



Federal Agricultural
Research Centre

Institute of Farm Economics

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Implementation of the CAP-reform in Germany and Consequences for German Beef Production

**Perspectives of Beef Production in Europe
EAAP Workshop, Uppsala, Sweden**

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Content

Statistical figures

Implementation of the CAP-reform in the EU

Implementation of the CAP-reform in Germany

Impact on incomes and supply in Germany

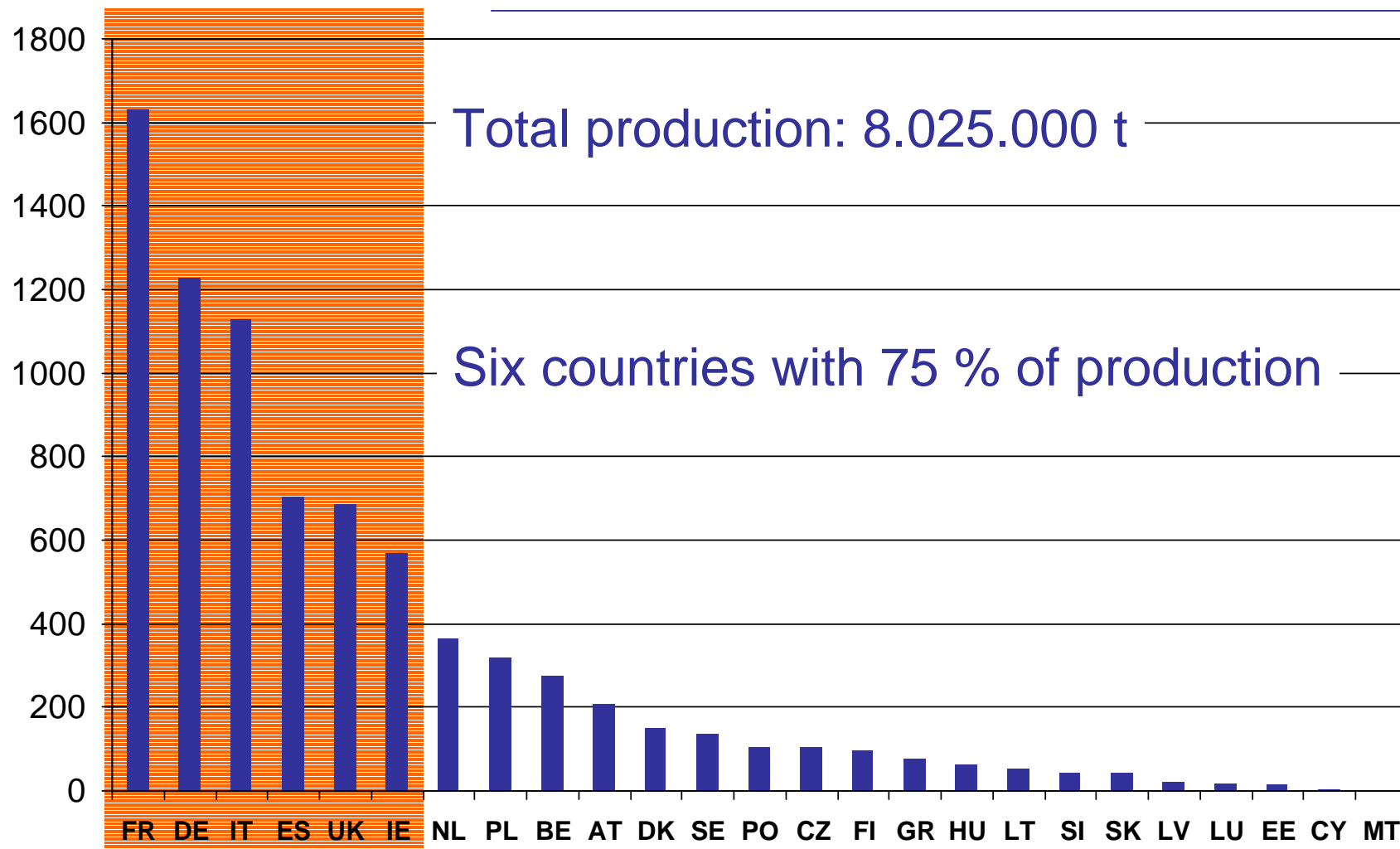
Comparative analysis for typical farms in the EU

