The Current Structure and Prospects of the EU Bovine Meat Sector

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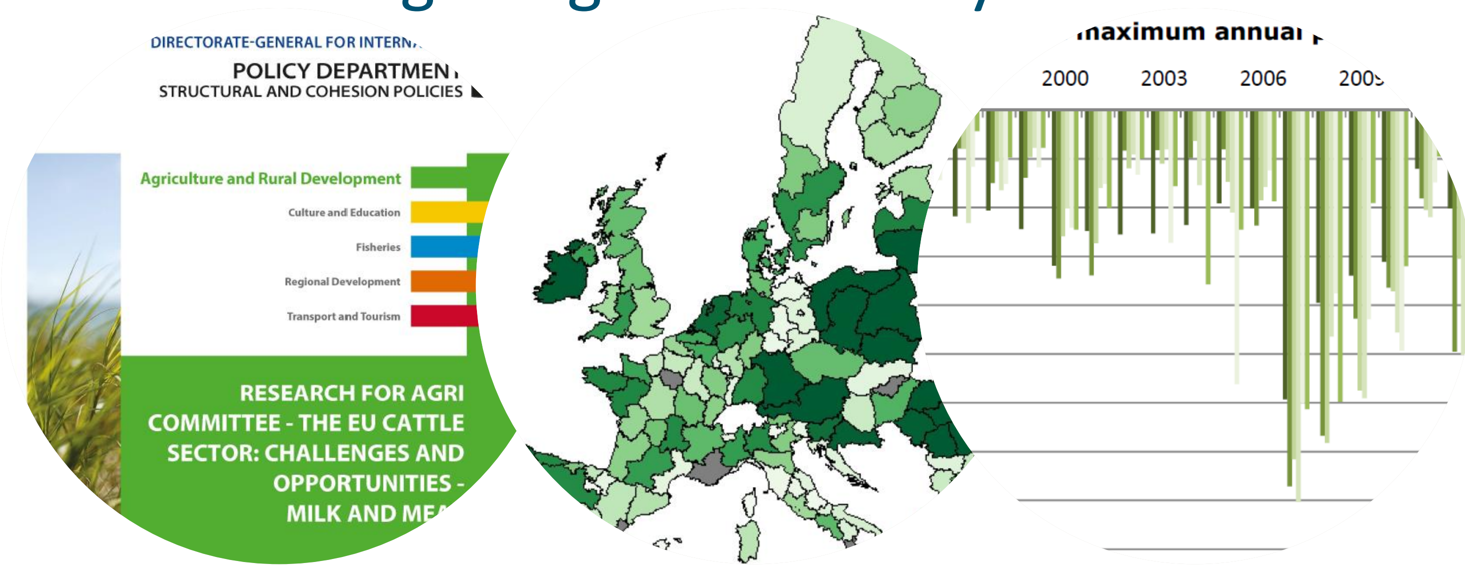

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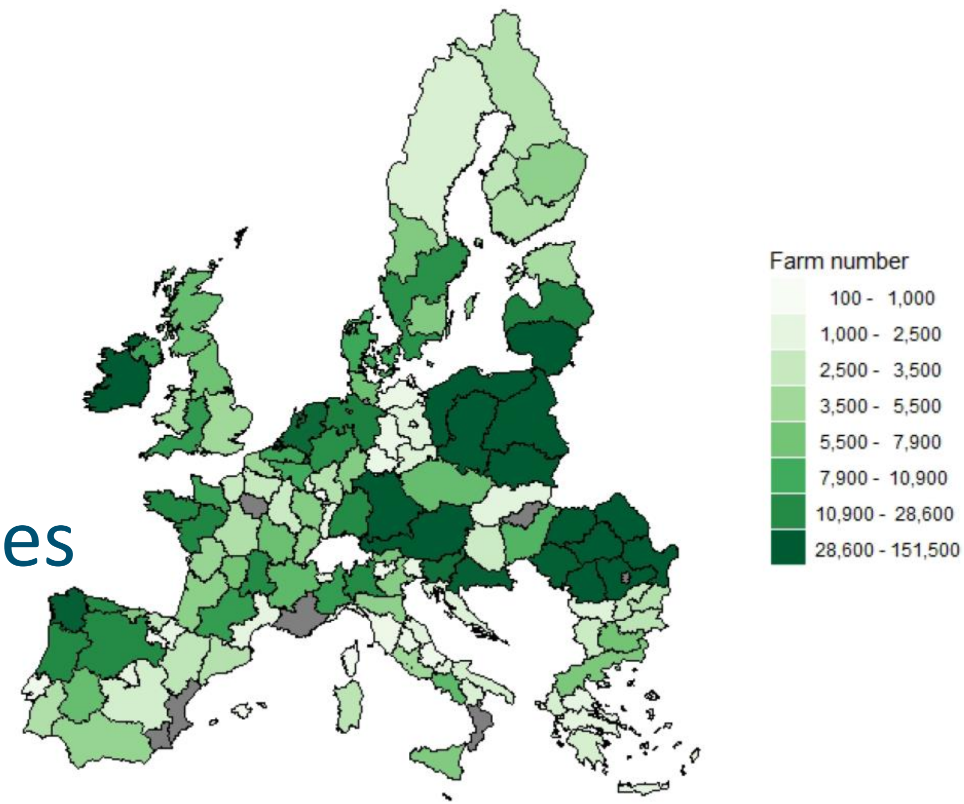
Outline

1. Background
2. Regional patterns
3. Role in EU trade
4. Prices and incomes
5. Current role of policies
6. Future scenarios
7. Summary

Map 1: Regional distribution of EU cattle-keeping farms



Source: Authors based on European Commission (2016j)

Source: Ihle et al. (2017).

1. Background

Analysis aims:

- Current situation of the EU cattle sector
    - Characteristics
    - Interlinkages between the meat and dairy sectors
    - Challenges
    - Opportunities
- Assessment of the role of current CAP measures supporting the EU cattle sector

Analysis dimensions:

- Macro-level vs. regionally disaggregated micro-level
- Diverse structures of the EU cattle sector
- Regional disparities vs. cohesion
- Effects of potential future policy choices

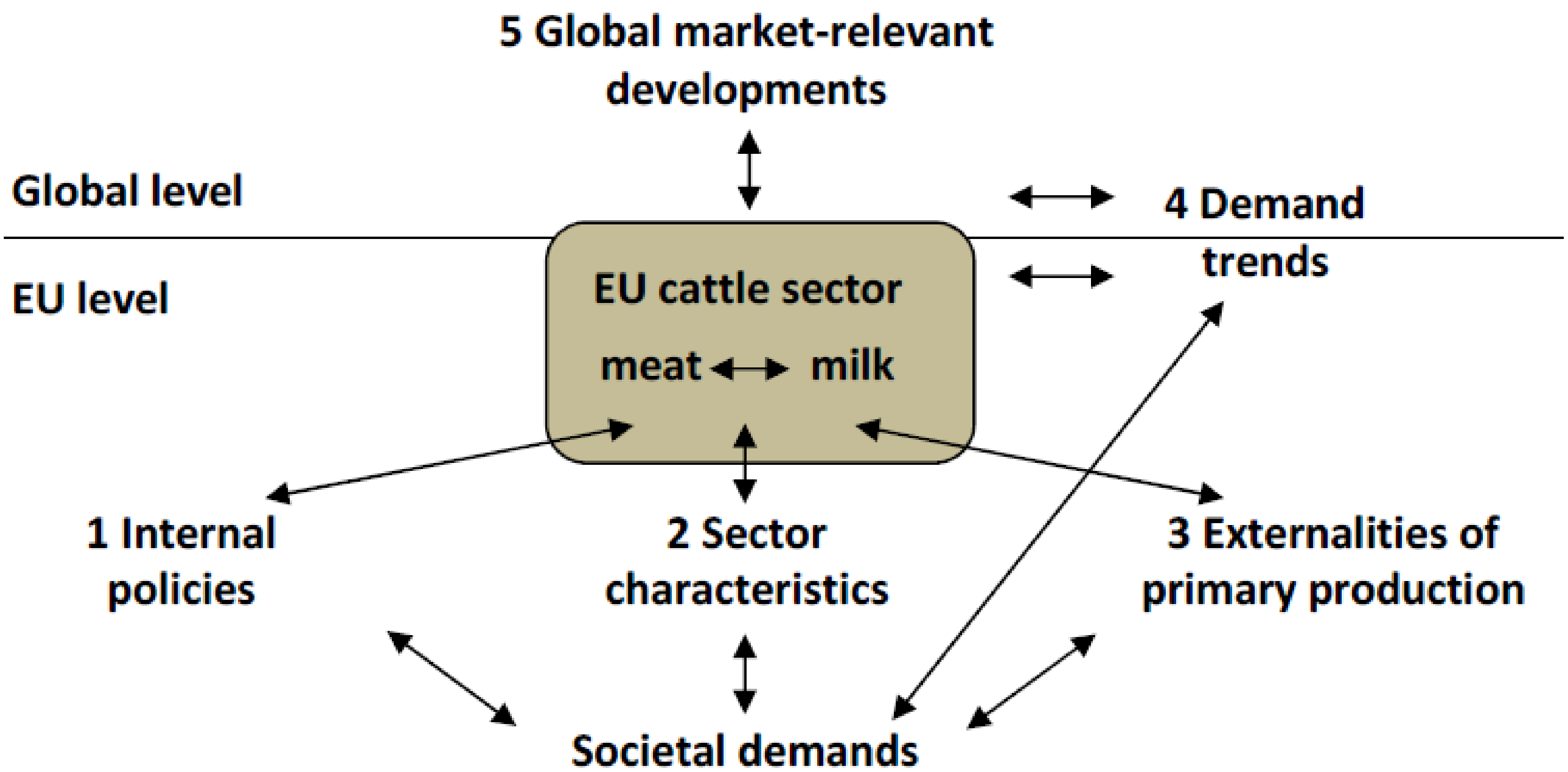
1. Background

Analysis perspectives:

Analysis dimensions	Macro-level vs. micro-level
Supply chain level	Primary production: commercial vs. non-commercial farms Processing chain: structure vs. conduct vs. performance
MS	EU15 vs. EU13, EU-N vs. EU-S
Production intensity	Intensively vs. extensively operated commercial farms
Farm income	Income quintiles
Farm type	Specialist dairying Specialist cattle — rearing and fattening Cattle — dairying, rearing and fattening combined Mixed livestock, mainly grazing livestock Field crops — grazing livestock combined

1. Background

Key determinants of the EU cattle sector:



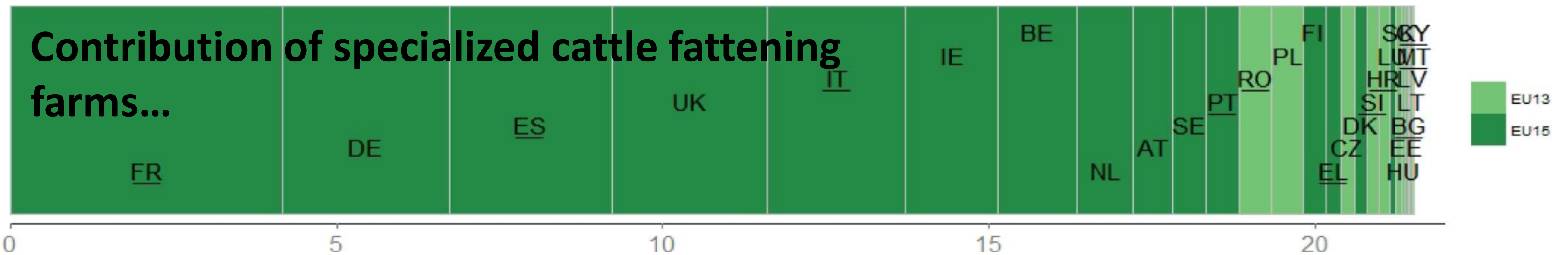
Source: Ihle et al. (2017).

