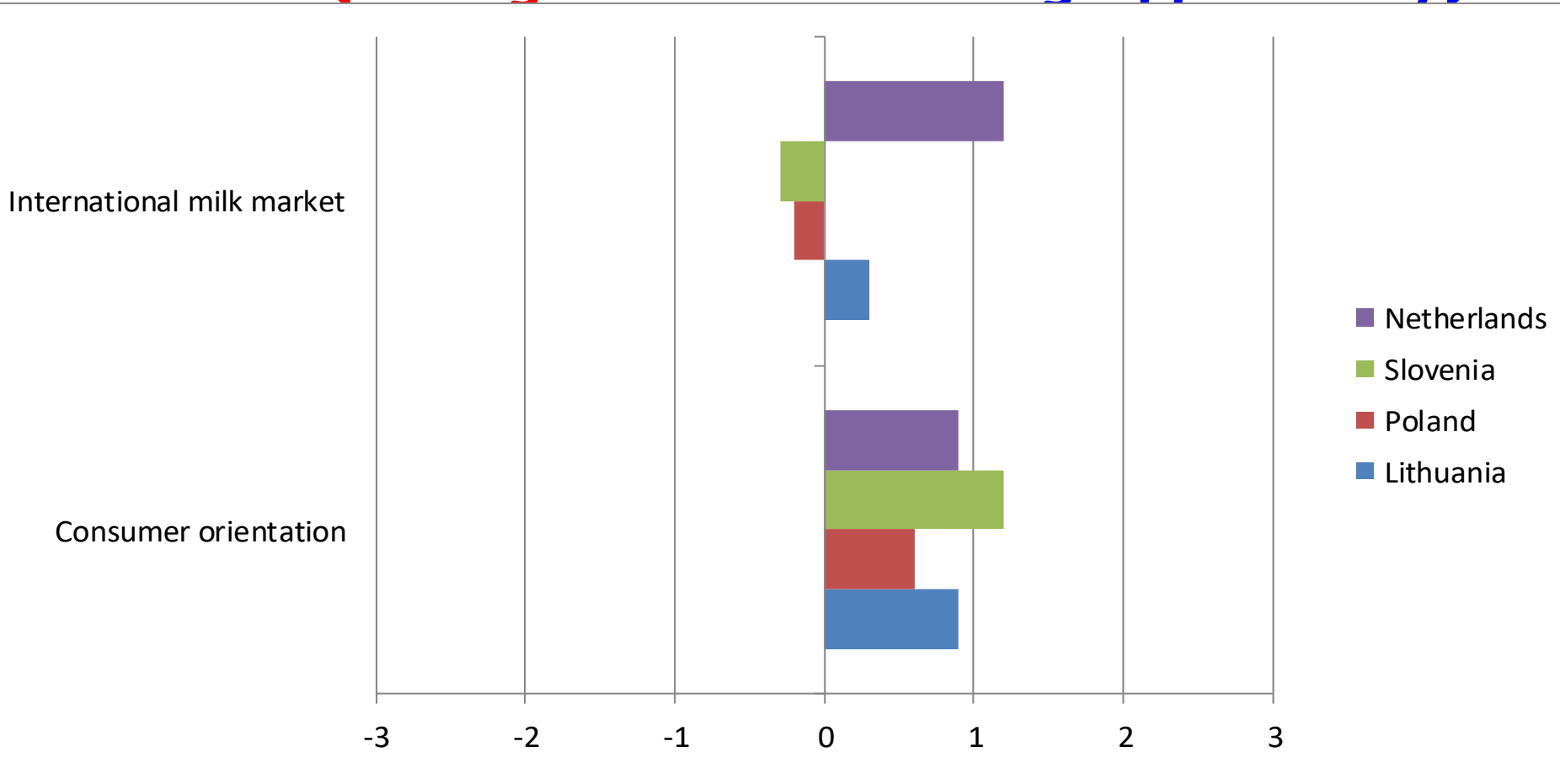
Inclusion of 102 dairy farmers from the Netherland: **EU policies**