Development of calf markets

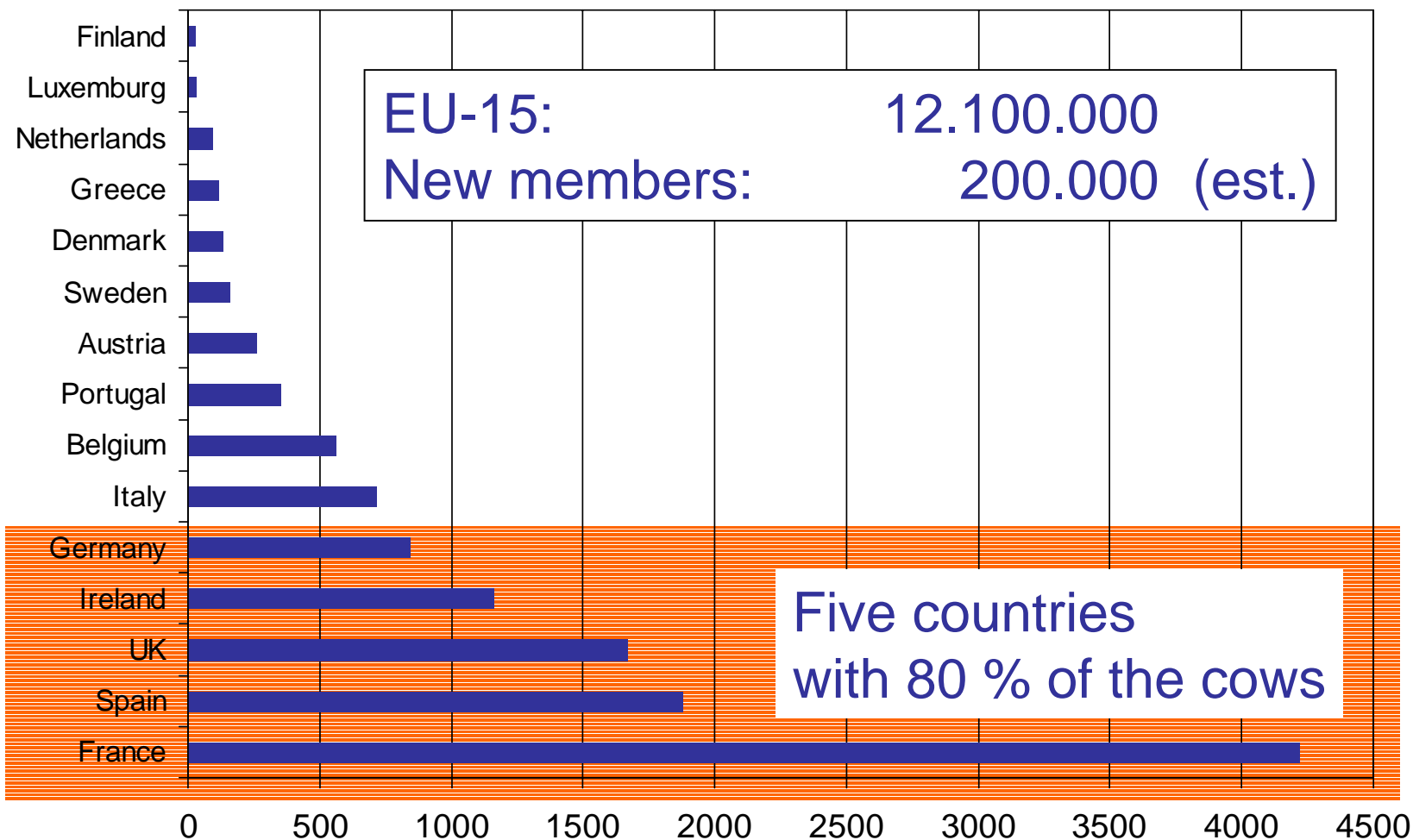
Conclusions



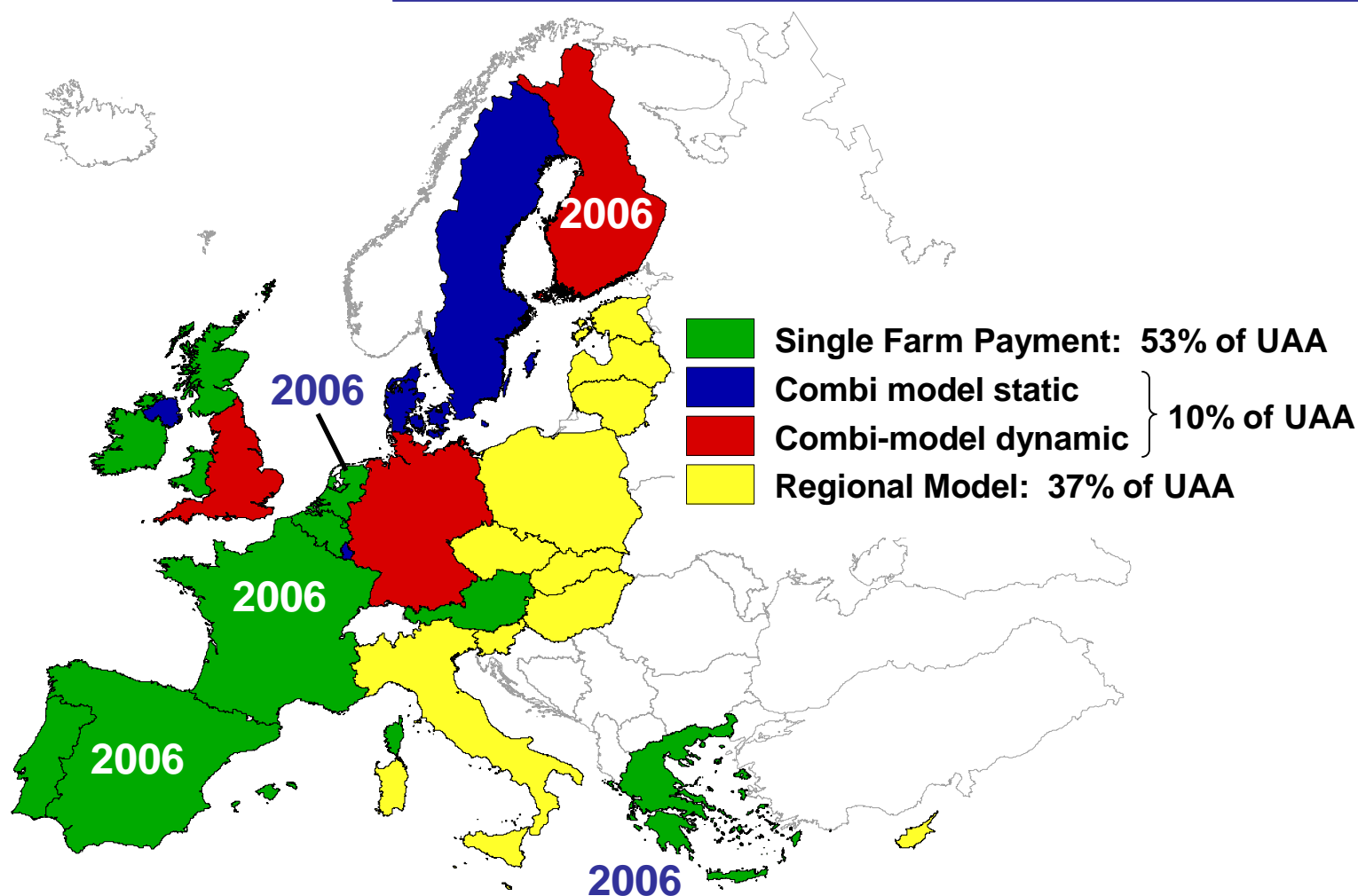
Beef production in the EU-25 – 1,000 Tons 2003