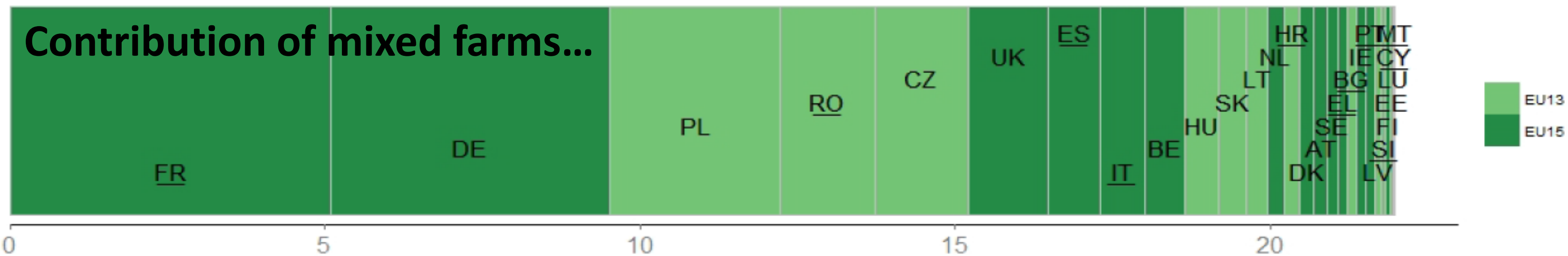
1. Background

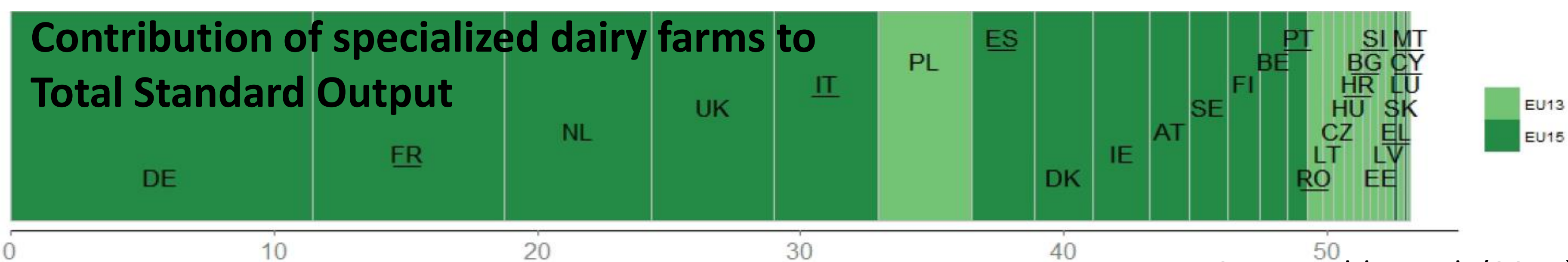
- **Data & Limitations:**
- FSS
    - Collection every three years & processing
    - Latest data available is from 2013 (2015 FSS data not yet published)
- FADN data
    - Annually collected & processing
    - Latest dataset available from 2013
- Farm type classification of the FADN dataset
    - Last available FSS: 2013 FADN is based on the 2010 FSS
- Comtrade dataset
    - Missing observations & incomplete panel observations

1. Background

Bird‘s eye perspective:







Source: Ihle et al. (2017).

1. Background

Bird‘s eye perspective:

Table 2: The role of the EU cattle sector in EU farming

(A) Characteristic	(B) EU total	(C) All cattle-keeping farms	(C)/(B)
Farm number	10,841,010	1,825,370	17%
Utilized agricultural area (UAA, ha)	174,613,630	54,717,470	31%
Livestock units (LSU)	130,172,030	60,694,260	47%
Labour force (AWU)	9,508,470	2,501,220	26%
Standard output (SO, Euro)	331,101,770,640	96,592,485,310	29%
Total area (ha)	213,813,200	63,515,240	30%
Subsistence farms (number)	4,765,980	643,720	14%

Source: Ihle et al. (2017).

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3. Role in EU trade
4. Prices and incomes
5. Current role of policies
6. Future scenarios
7. Summary

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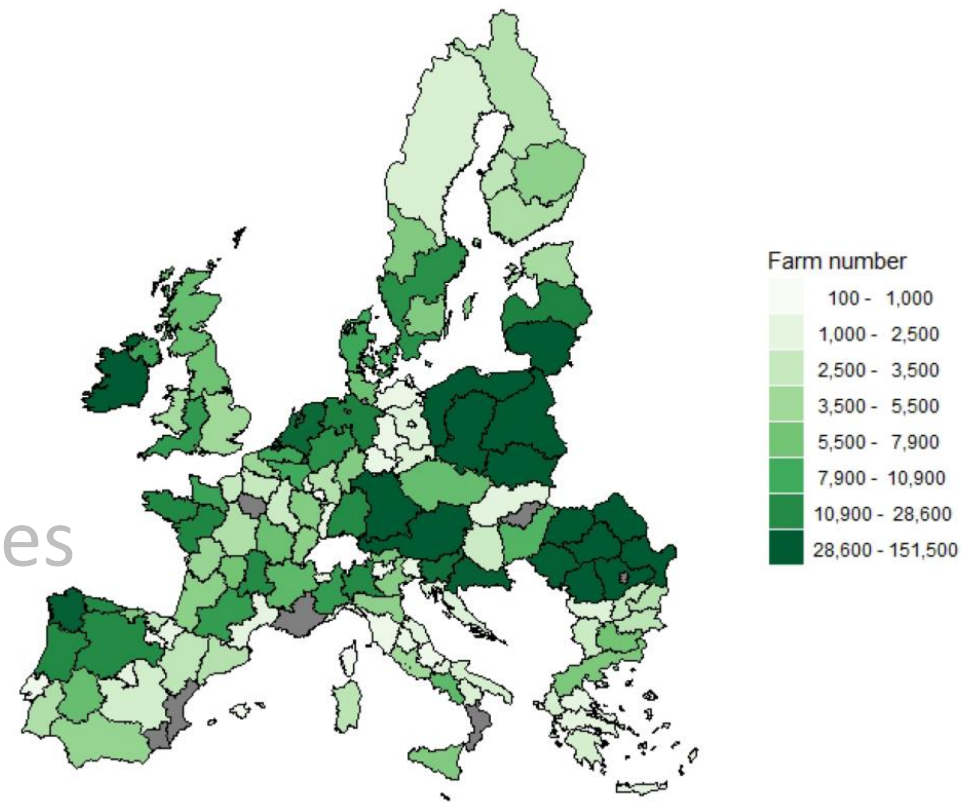

Source: Authors based on European Commission (2016j)

Source: Ihle et al. (2017).

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2. Regional patterns

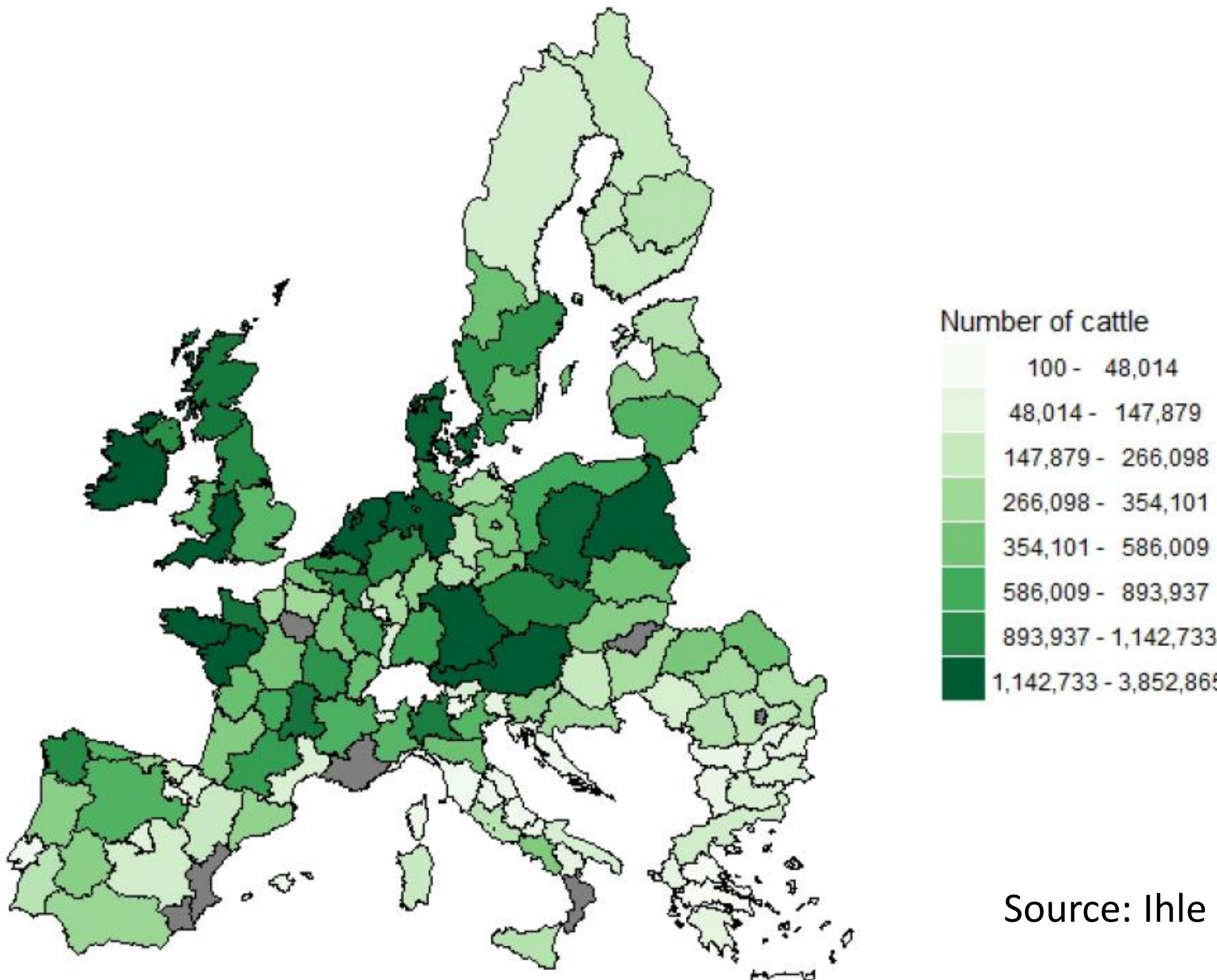
Table 31: The structure of bovine meat production in the EU in 2015

(A) REGION	(B) NON-DAIRYING CATTLE		(C) SUCKLER COWS		(D) SUCKLER COWS IN (B)	(E) BOVINE MEAT PRODUCTION		(F) CARCASS WEIGHT	
	NUMBER (M HEADS)	SHARE	NUMBER (M HEADS)	SHARE		QUANTITY (MT)	SHARE	WEIGHT (KG/HEAD)	RELATION TO EU AVERAGE
EU	65.8	100%	12.3	100%	19%	7.7	100%	288	100%
EU15	57.5	87%	11.5	93%	20%	6.8	89%	295	103%
EU13	8.3	13%	0.8	7%	10%	0.9	11%	241	84%
EU-N	36.6	56%	5.0	41%	14%	4.5	58%	293	102%
EU-S	29.1	44%	7.3	59%	25%	3.2	42%	281	98%

L7).

2. Regional patterns

Map 2: Regional distribution of cattle throughout the EU



Source: Ihle et al. (2017).