(-3 big threat to +3 big opportunity)



The Market

(-3 big threat to +3 big opportunity)



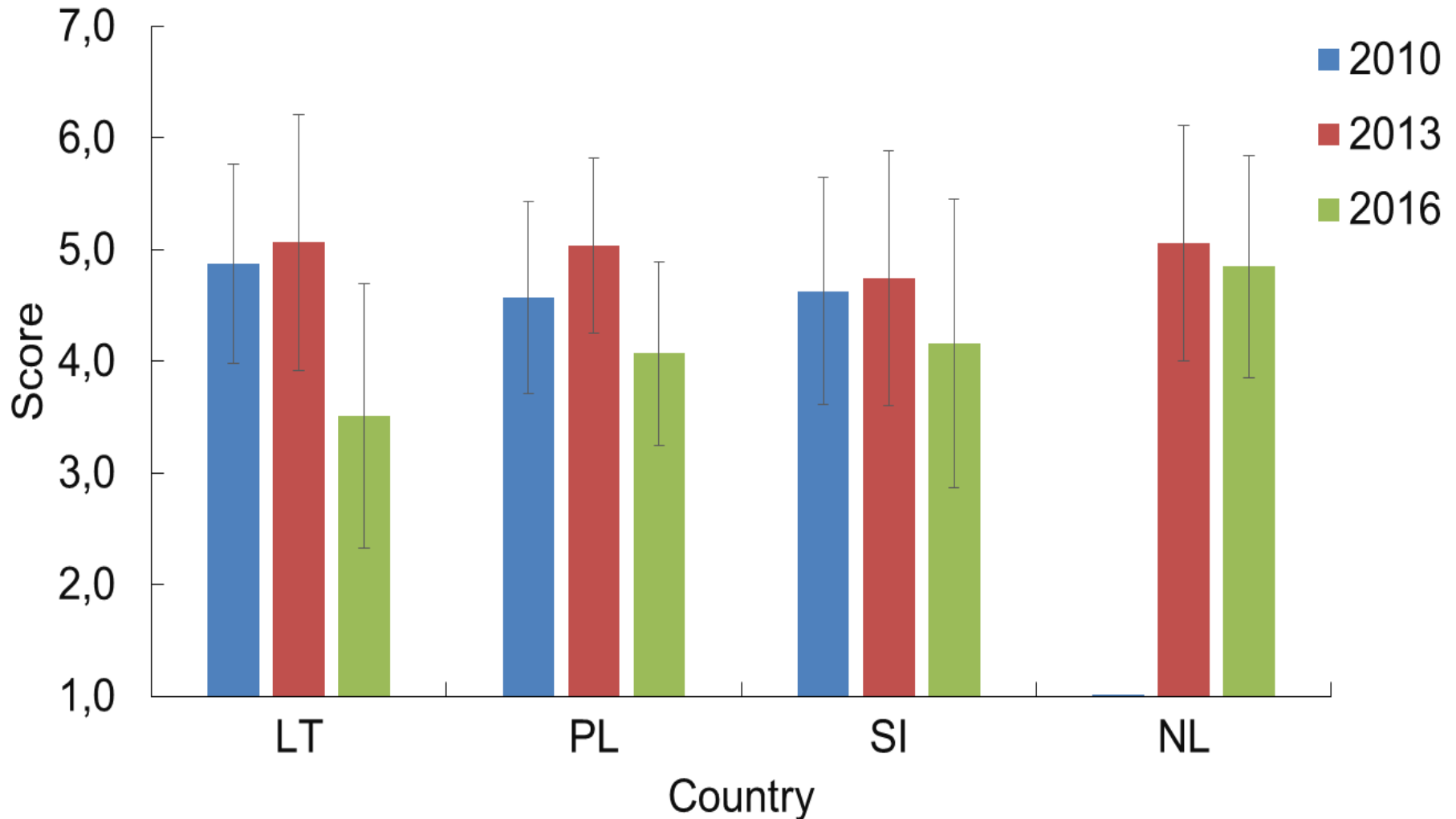
Trend in opinions of farmers

Using the same questions

Country	2010/2011	2013	2016
Poland	334	71	60
Lithuania	339	102	33
Slovenia	355	175	91
The Netherlands	-	105	50
Total	1.028	453	234