Number of suckler cows in the EU-15 – 1,000 Head in 2003



Payment models in the EU-25



Options for coupling beef premiums

– Percentages indicate the level of coupling

Payment

Slaughter premium
calves

Suckler-cow
Premium

Slaughter-premium
adult cattle

Special premium
for male cattle

Option I

up to
100 %

up to
100 %

up to
40 %

0 %

Option II

up to
100 %

0 %

up to
100 %

0 %

Option III

up to
100 %

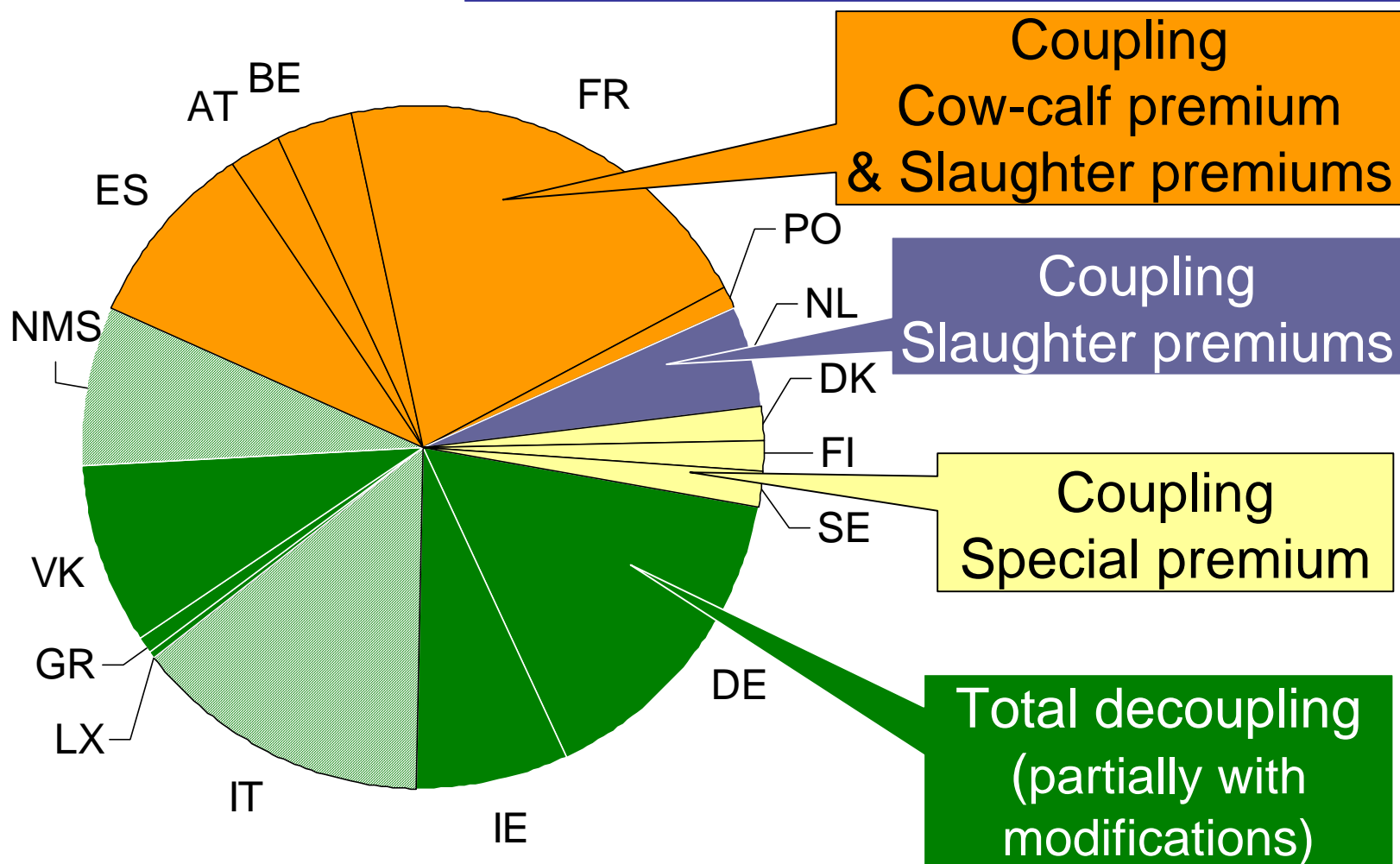
0 %

0 %

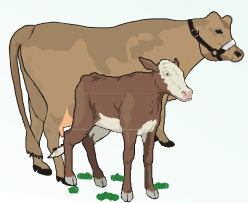
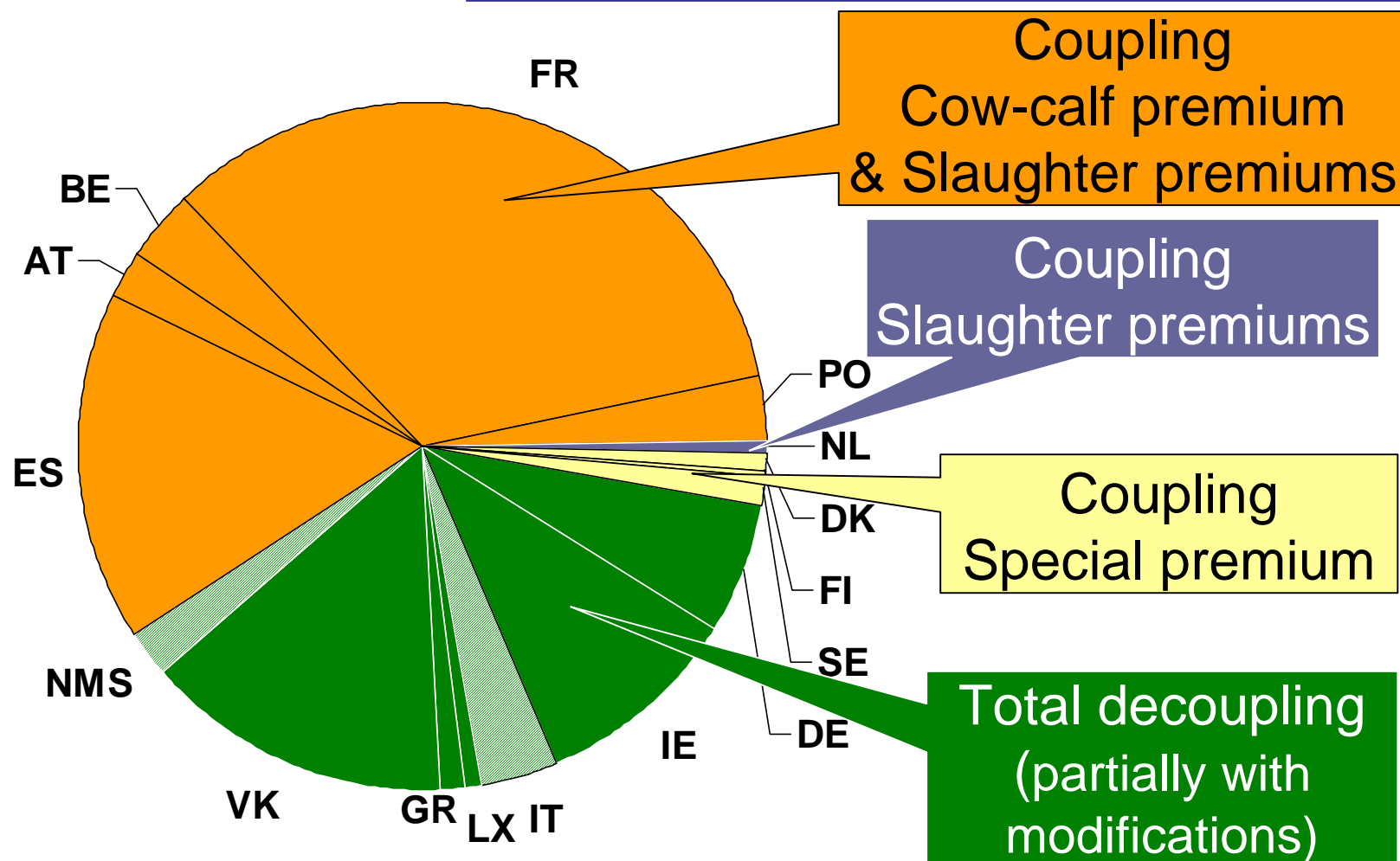
up to
75 %



Share in total beef production 2003 and (de)coupling options in the beef sector



Share in total beef cow numbers 2003 and (de)coupling options in the beef sector



Implementation of the CAP-reform in Germany

- Full decoupling of per-head-payments from 2005 onwards
- Dairy quota system is maintained until 2014 but milk intervention prices are reduced by 15 % in 2005-2007 and a decoupled milk premium is introduced
- Combination model with a regional hectare premium and a single farm payment (SFP) until 2009
- Initial hectare payments depend on number of application as by May 2005
- From 2009 to 2013 the SFP is converted into a hectare payment
- In 2013 SFP = zero and hectare payment with an average of 328 EUR/ha in Germany for both arable land and grass land



Allocation of coupled premiums to SFP and hectare payments in Germany 2005-2009

Hectare payment

Grand Cultures p/
Seed production p/
75 % dec. starch payments p/
Decoupled hop p/