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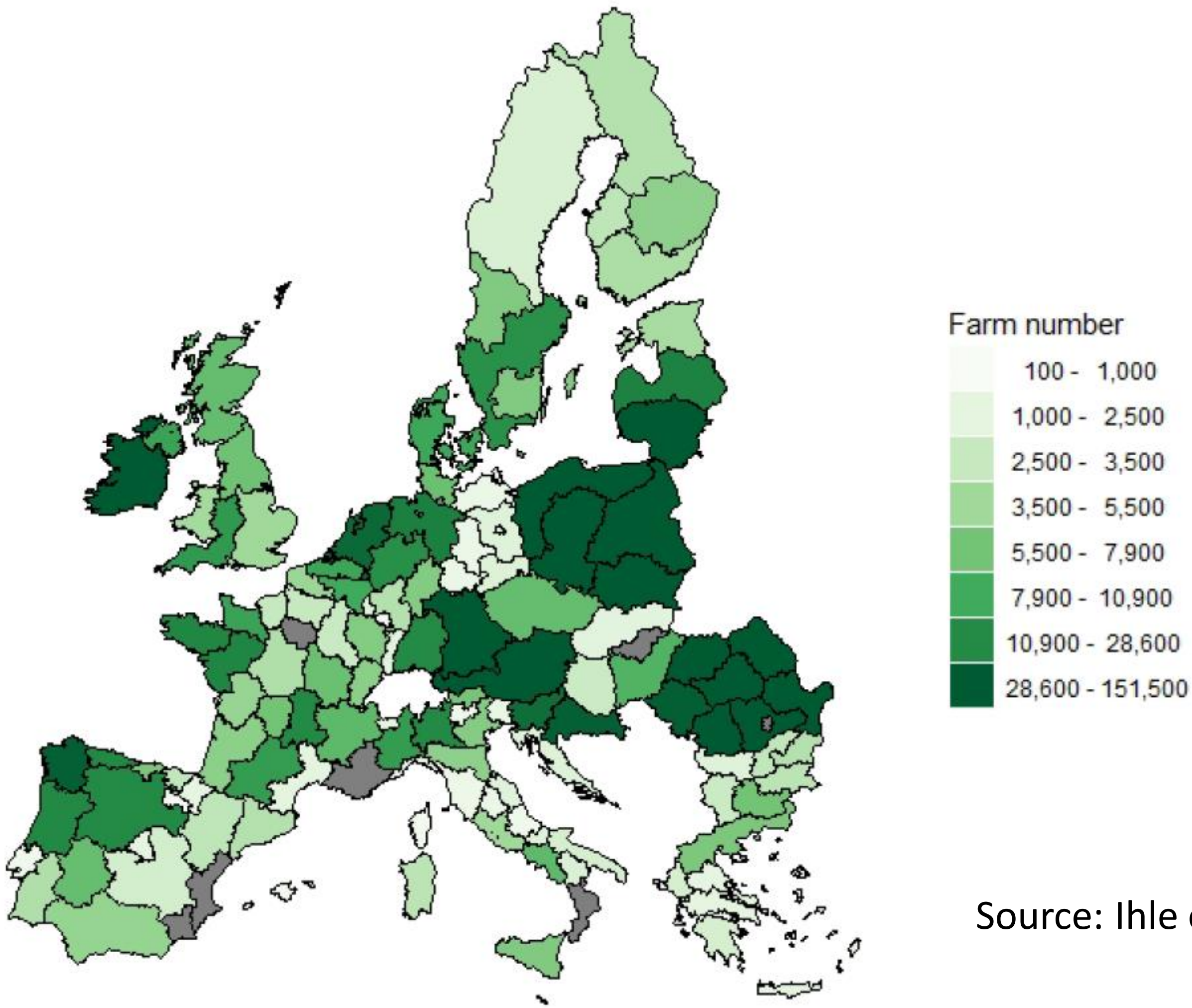
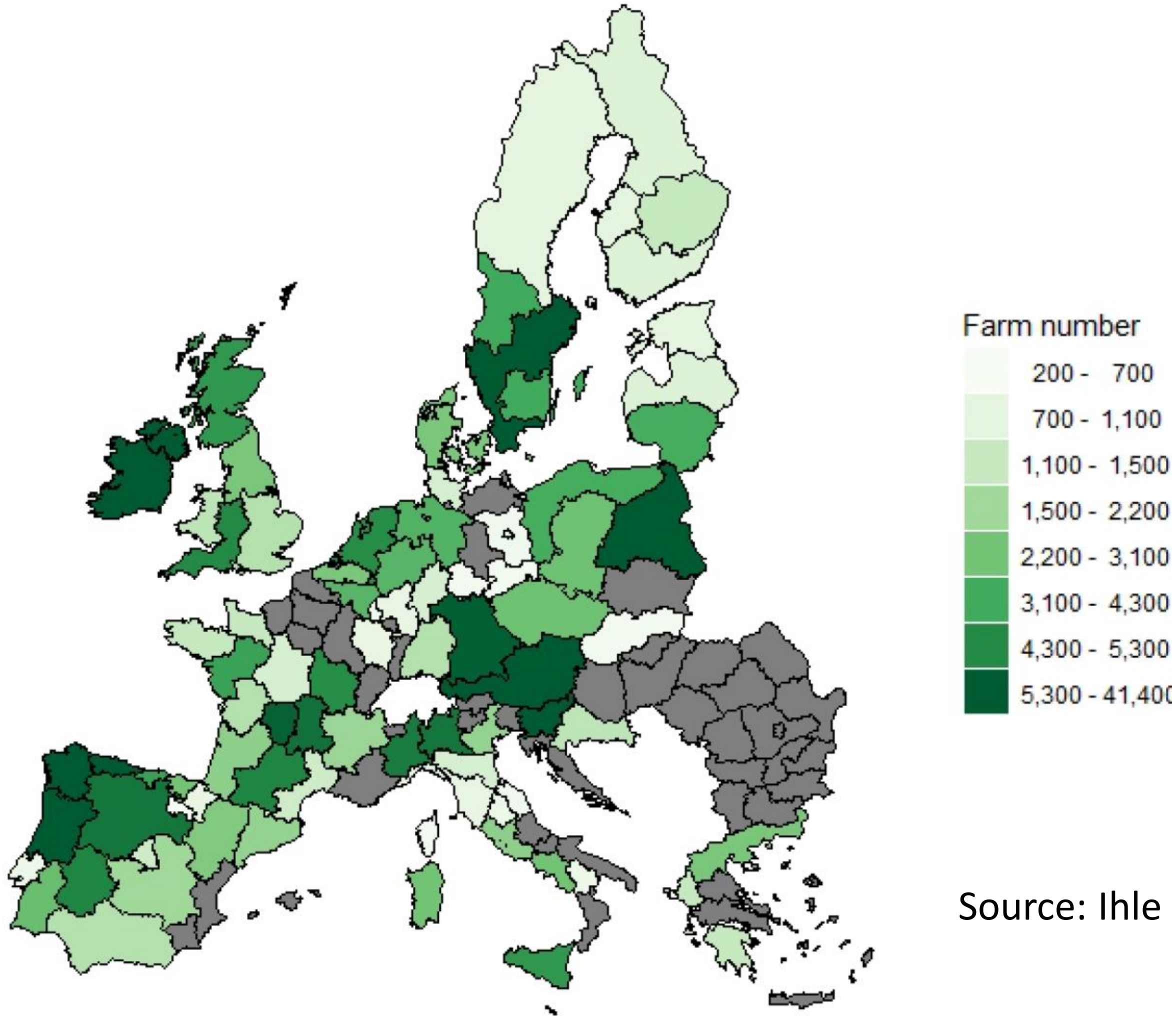


Source: Ihle et al. (2017).

2. Regional patterns

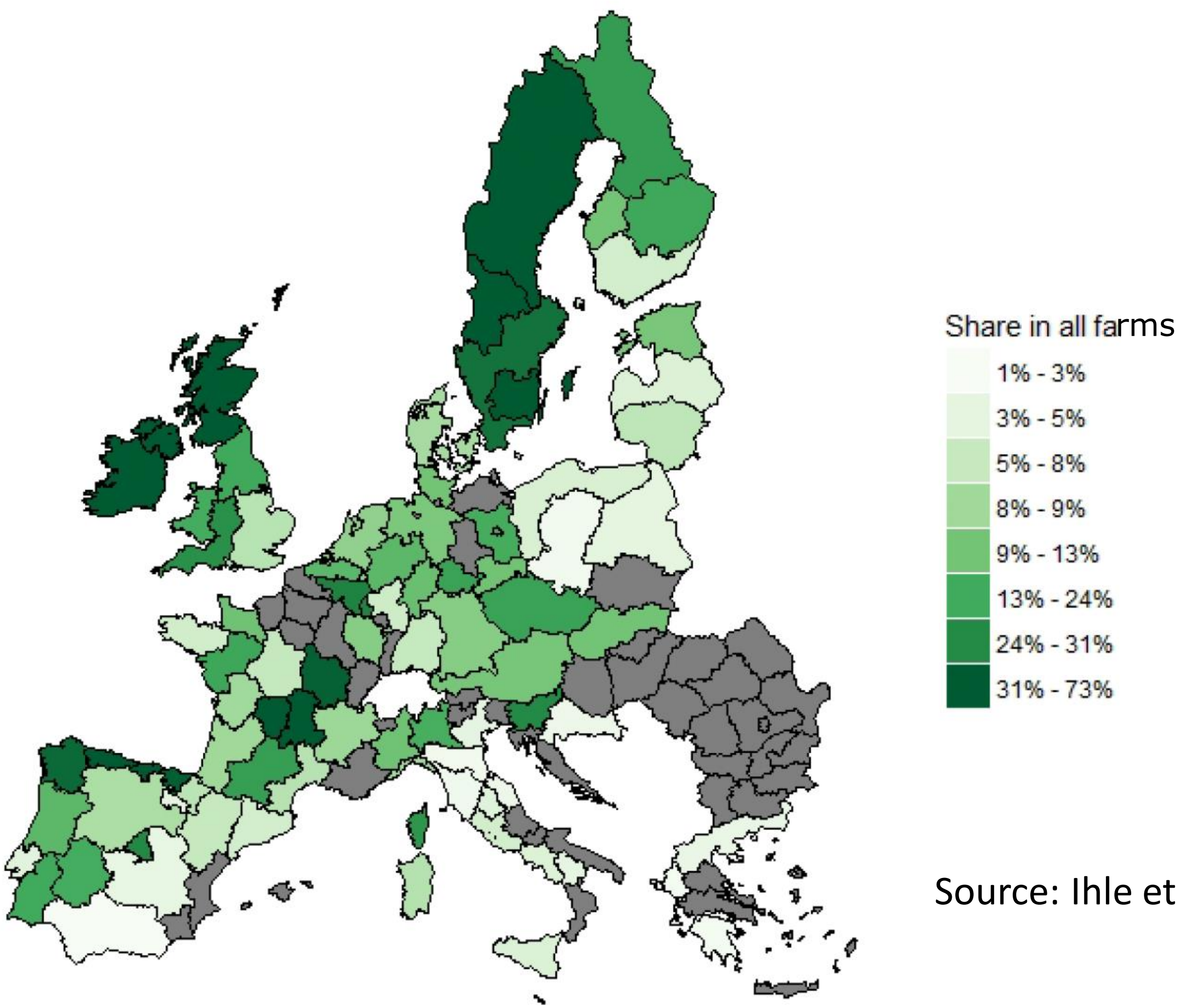
Map 16: Regional distribution of specialist cattle fattening farms



Source: Ihle et al. (2017).

2. Regional patterns

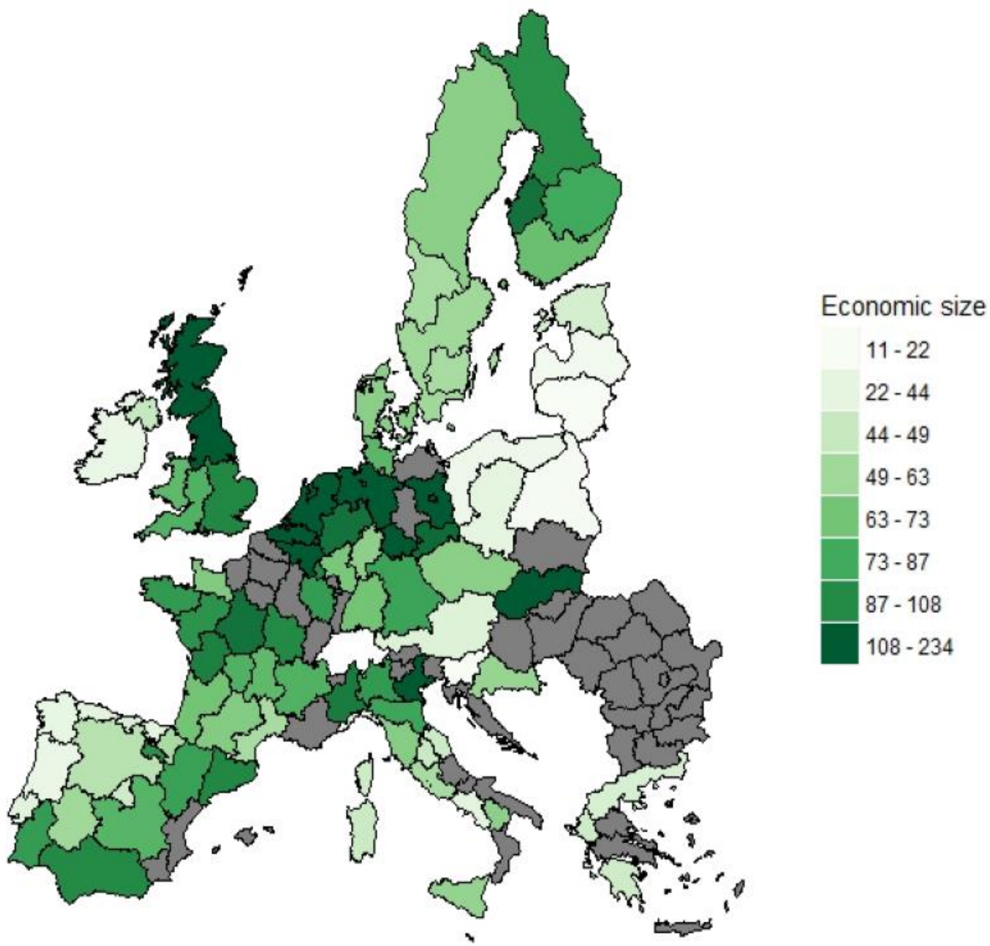
Map 24: Regional distribution of the shares of specialist fattening farms



Source: Ihle et al. (2017).

2. Regional patterns

Map 17: Regional distribution of economic size of specialist fattening farms (measured in 1,000 euros standard output per FADN region)



Source: Ihle et al. (2017).