Farmer opinions: future expectations

n = 234

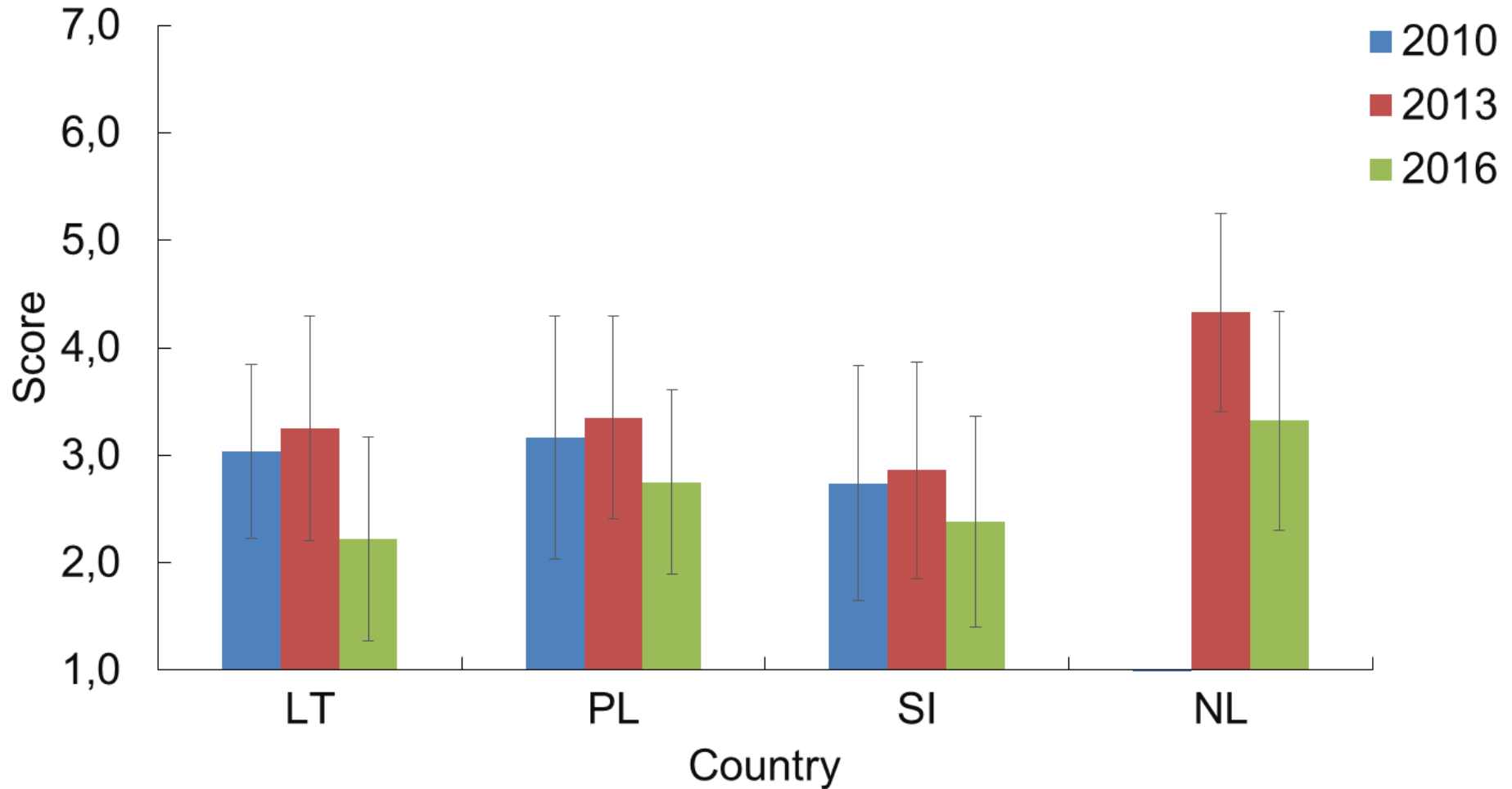


1 = pessimistic

7 = optimistic / positive

Farmer opinions: EU agricultural policy

n = 234

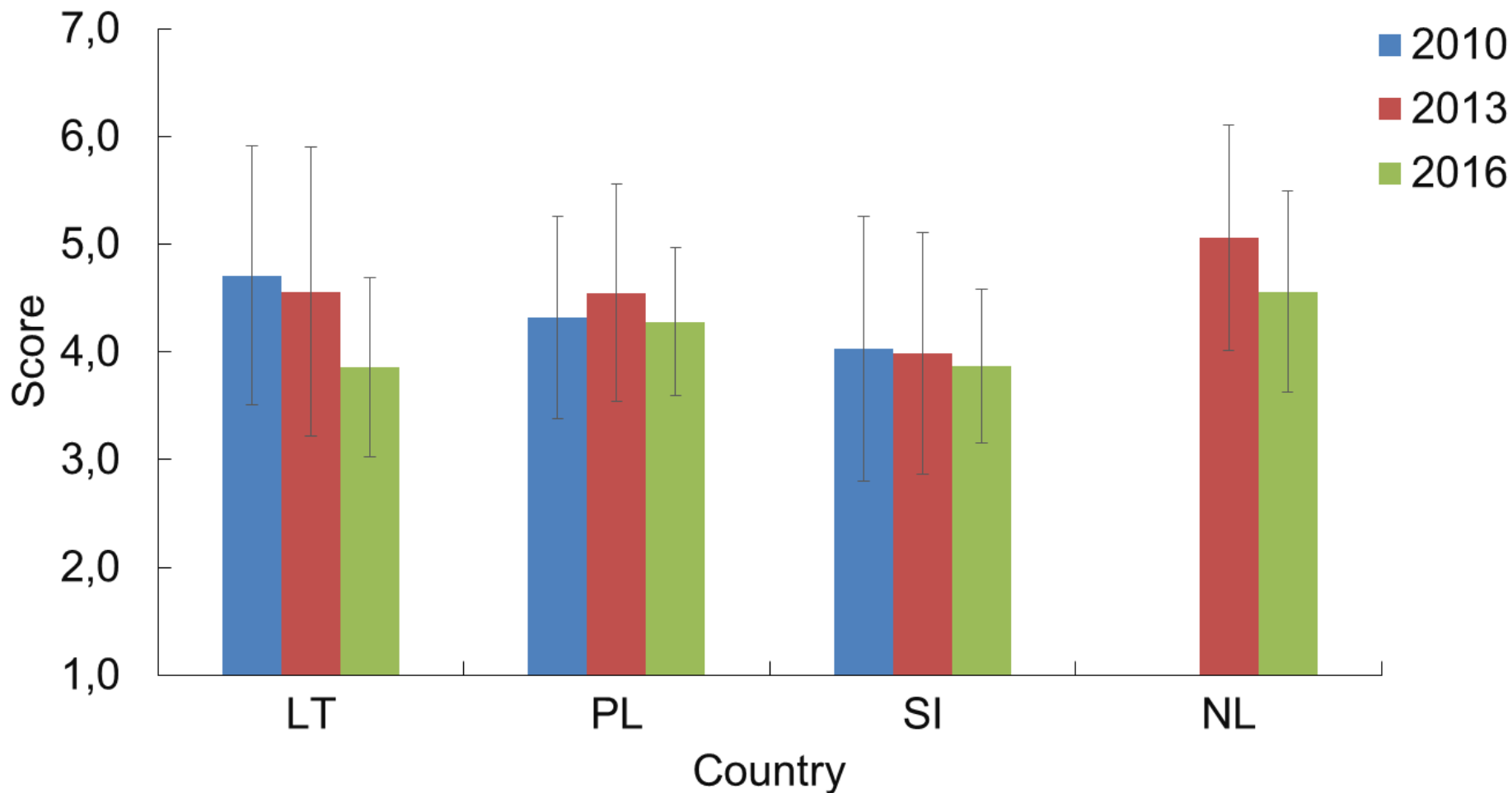


1 = threat

7 = opportunity

Farmer opinions: milk market

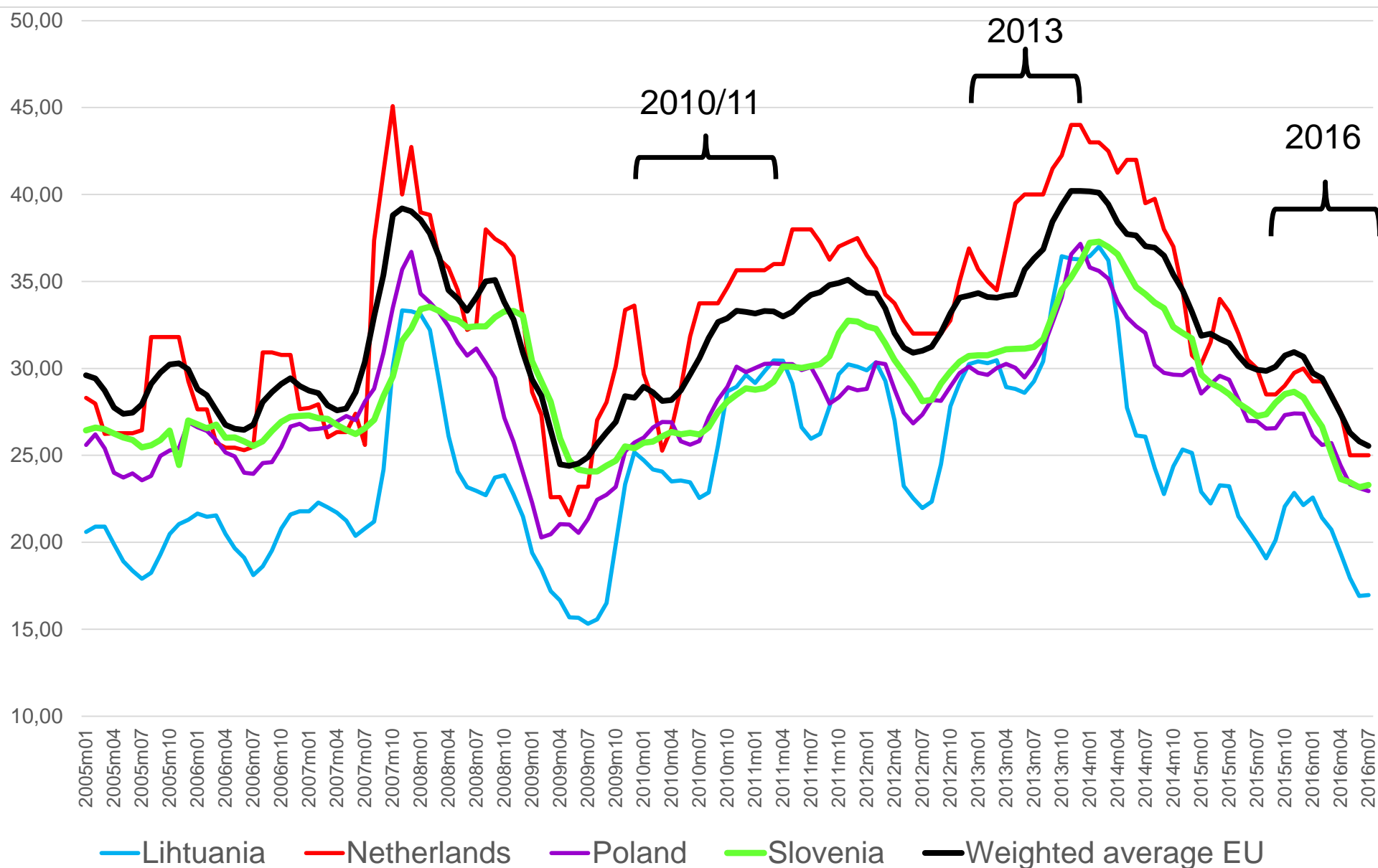
n = 234



1 = threat

7 = opportunity

Milk prices in EU: 2005 - 2016



Farmers opinions

- **Future development paths:** **Polish** farmers had the **highest** interest in specialising, **Slovenian** farmers had the **greatest** interest in diversifying and **Lithuanian** farmers had the least interest in cooperation and chain integration