Cropland

Slaughter p/ adults
National p/ cattle
50% extensification p/ cattle

Grassland

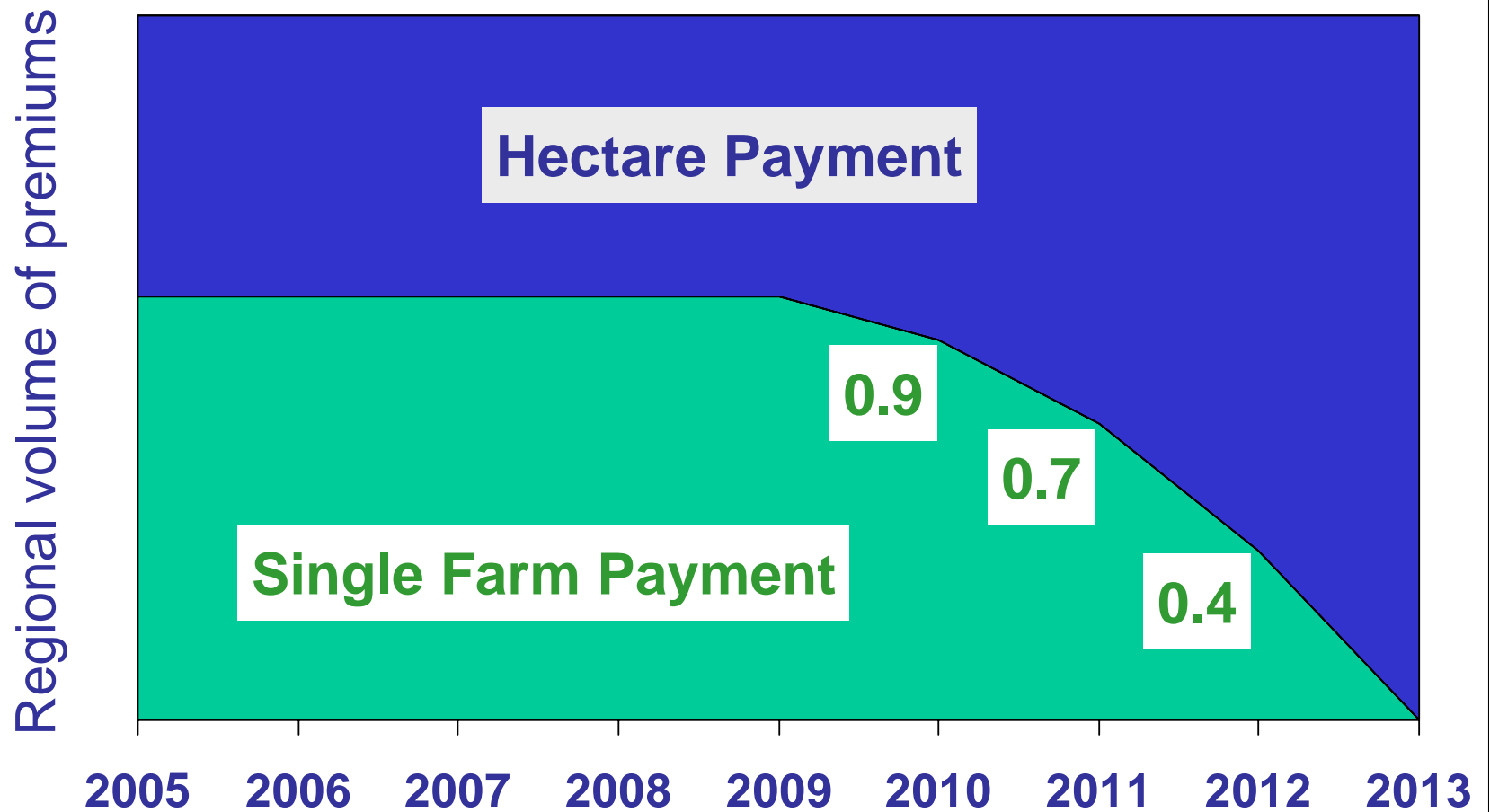
Single farm payment

Dairy p/
Suckler cow p/
Special p/ male cattle
Slaughter p/ calves
50% extensific. p/cattle
Ewe p/
25 % dec. starch payments
Decoupled part tobacco and dry feed



Dynamisation of the combi-model

– evolution towards a hectare payment in 2013

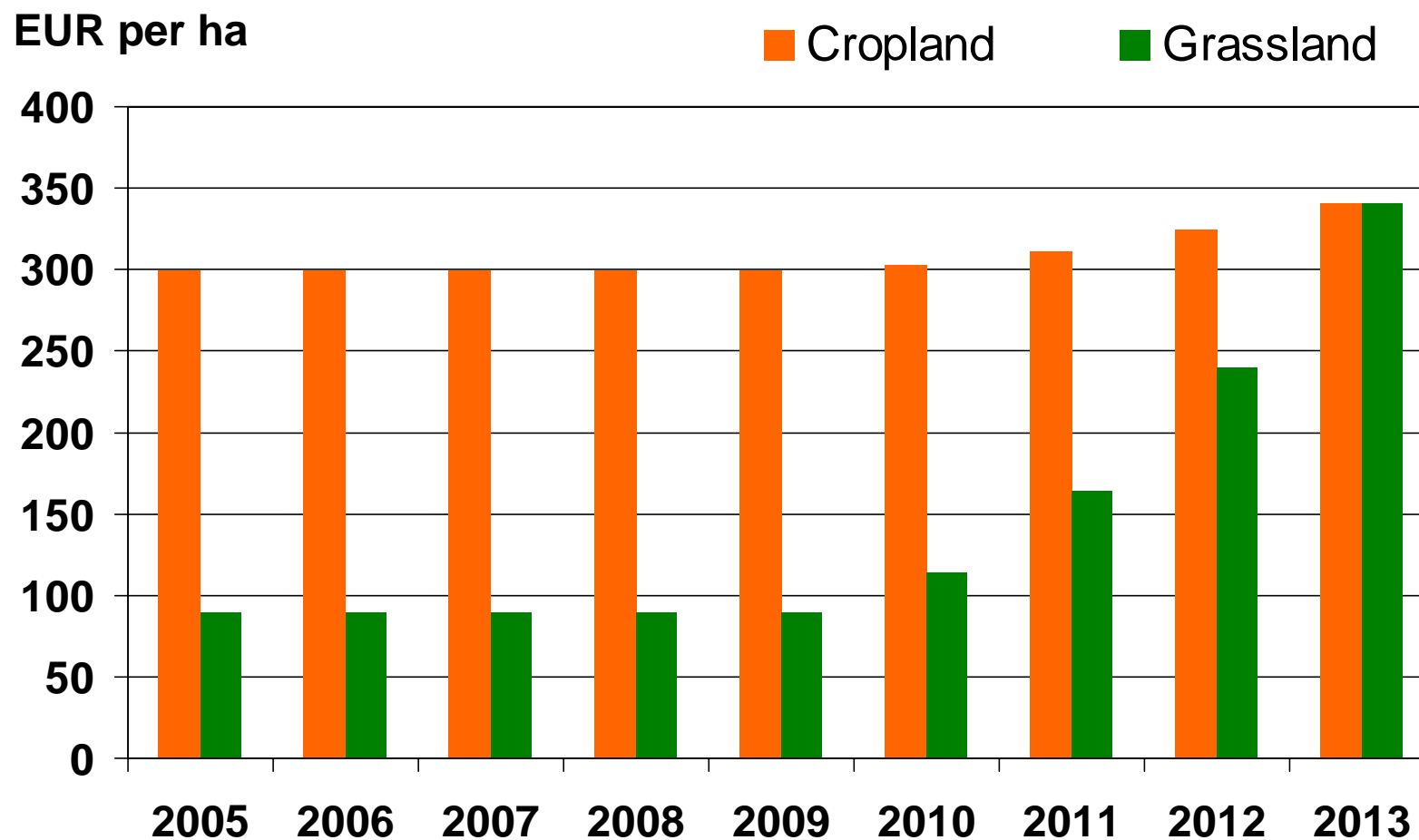


Start and end values of acreage payments by Bundesländer (estimation)