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4. Prices and incomes
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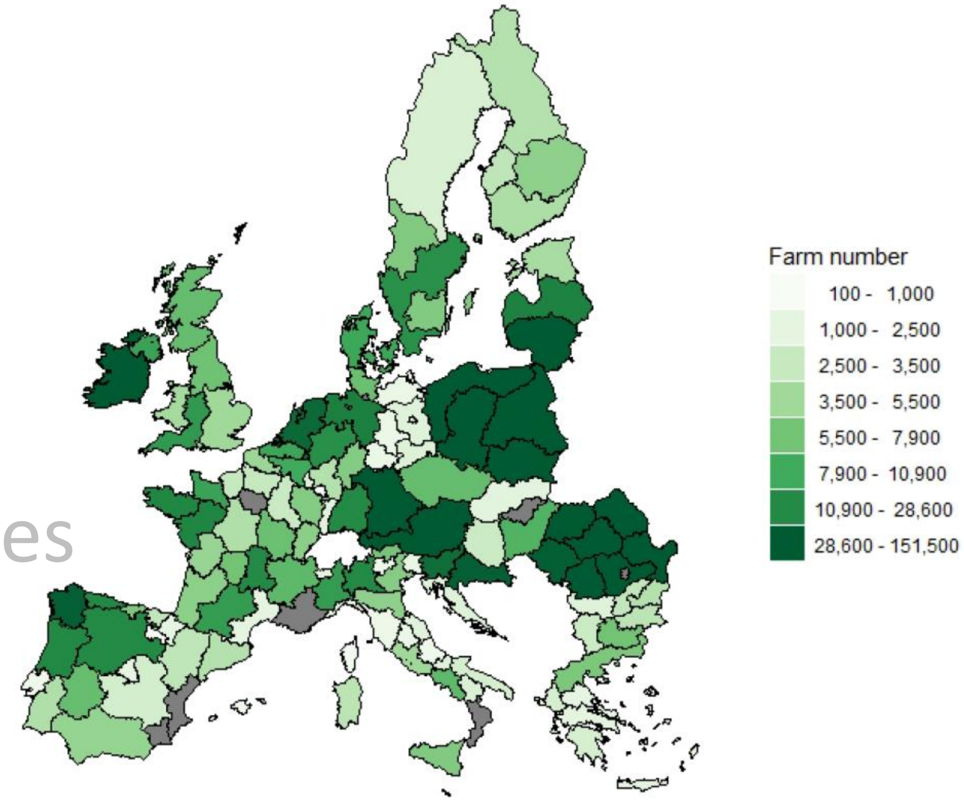
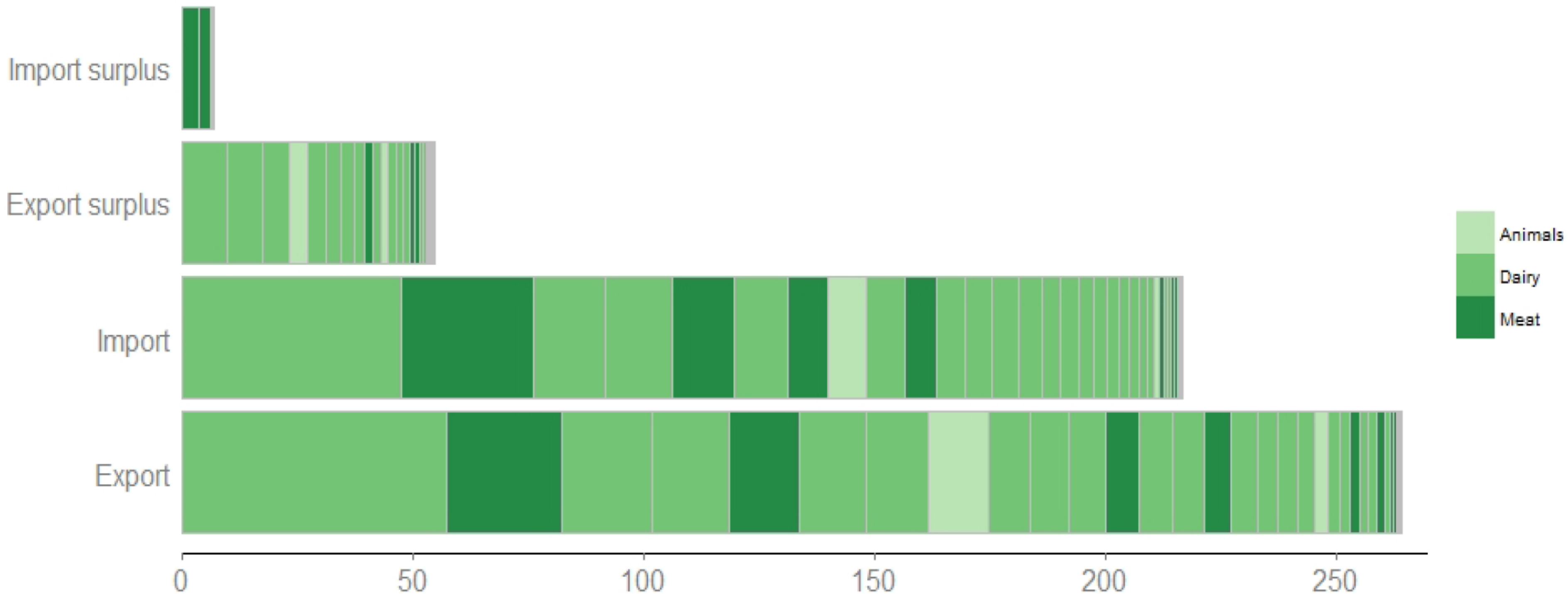


Source: Authors based on European Commission (2016j)

Source: Ihle et al. (2017).

3. Role in EU trade

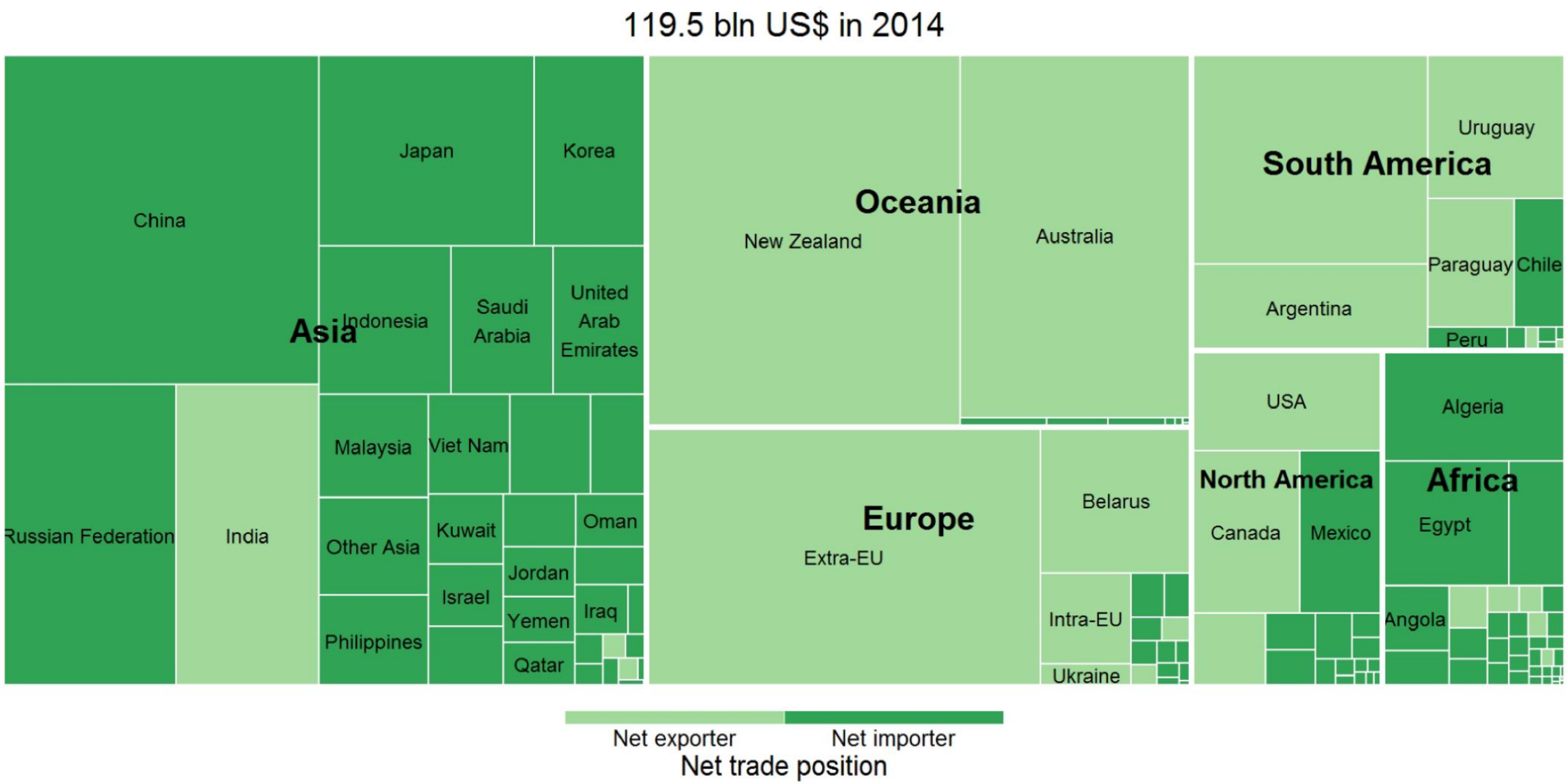
Figure 8: EU trade in bovine products (in bln Euros)



Source: Ihle et al. (2017).

3. Role in EU trade

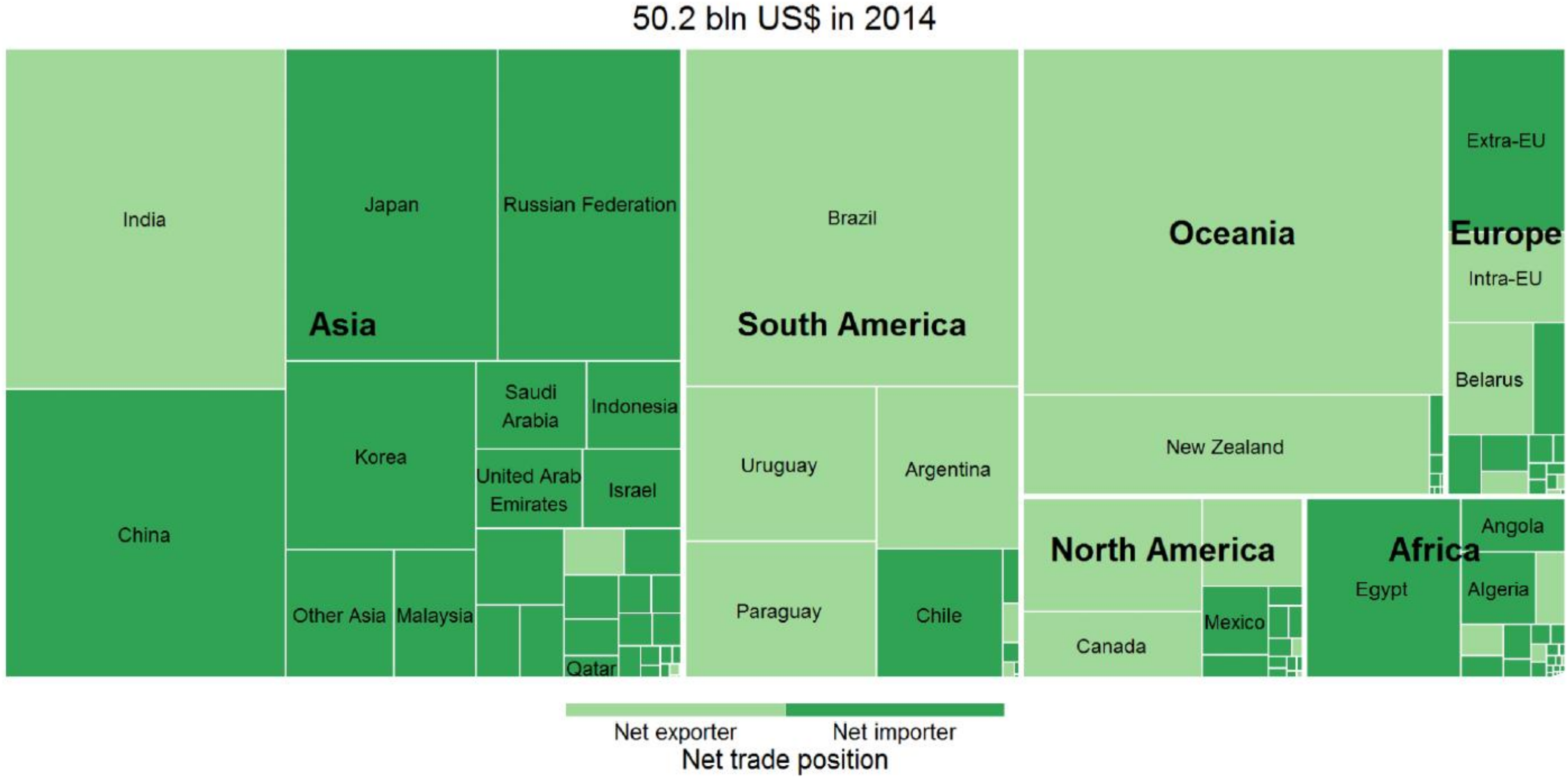
Figure 15: Net trade positions in global dairy, bovine meat and live animals trade



Source: Ihle et al. (2017).