- **Resources:** Land and labour are the biggest constraints to farm development in all three countries. **Polish** farmers were more **positive** about availability of land, capital and know-how. **Slovenian** farmers **saw more limitations** in availability of these resources.
- **O&T:** **Dutch** farmers are more optimistic about the market
- **Opinions about market, EU etc. seem to follow the trend in milk price**

Stakeholders study

Netherlands	46
Slovenia	45
Lithuania	40
<u>Poland</u>	<u>30</u>
Total	161

From 8 categories of the sector chain (Ministry, Research, NGO, Extension service, Input suppliers, ...)

Questions: low = 1 high = 7

SWOT analysis of dairy sector

Stakeholders opinion: **Development paths**

Main factors	Stakeholders from			
Development paths	Netherlands	Slovenia	Lithuania	Poland
Expansion/Intensification	5,87	5,46	4,66	5,48
Diversification/Organic	3,52	4,42	4,29	2,67
Wait & See	3,65	3,67	3,75	3,10
Cooperation	5,24	6,07	5,29	4,27

Stakeholders opinion: Resources

	Stakeholders from			
Resources	Netherlands	Slovenia	Lithuania	Poland
Knowhow/Advise	5,69	4,37	5,67	5,09
Subsidies/Credit	4,12	3,88	4,31	4,96
Land	2,39	2,55	2,49	2,82
Labour	4,02	3,43	2,60	3,02

Stakeholders opinion: Opportunities & Threats

	Stakeholders from			
Opportunities & Threats	Netherlands	Slovenia	Lithuania	Poland
Free market	1,26	-1,36	-0,85	0
ICT Tech	2,00	1,57	2,14	1,42
Regulations / Consumer concern	0,23	-0,20	-0,53	-0,33
Service organisations	1,09	0,56	1,21	0,68
Grazing / Greening	0,33	0,33	-0,12	-0,60
Consumer orientation	0,83	0,31	0,16	0,21

Stakeholders opinion: **Future expectations**

	Stakeholders from			
	Netherlands	Slovenia	Lithuania	Poland
Future expectations	5,50	4,07	3,88	4,53

Stakeholders opinions

- **Netherlands** stakeholders are more positive about **future** than Slovenian and Lithuanian farmers; they see many market opportunities;
- **Slovenian and Netherlands** stakeholders are more positive towards **environment** than Lithuanian stakeholders
- **Netherlands** stakeholders are more positive about the **input and service providers**
- **Polish** stakeholders are more positive about availability of credits and subsidies
- **Slovenian** stakeholders are **concerned about availability of know-how**, and **positive towards consumer orientation**



Thank you!