Bundesland	2005		2013	2013 vs. 2005
	Grassland	Cropland	Homogeneous Acreage payment	Direction crop payments
Baden Wurttemberg	56	317	302	-
Bavaria	89	299	340	++
Brandenburg	70	274	293	++
Hesse	47	327	302	--
Mecklenburg-Pomerania	61	316	322	+
Lower Saxony	102	259	326	+++
Northrhine-Westphalia	111	283	347	+++
Rheinland-Palatina	50	288	280	-
Saarland	57	296	265	---
Saxony	67	321	349	++
Saxony-Anhalt	53	337	341	+
Schleswig-Holstein	85	324	360	++
Thuringia	61	338	345	+
Germany	79	301	328	++



Evolution of acreage payments 2005-2013 in Germany – example Bavaria



Implications

- Full decoupling: **no obligation to produce** anymore
- The **SFP** until 2009 **reduces the liquidity problems** for intensive (dairy and beef finishing) farms
- To receive payments the land must be maintained in a defined status (**cross compliance**), basically kept 'open'
- This can be done **mechanically** by mulching once a year at cost of approx. **50 EUR/ha**
- If the loss from beef production is below **-50 EUR/ha**, mechanical maintenance is the better alternative

Policy analysis for Germany 2013 vs. 2002

– Assumptions

MTR * vs. 2002

Beef price	constant
Calf price	constant
Milk price	- 17 %
Milk yield (p.a.)	+ 2,1 %

* Combi-model: Single Farm Payment + acreage payment 2005-2009
2010-2013 phasing out of SFP to zero and average payments 328 EUR/ha



Policy analysis for Germany 2013 vs. 2002

– Impact on **production**

MTR compared to 2002

Number of beef cows	- 23 %	> decoupling and low calf prices
Number of dairy cows	- 19 %	> Milk yield increase, quota constant
No. of finishing bulls	- 16 %	> less competitive due to decoupling > compensation by beef price increase and calf price decrease insufficient > mainly in less intensive farms > mainly in small farms
Beef production	- 17 %	> less cow numbers > less bulls



Policy analysis for Germany 2012 vs. 1999

– Impact on **incomes**

MTR compared to 2002

Bull finishers

- Lower incomes mainly in intensive farms with high stocking rates
- Average losses 50 EUR/ha
- Farms with more than 2.5 bulls per ha forage area 200 EUR/ha (higher than 200 in MTRvar due to higher calf prices)

Cow-calf operations: heterogeneous

North and Centre: gains of 40-65 EUR/ha

South: losses less than 20 EUR/ha

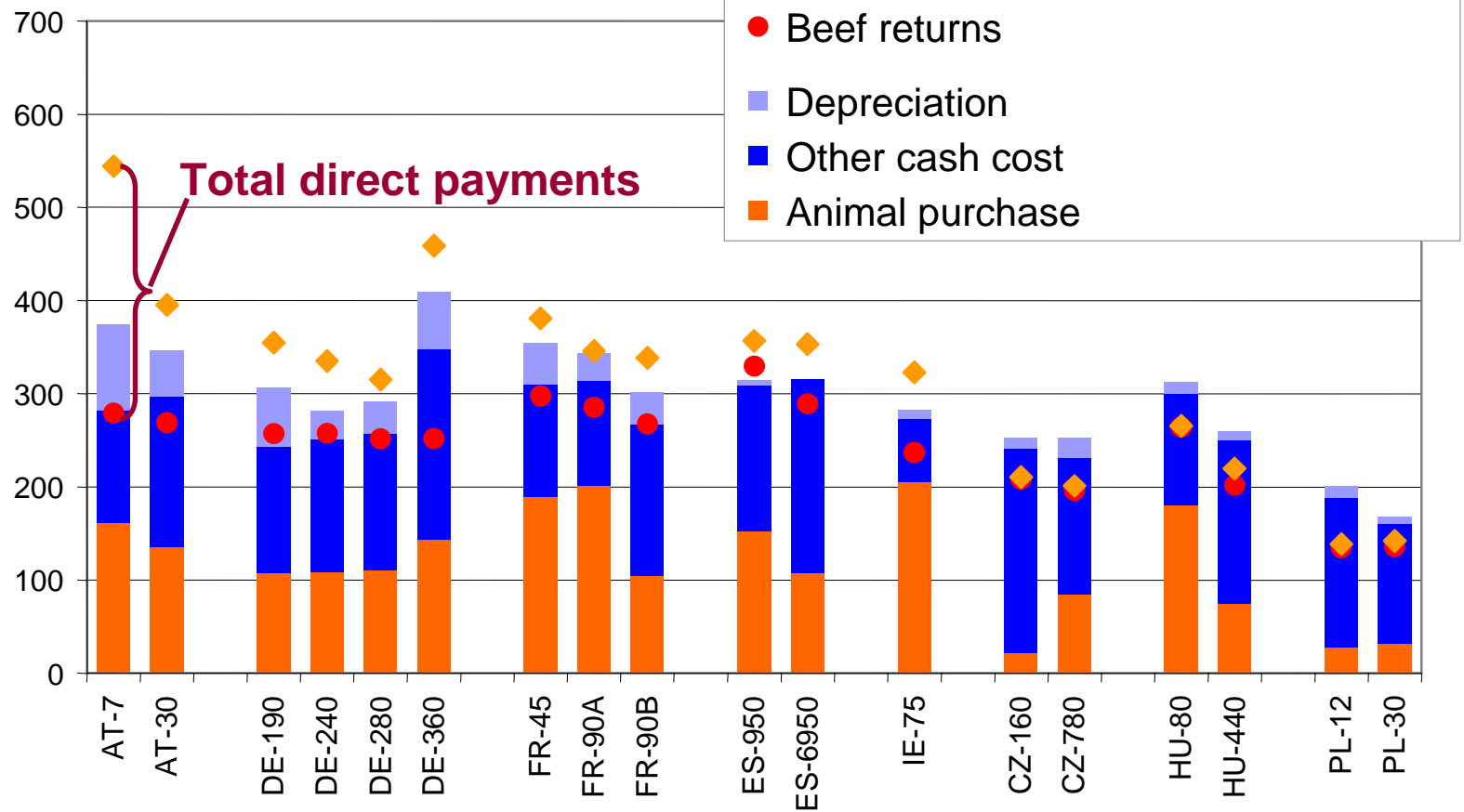
East: from gains + 20 to losses – 40 EUR/ha