3. Role in EU trade

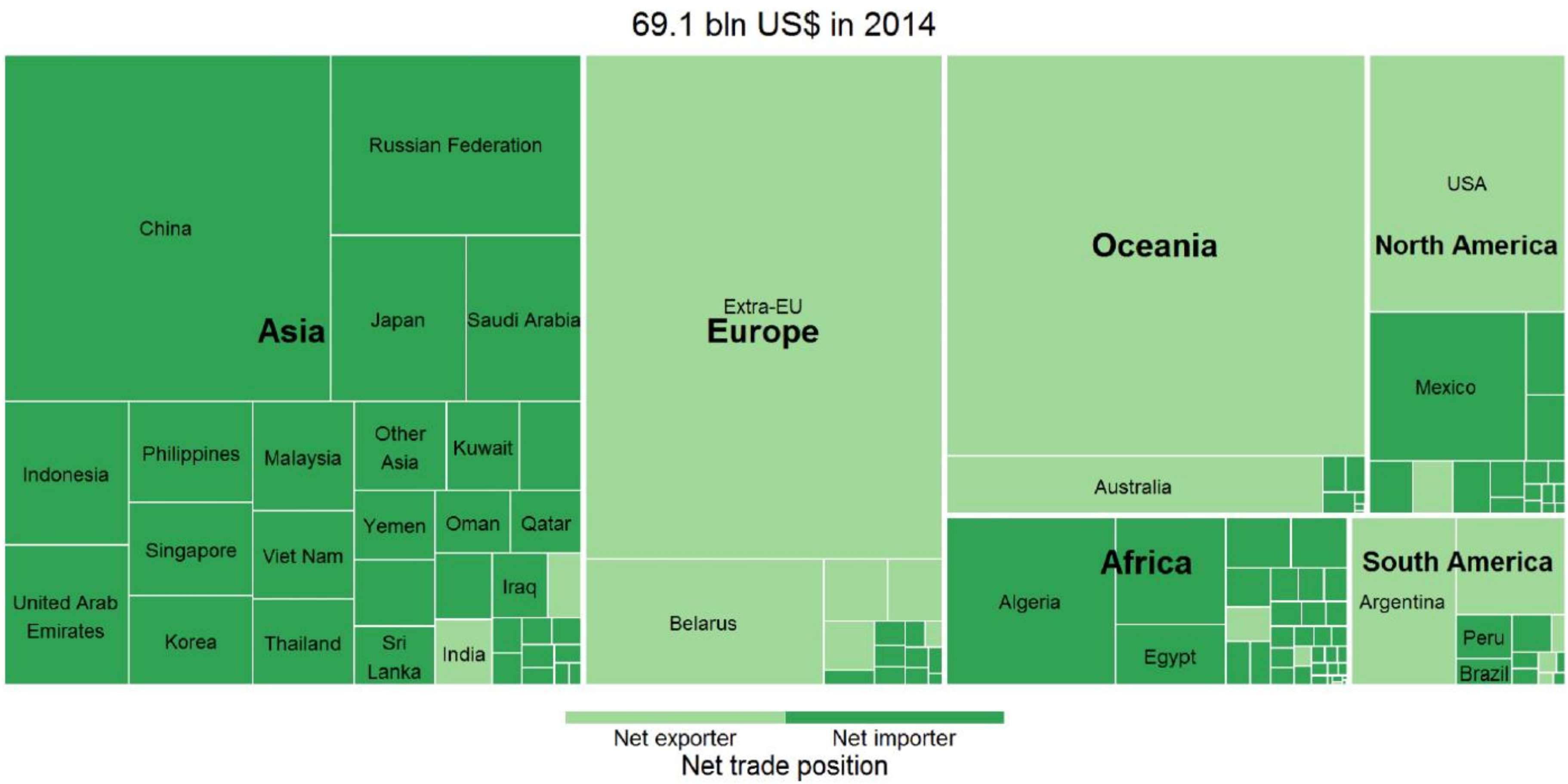
Figure 43: Trade balances in global bovine meat commodity trade



Source: Ihle et al. (2017).

3. Role in EU trade

Figure 42: Trade balances in global dairy commodity trade



Source: Ihle et al. (2017).

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3. Role in EU trade

Table 33: Development of bovine meat imports (in bln US dollar) by continent from 2004-2014

Continent	Imports 2014	Share 2014	Change 2014 vs. 2004
Africa	2.3	5%	+388%
Asia	17.5	38%	+268%
Europe	15.9	35%	+82%
North America	8.3	18%	+74%
Oceania	0.2	0%	+111%
South America	1.4	3%	+255%
Sum	45.5	100%	

Source: Ihle et al. (2017).

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3. Role in EU trade

(A) PARTNER	(B) BALAN MEAT (bln
Australia	-0.21
US	-0.23
Uruguay	-0.31
Argentina	-0.37
Brazil	-0.47

(A) PARTNER	(B) CHANGE MEAT	(C) REGION
US	+6737%	North America
New Zealand	+480%	Oceania
Australia	+473%	Oceania
Switzerland	+321%	Europe
Uruguay	+228%	South America

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Source: Ihle et al. (2017).

Outline

1. Background
2. Regional patterns
3. Role in EU trade
4. **Prices and incomes**
5. Current role of policies
6. Future scenarios
7. Summary

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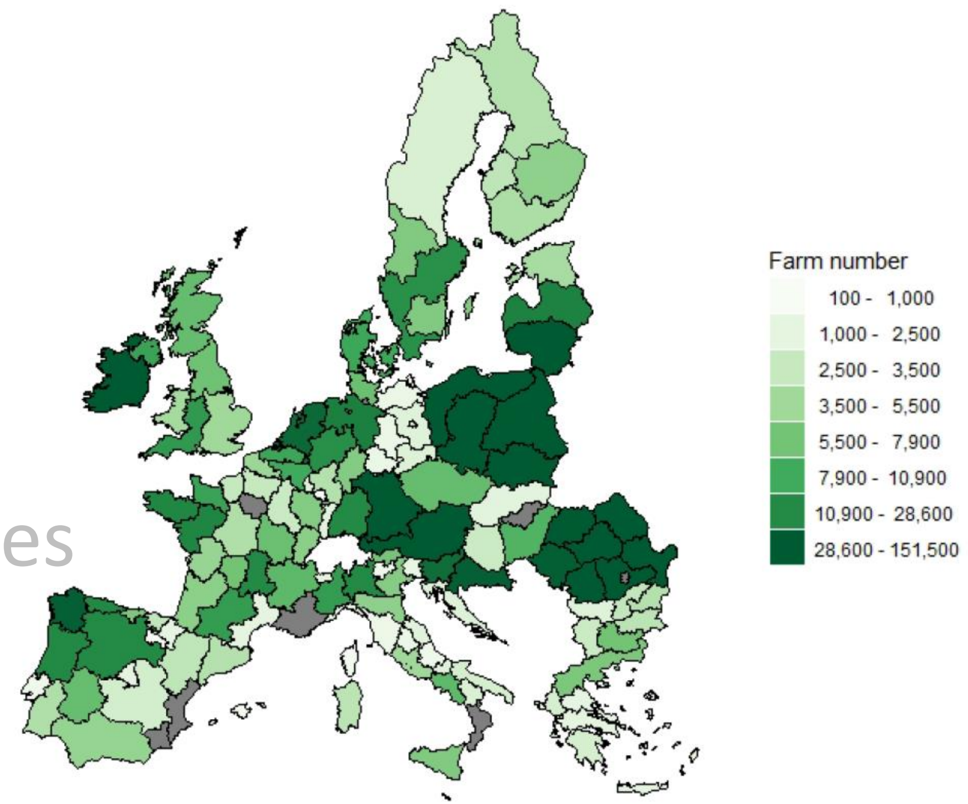


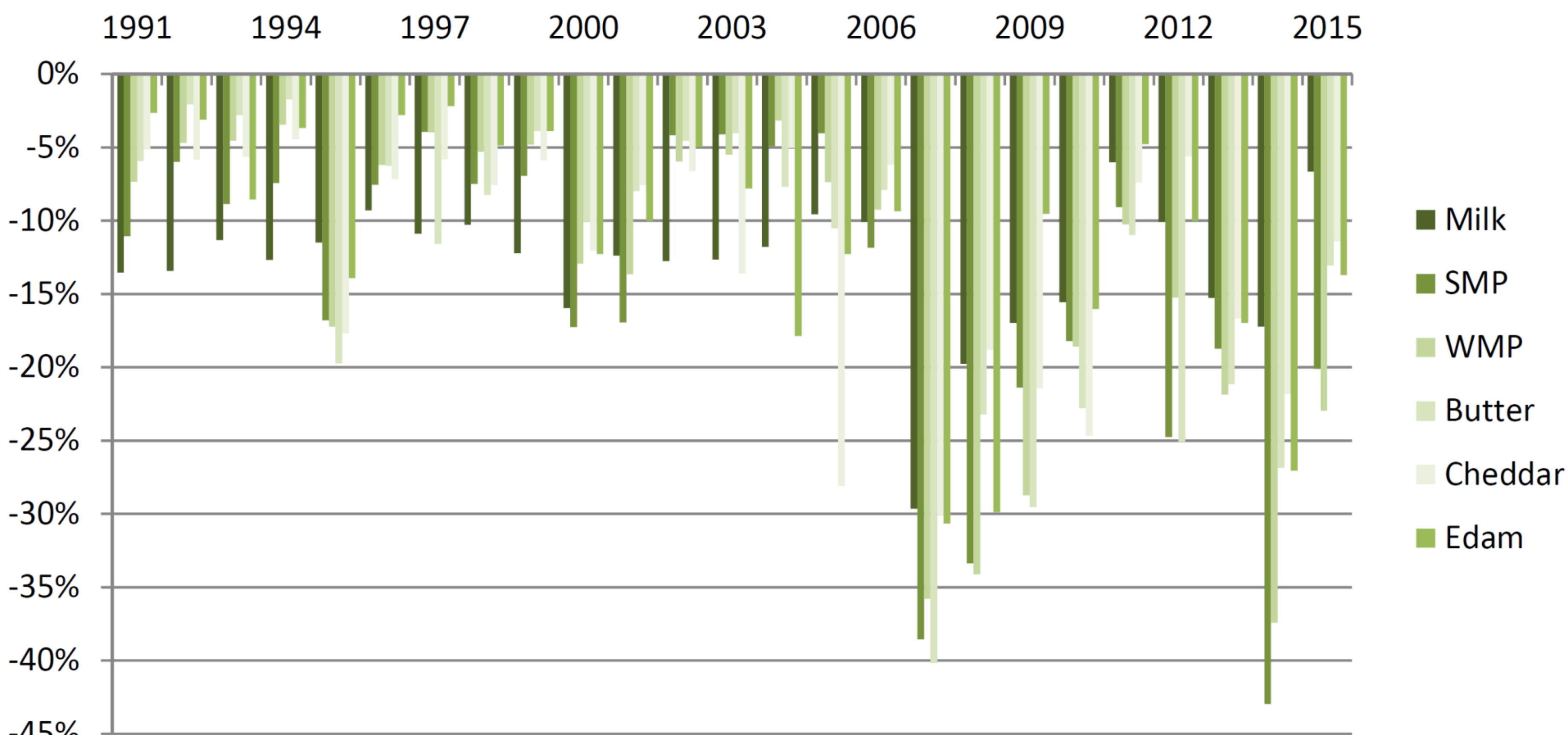
Source: Authors based on European Commission (2016j)

Source: Ihle et al. (2017).

4. Prices and incomes

In contrast to structural change in milk price formation:

Figure 27: Development of the maximum annual price ranges of dairy products

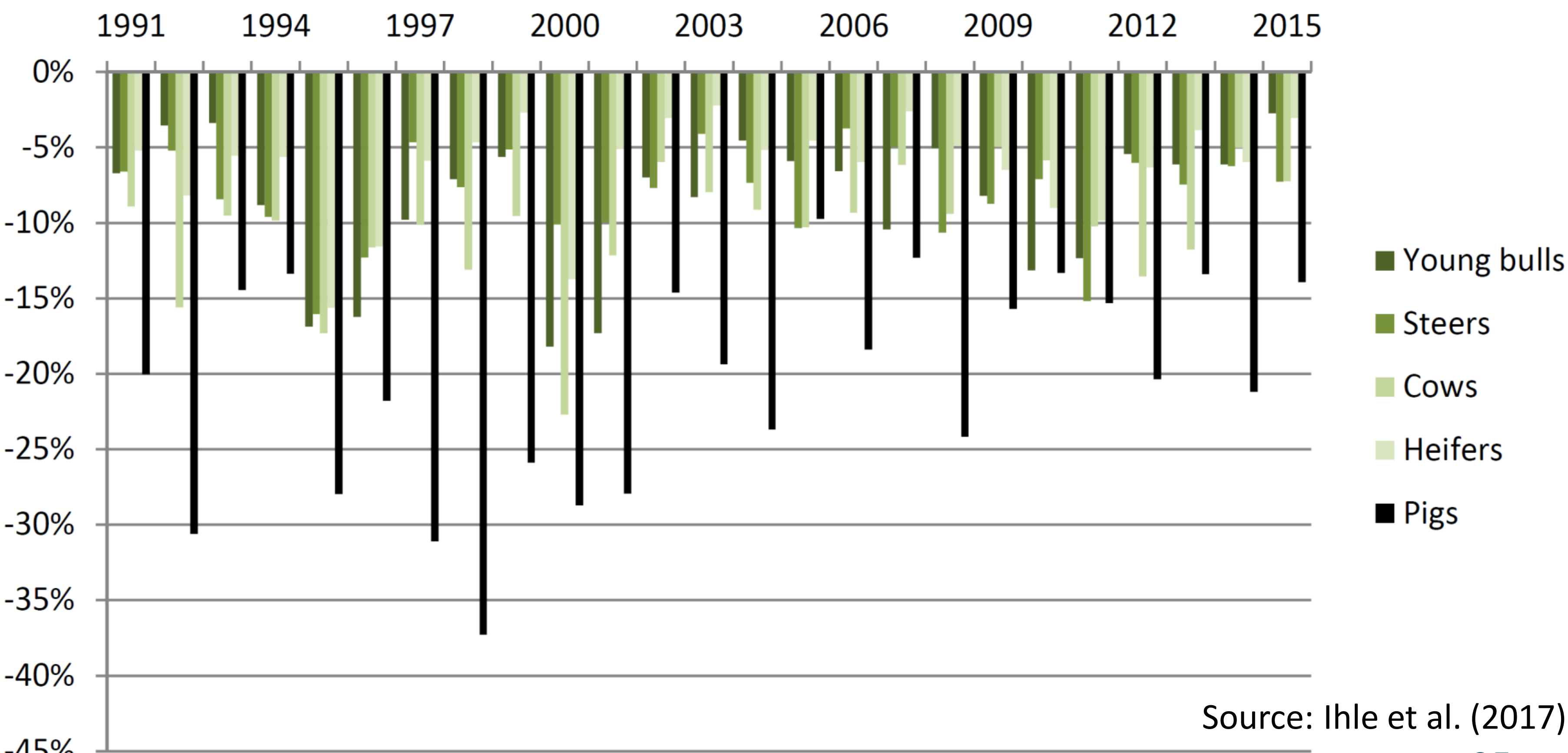


Source: Ihle et al. (2017).

4. Prices and incomes

Very stable price levels since 1990:

Figure 39: Development of the maximum annual ranges of EU cattle slaughter prices



Source: Ihle et al. (2017).

4. Prices and incomes

Certain income vulnerability due to specialization:

Table 3: Production values of bovine raw products in the EU

(A) General farm type	(B) Total	(C) Milk & milk pro-ducts	(D) Beef & veal	(E) Bovine pro-ducts	(F) Share bovine prod.	(G) Bovine prod. in 2013 total
(15) Specialist COP	41.2	0.1	0.5	0.5	1%	0.2%
(16) Specialist other field crops	31.8	0.2	0.4	0.6	2%	0.2%
(20) Specialist horticulture	29.6	0.0	0.0	0.0	0%	0.0%
(35) Specialist wine	19.6	0.0	0.0	0.0	0%	0.0%
(36) Specialist orchards fruits	13.2	0.0	0.0	0.0	0%	0.0%
(37) Specialist olives	4.2	0.0	0.0	0.0	0%	0.0%
(38) Permanent crops combined	3.4	0.0	0.0	0.0	0%	0.0%
(45) Specialist milk	68.1	48.2	7.4	55.5	81%	15.8%
(48) Specialist sheep and goats	15.4	0.3	1.2	1.5	10%	0.4%
(49) Specialist cattle	22.1	2.9	11.9	14.7	67%	4.2%
(50) Specialist granivores	47.4	0.4	0.3	0.7	1%	0.2%
(60) Mixed crops	8.1	0.1	0.1	0.2	2%	0.0%
(70) Mixed livestock	12.2	3.0	1.4	4.4	36%	1.3%
(80) Mixed crops and livestock	34.7	5.2	3.7	8.8	25%	2.5%
EU cattle sector	**137**	**59**	**24**	**84**	**61%**	**24%**
All commercial farms	**351**	**60**	**27**	**87**	**25%**	**25%**
EU cattle sector in all comm. farms	**39%**	**98%**	**91%**	**96%**		

Source: Ihle et al. (2017).

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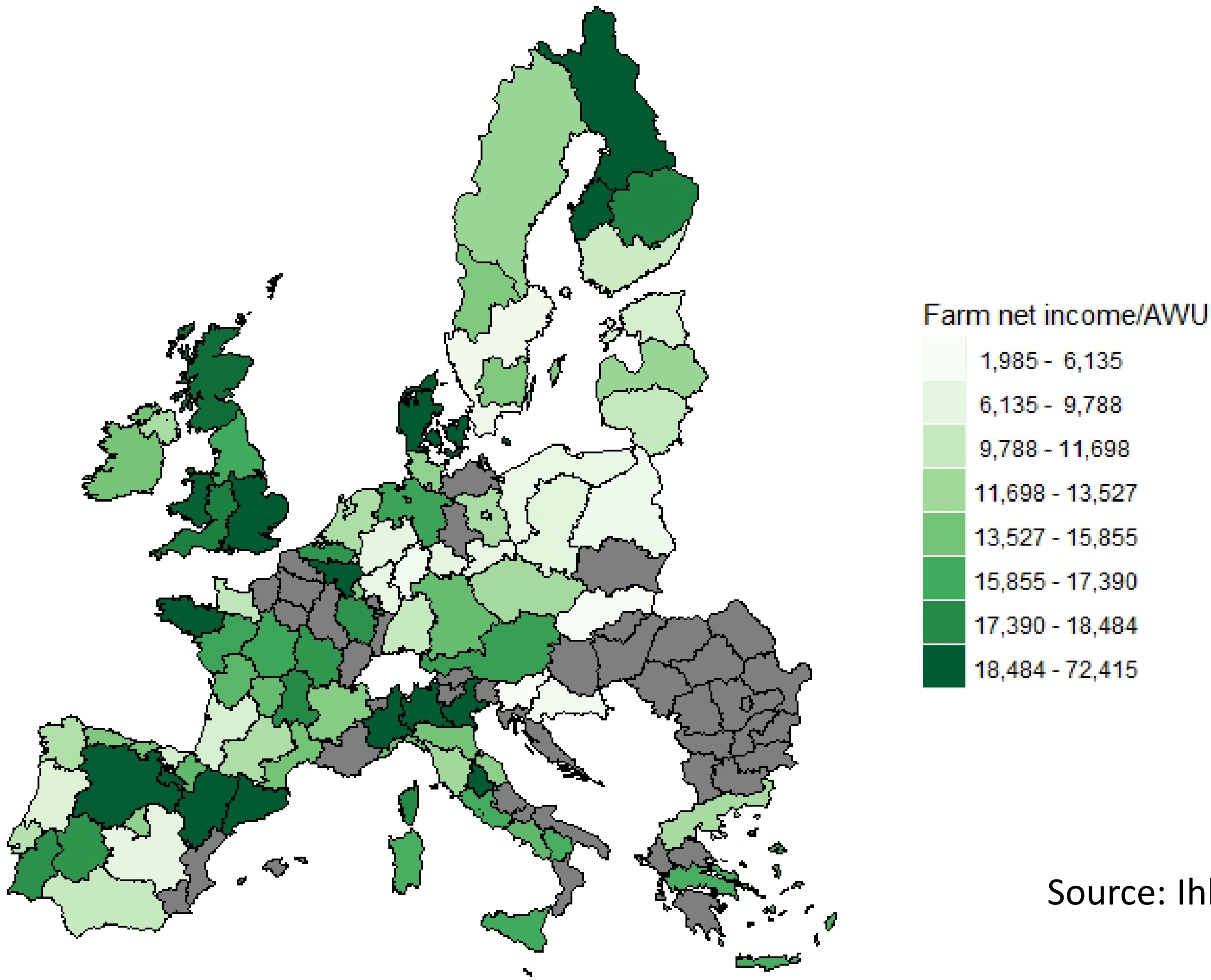
4. Prices and incomes

Map 23: Regional distrib. of labour income (Euros/year) of spec. fattening



Source: Ihle et al. (2017).

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Outline

1. Background
2. Regional patterns
3. Role in EU trade
4. Prices and incomes
5. **Current role of policies**
6. Future scenarios
7. Summary

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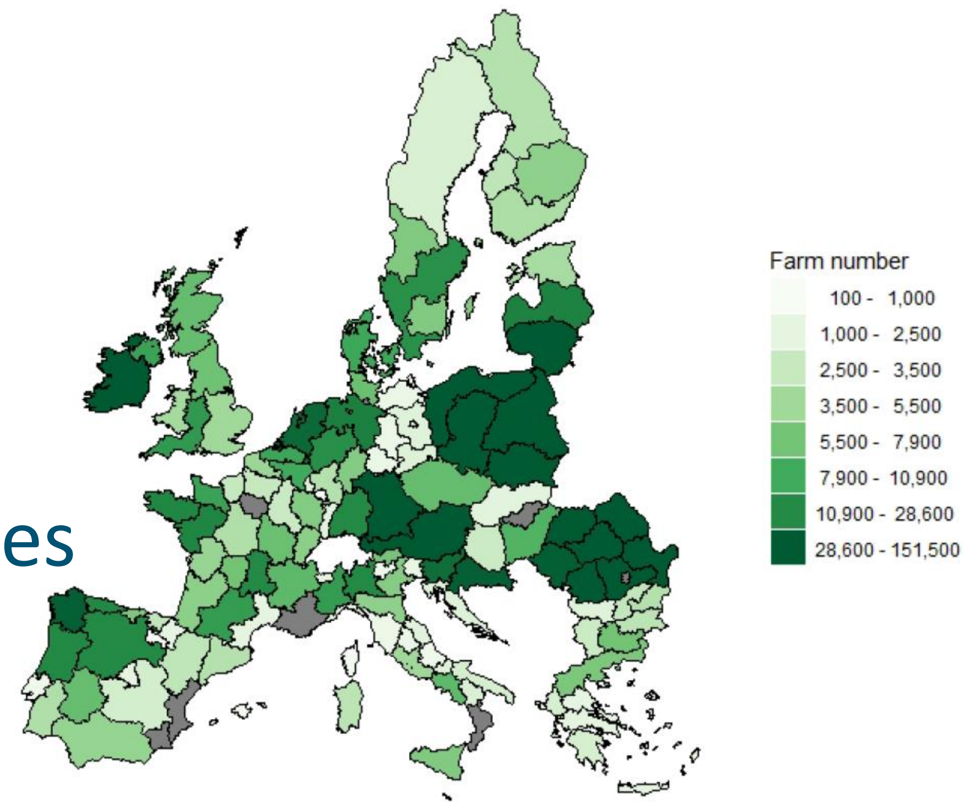

Source: Authors based on European Commission (2016j)

Source: Ihle et al. (2017).

5. Current role of policies

- CAP measures applicable to EU cattle sector
  - Direct payments (decoupled and voluntary coupled)
  - Common Market Organisation (safety net, trade, calamities)
  - Rural development policy

- DPs play important role for viable food production
  - DPs under "old" CAP make up a very large share in beef farm income
  - Simulated results for "new" CAP: confirm effective role of DPs for farm income improvement
  - DPs are relevant and effective
  - Dependency on DPs may create problem in medium to long run

5. Current role of policies

Lion's share of voluntarily coupled support (VCS):

Table 9: Allocation of voluntary coupled support to the EU cattle sector

(A) Specialization	(B) VCS in m €	(C) Share in EU budget	(D) Number of MS
Beef and veal	1 706	41%	23
Milk and milk products	829	20%	19
Sheep and goat	503	12%	19
Protein crops	443	11%	15
Other sectors	646	all < 5%	
Total	4 127	100%	27

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Source: Ihle et al. (2017).

5. Current role of policies

Regional distribution of CAP payments to the EU cattle sector:

Table 7: CAP Subsidies in the EU cattle sector

(A) Region or subsector	(B) Milk cows	(C) Other cattle	(D) DPs	(E) Other	(F) Total
EU cattle sector (m €)	480	1,201	13,867	6,698	22,246
Share of EU dairy sector	99%	26%	75%	72%	72%
Share of EU bovine meat sector	1%	74%	25%	28%	28%
Share of EU15	64%	95%	81%	70%	78%
Share of EU13	36%	5%	19%	30%	22%
Share of EU-N	67%	31%	64%	75%	65%
Share of EU-S	33%	69%	36%	25%	35%

Source: Ihle et al. (2017).

5. Current role of policies

Role of CAP payments in EU cattle sector incomes:

Table 8: Income, labour and the role of subsidies in the EU cattle sector

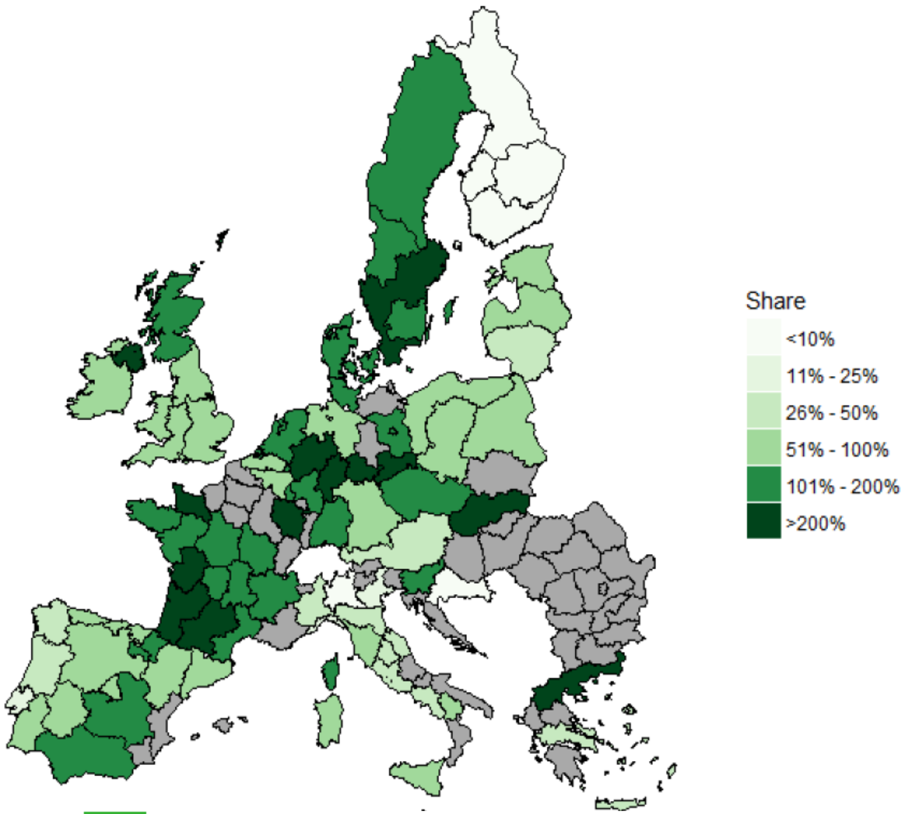
(A) Region or subsector	(B) Income	(C) Total labour	(D) Income/AWU €	(E) Cattle support as share of farm income
EU cattle sector	27,211 m €	2.4 m AWU	11,411 €	57%
EU dairy sector	84%	86%	11,174	49%
EU bovine meat sector	16%	14%	12,842	100%
EU15	77%	42%	20,831	61%
EU13	23%	58%	4,539	46%
EU-N	57%	53%	12,226	61%
EU-S	43%	47%	10,481	51%

Source: Ihle et al. (2017).