Cost, returns & profitability of beef production

– Coupled situation until 2004/2005

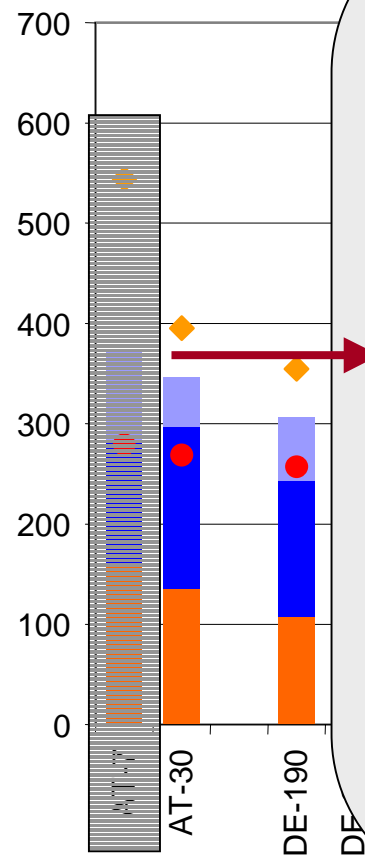
EUR per 100 kg carcass weight



Coupled situation until 2004 / 2005

– Beef finishing

EUR per 100 kg carcass



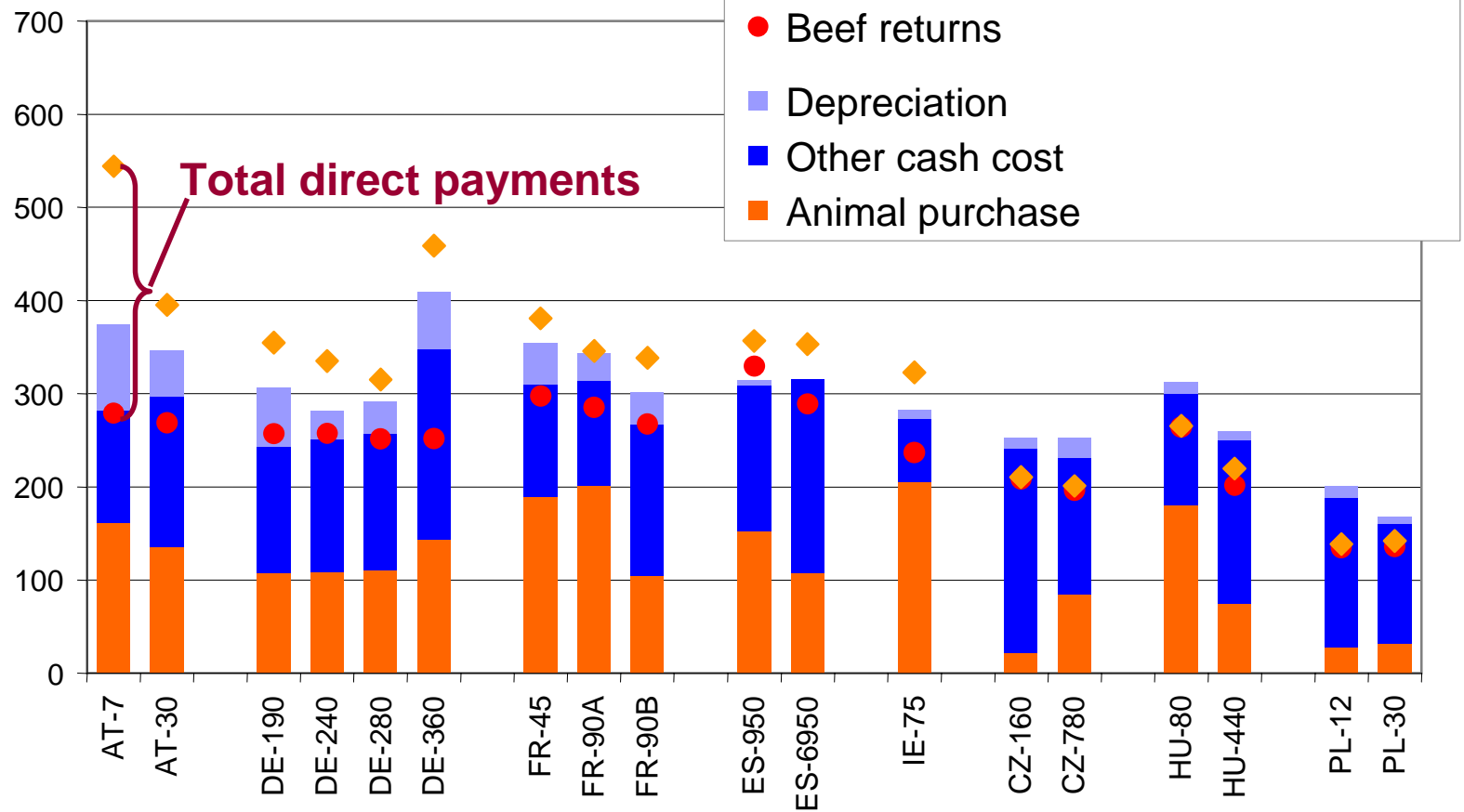
Part of the payment that must be used to compensate a loss that occurs without payments