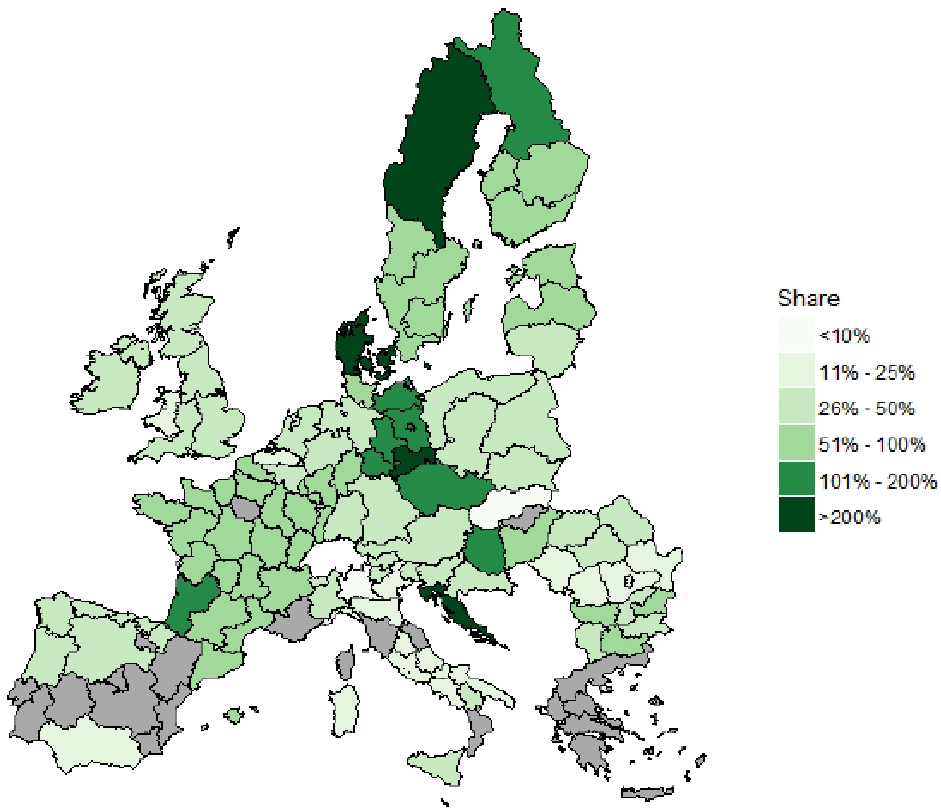
4. Current role of policies

Crucial role of political support for specialist fattening farms under new CAP:

Share of cattle-related CAP payments in farm income



Distribution of labour income (€ /AWU) vs. benchmark income (GDP/cap)



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Source: Ihle et al. (2017).

4. Current role of policies: Dairy-beef interaction

- Dutch phosphate production has exceeded phosphate ceiling
- Joined government action and dairy sector remedying actions to reduce phosphate production by 8.2 million kg
    - Phosphate Production Reduction Decree (-4.0 million kg)
    - Dairy Farm Termination Program (-2.5 million kg)
    - Reduction of the Phosphate content in dairy feed (-1.7 million kg)
- Impacts of this set of measures
    - Reduction of livestock herd in 2017 by 160 000 LUs
    - Composition not fully clear: about 90 000 dairy cows and remainder by reducing young stock (about 70 000 animals)
    - Measure includes a smoothing over the year

Outline

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6. Future scenarios
7. Summary

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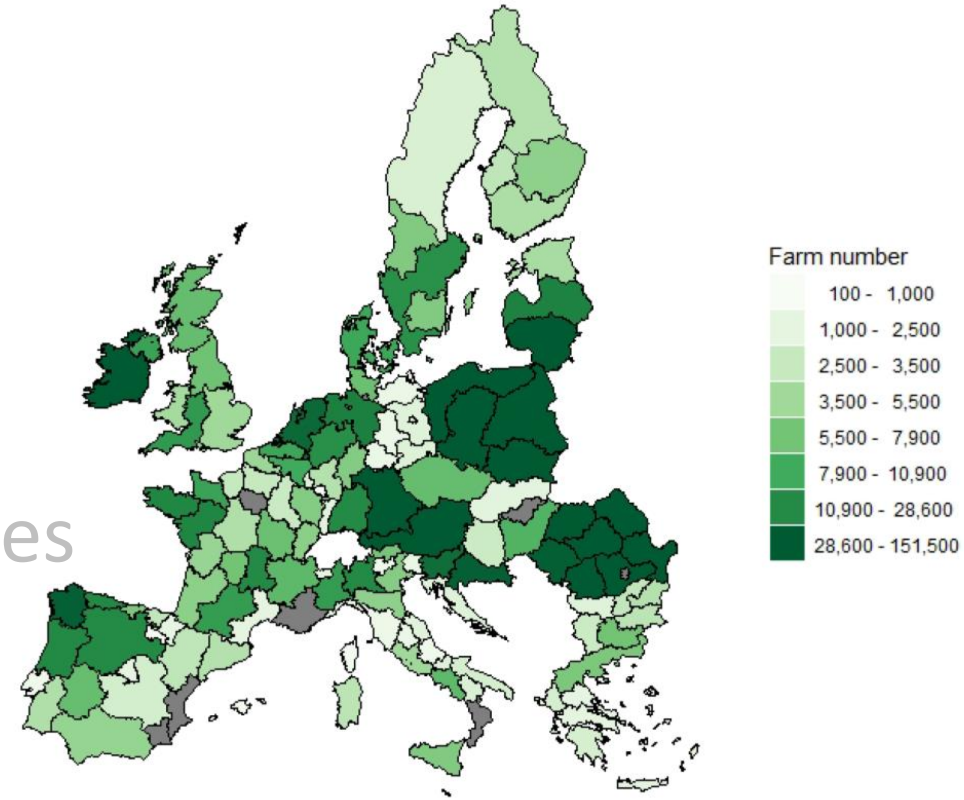


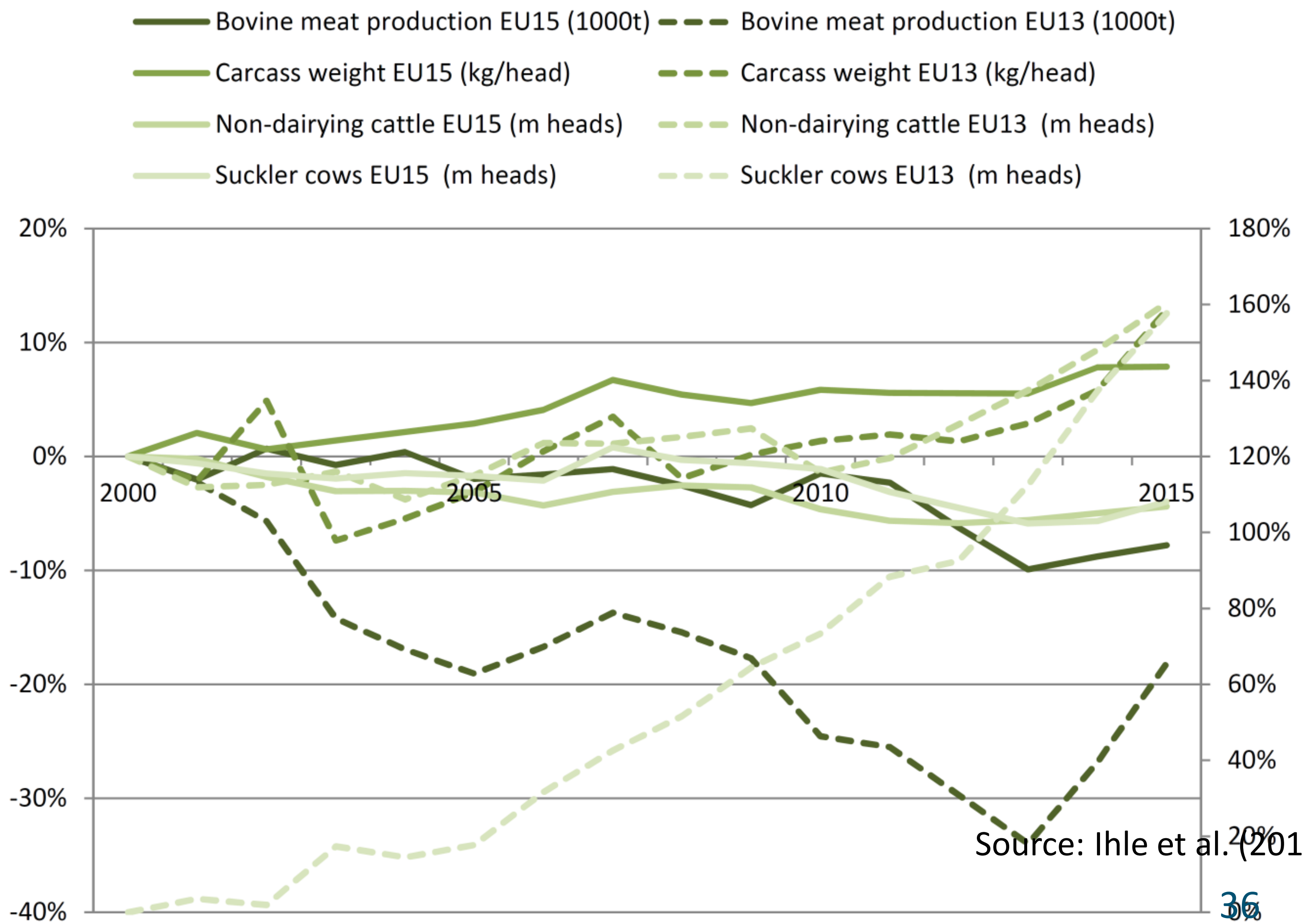
Source: Authors based on European Commission (2016j)

Source: Ihle et al. (2017).

5. Future scenarios: Herd size and quantities

- ....

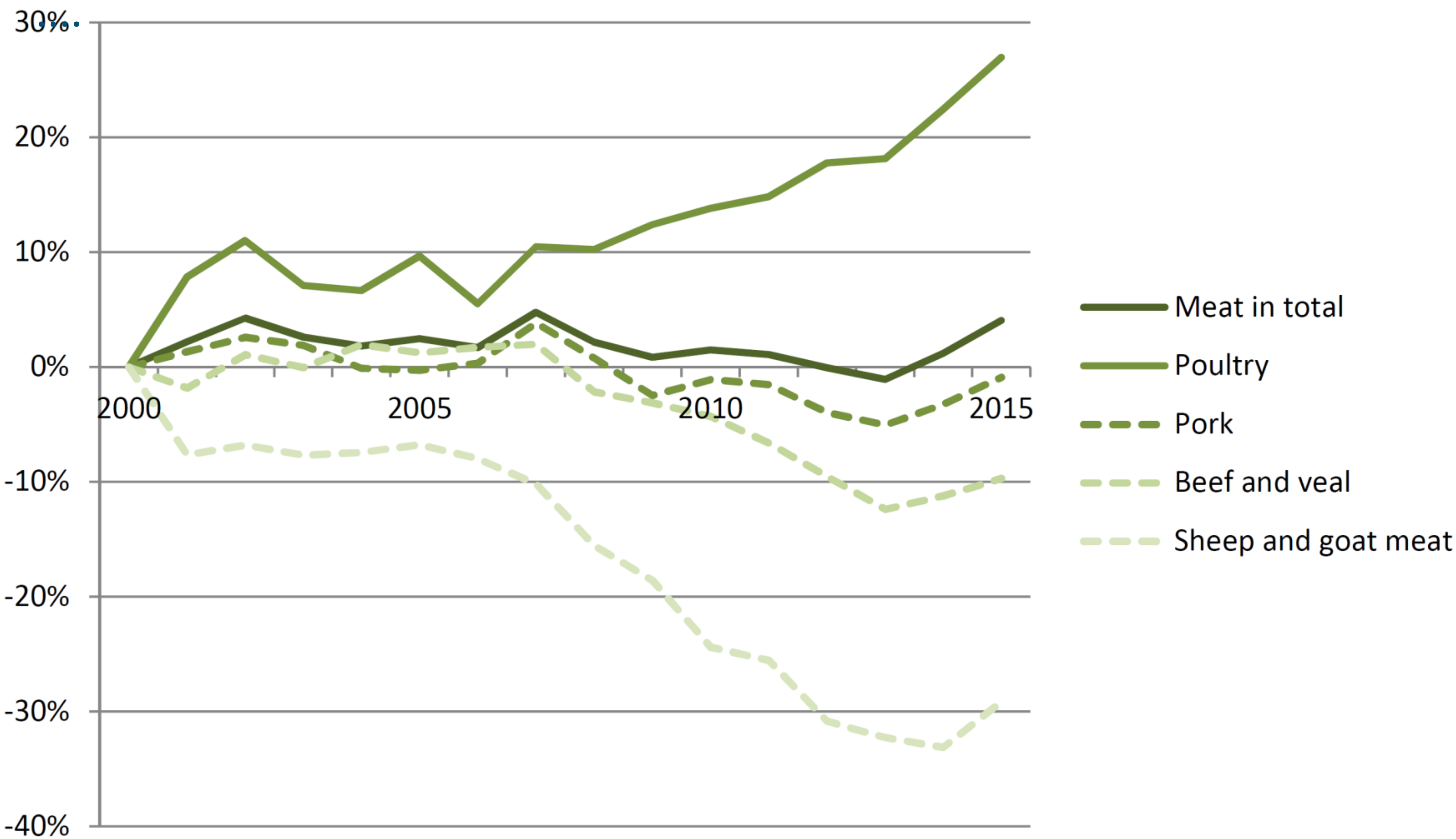
Figure 36: Development of EU bovine meat production since 2000



Source: Ihle et al. (2017).

5. Future scenarios: Consumption preferences

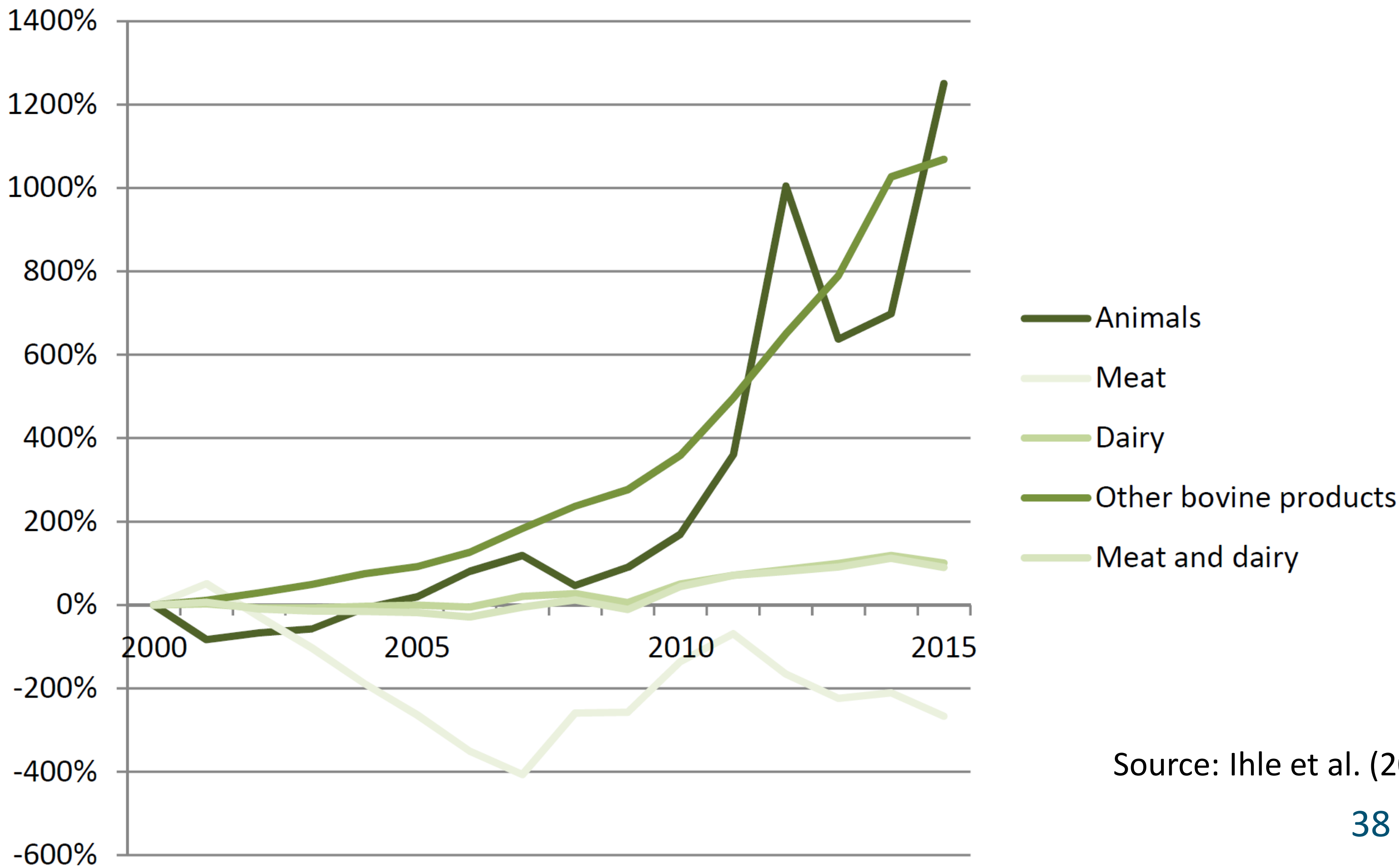
Figure 31: Evolution of per capita consumption of different meat types in the EU



Source: Ihle et al. (2017).

5. Future scenarios: Trade balance

Figure 10: Development of EU bovine product trade value balance



Source: Ihle et al. (2017).

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4. Prices and incomes
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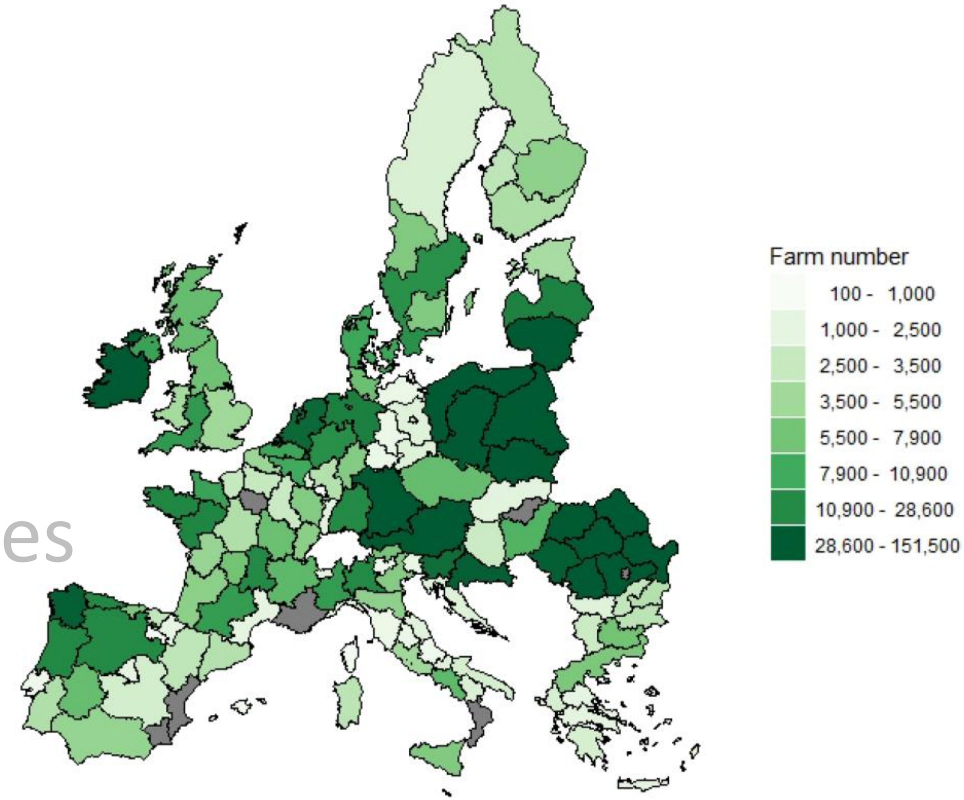

Source: Authors based on European Commission (2016j)

Source: Ihle et al. (2017).

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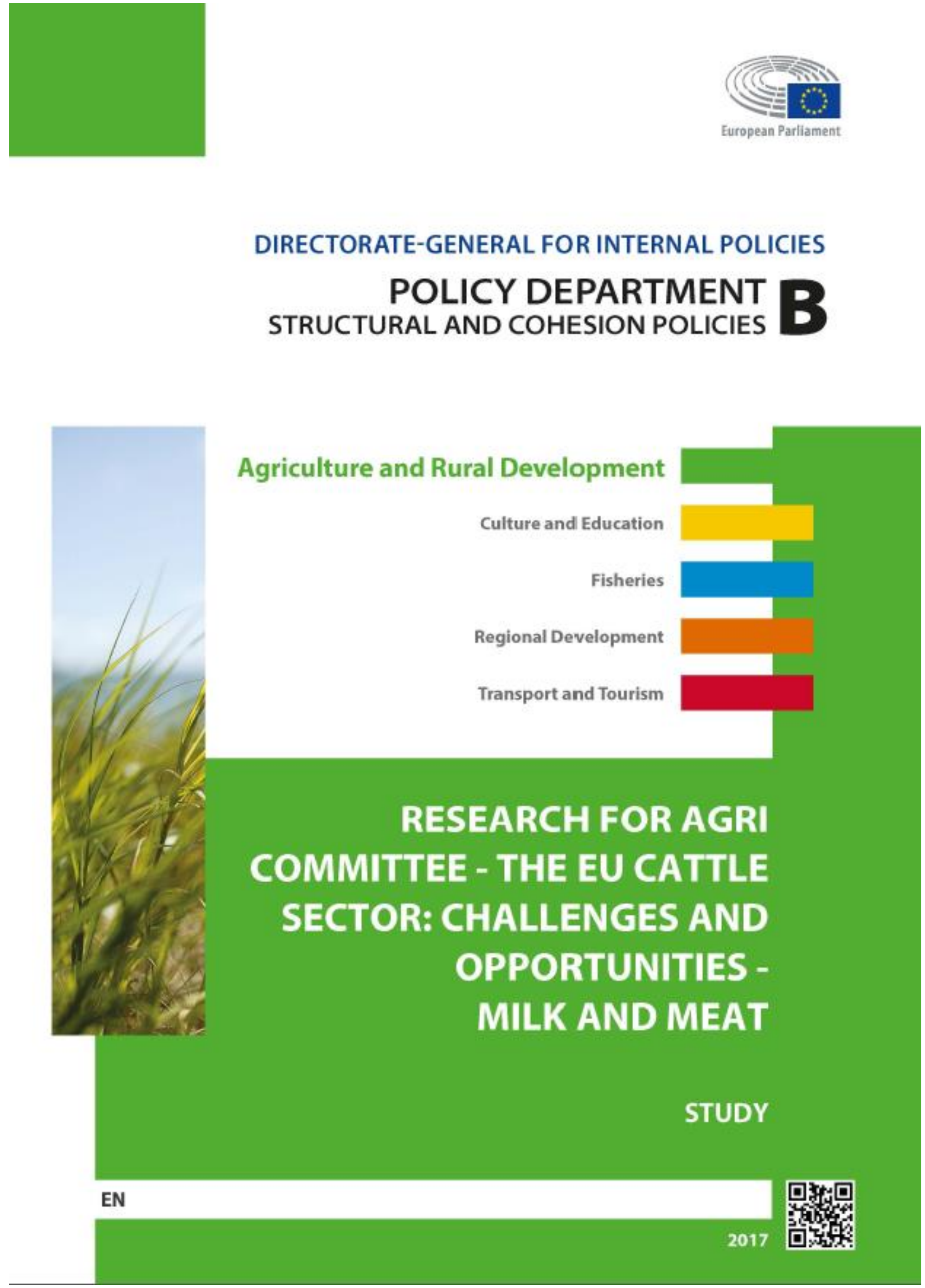
6. Summary

- Data lag impedes timely analyses
- EU cattle substantial aspect of EU agriculture
  - Dairy sector more than double production value
- Pronounced regional disparities:
  - Bovine meat concentrated in south-west. & north-west. EU
  - Animals & farms in peripheral regions vs. economic size in central EU
- Trade:
  - Major net importer on global scale besides Asian countries
  - Main sources: South America, US & Australia
- Prices and incomes:
  - Remarkably stable prices – superior to dairy farms
  - Regions of high net farm income/ AWU scattered across EU
- Role of policies:
  - Lion's share of voluntarily coupled support
  - Key role of DPs for ensuring competitiveness
- Prospects:
  - Modest downward per capita consumption trend since 2007
  - Steep downward trend of trade balance since 2010
  - Strong production quantity rebound in EU13 since 2013

Questions?
Comments?


European Parliament

DIRECTORATE-GENERAL FOR INTERNAL POLICIES

POLICY DEPARTMENT B
STRUCTURAL AND COHESION POLICIES

Agriculture and Rural Development

Culture and Education

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Transport and Tourism

RESEARCH FOR AGRI COMMITTEE - THE EU CATTLE SECTOR: CHALLENGES AND OPPORTUNITIES - MILK AND MEAT

STUDY

EN

2017

Link to the study:

http://www.wur.nl/en/newsarticle/Research-for-AGRI-Committee-of-the-European-Parliament.htm

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