Sum government payments

Cost, returns & profitability of beef production

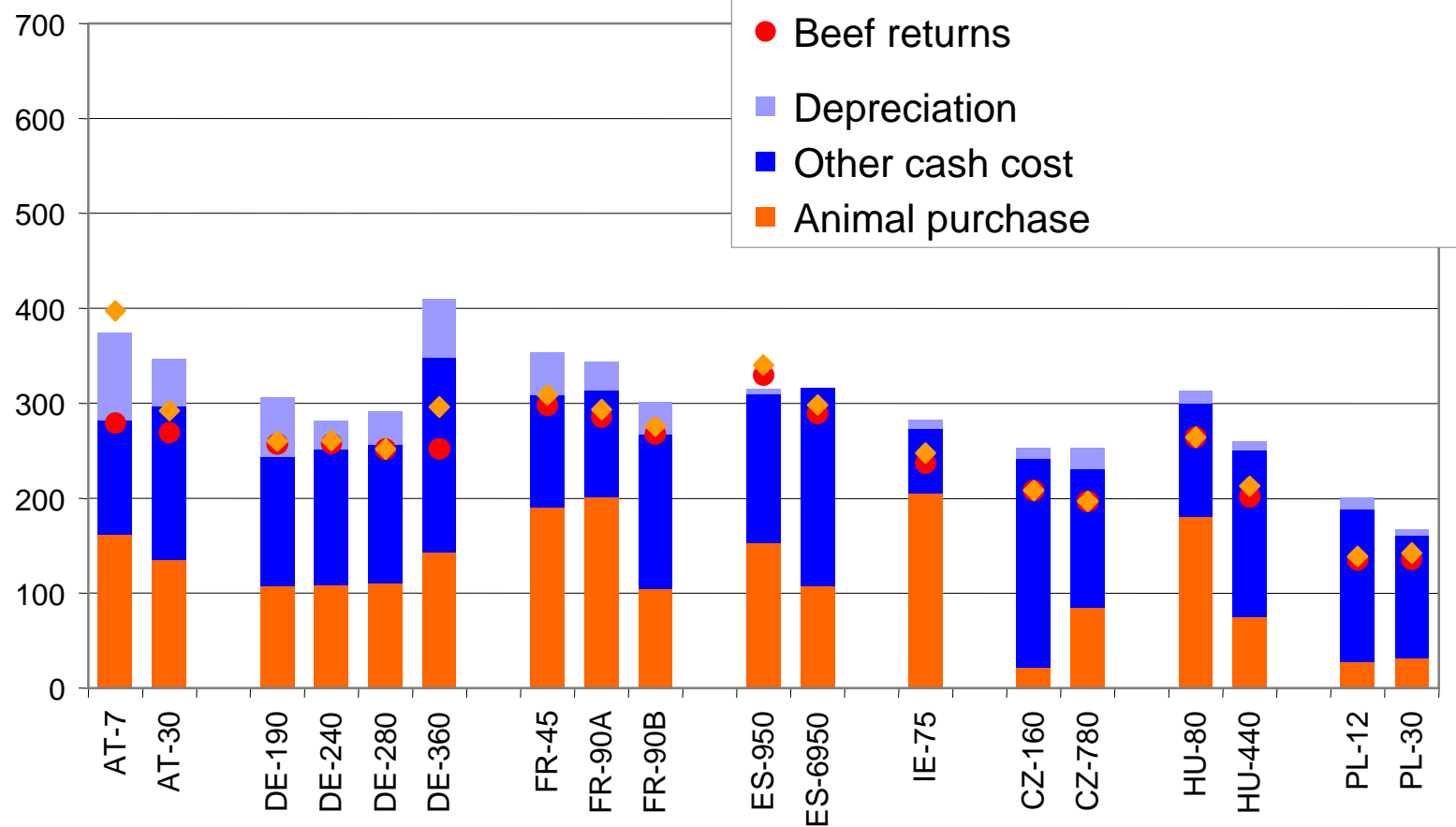
– Coupled situation until 2004/2005

EUR per 100 kg carcass weight



Cost, returns & profitability of beef production – (Partially) decoupled situation from 2005/2006 onwards

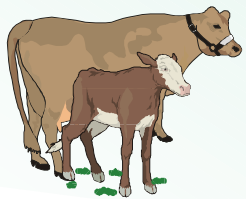
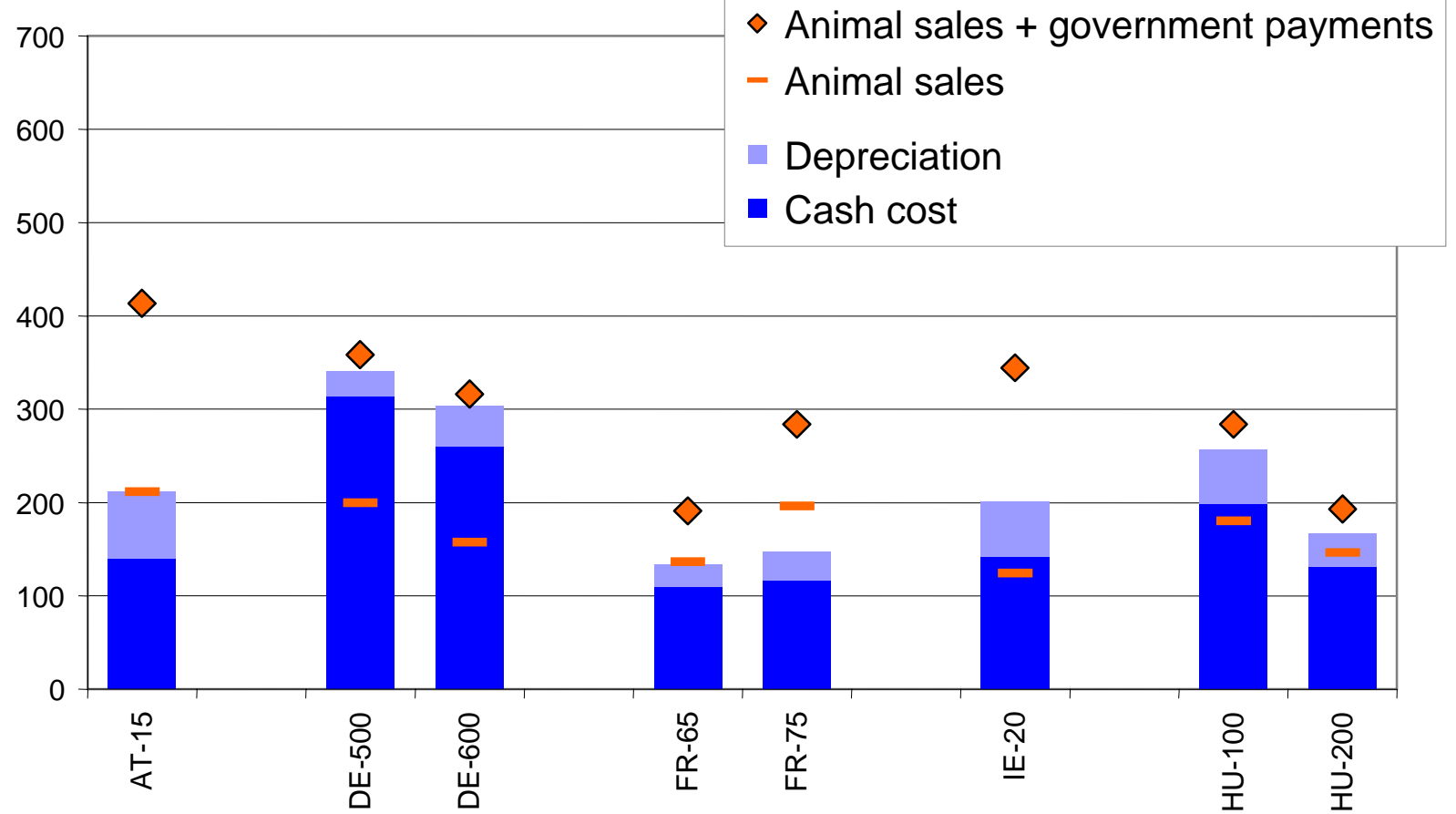
EUR per 100 kg carcass weight



Cost, returns & profitability of cow-calf

– Coupled situation until 2004/2005

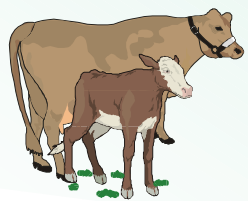
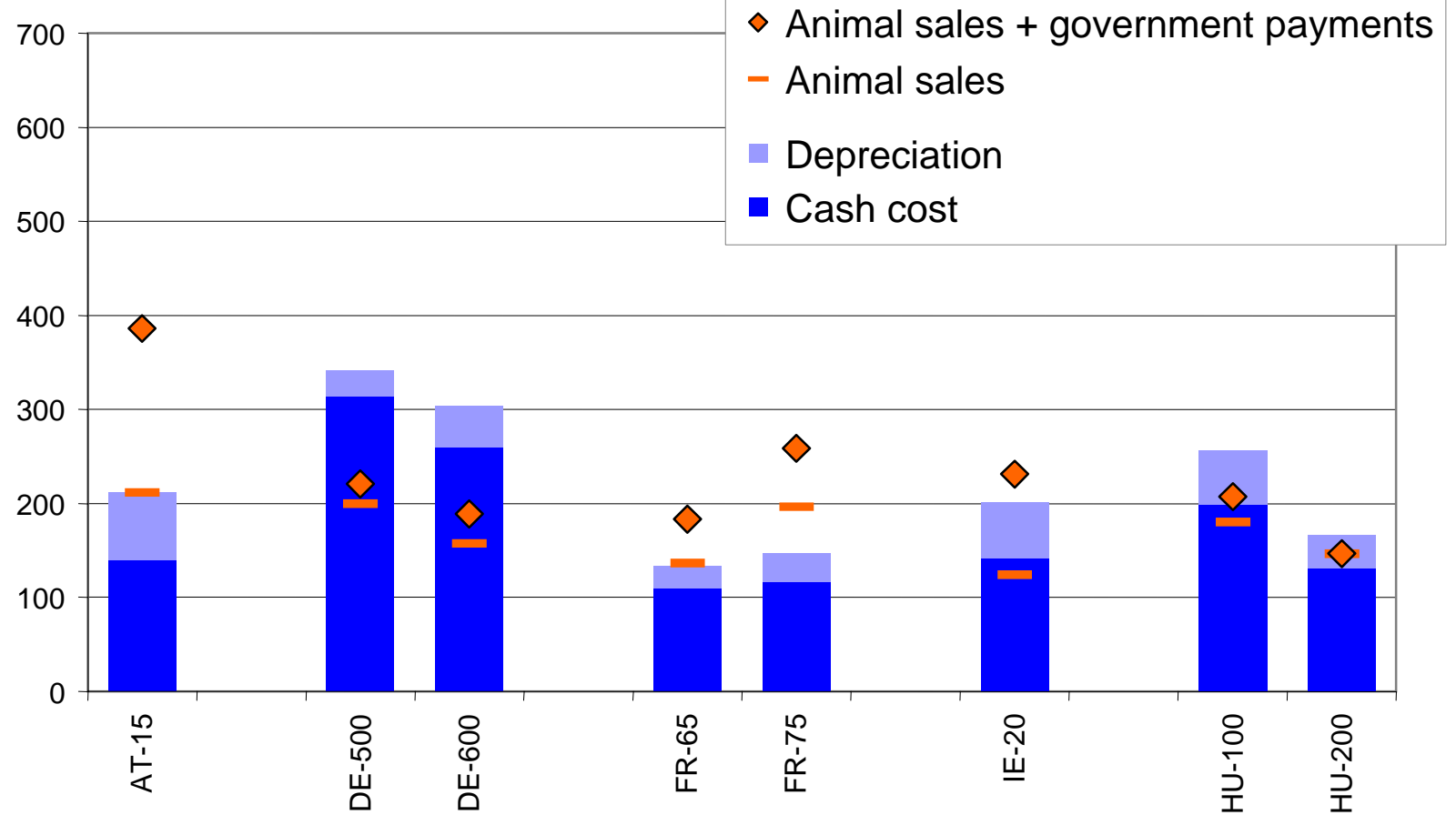
EUR per 100 kg live weight produced



Cost, returns & profitability of cow-calf

– (Partially) decoupled situation from 2005/2006 onwards

EUR per 100 kg live weight produced



Determinants of the price developments for beef and calves

Beef price

Demand ↑ not realistic
Supply ↑ not realistic

Supply ↓ Prices ↑

Less animals

- Exit of finishers
- Less dairy cows
- Less suckler cows

Lower slaughter weights?

- Calves instead of adults
- Earlier slaughter
- Small breeds

Calf price

Demand ↑ not realistic
Re-transmission prem.: Price ↓

Supply ↓ Prices ↓ ↑

Dairy cows

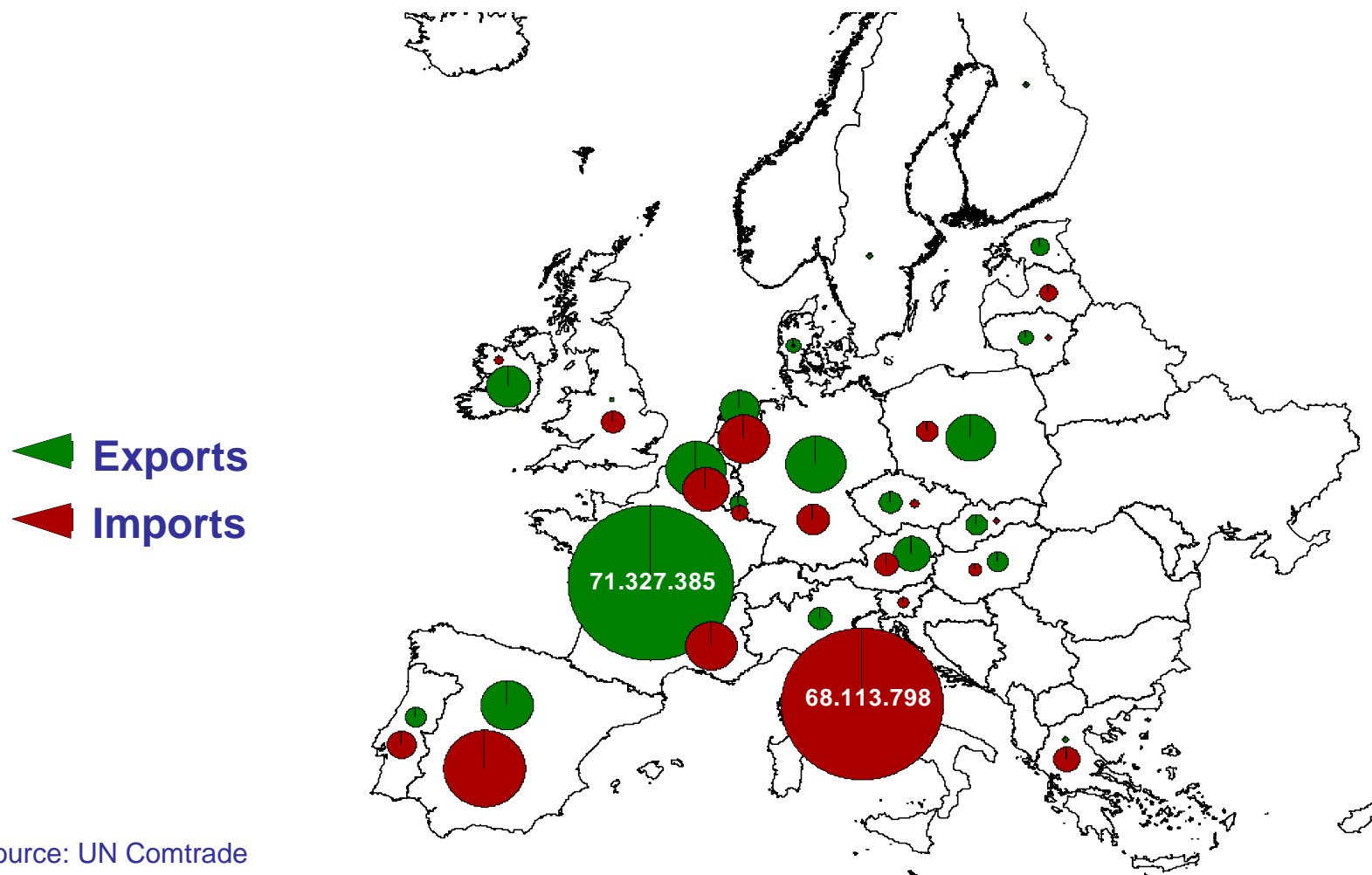
- Higher milk yields
- More structural change?
- Technical progress

Suckler cows

- Less cows
- Second pillar?
- Land prices?

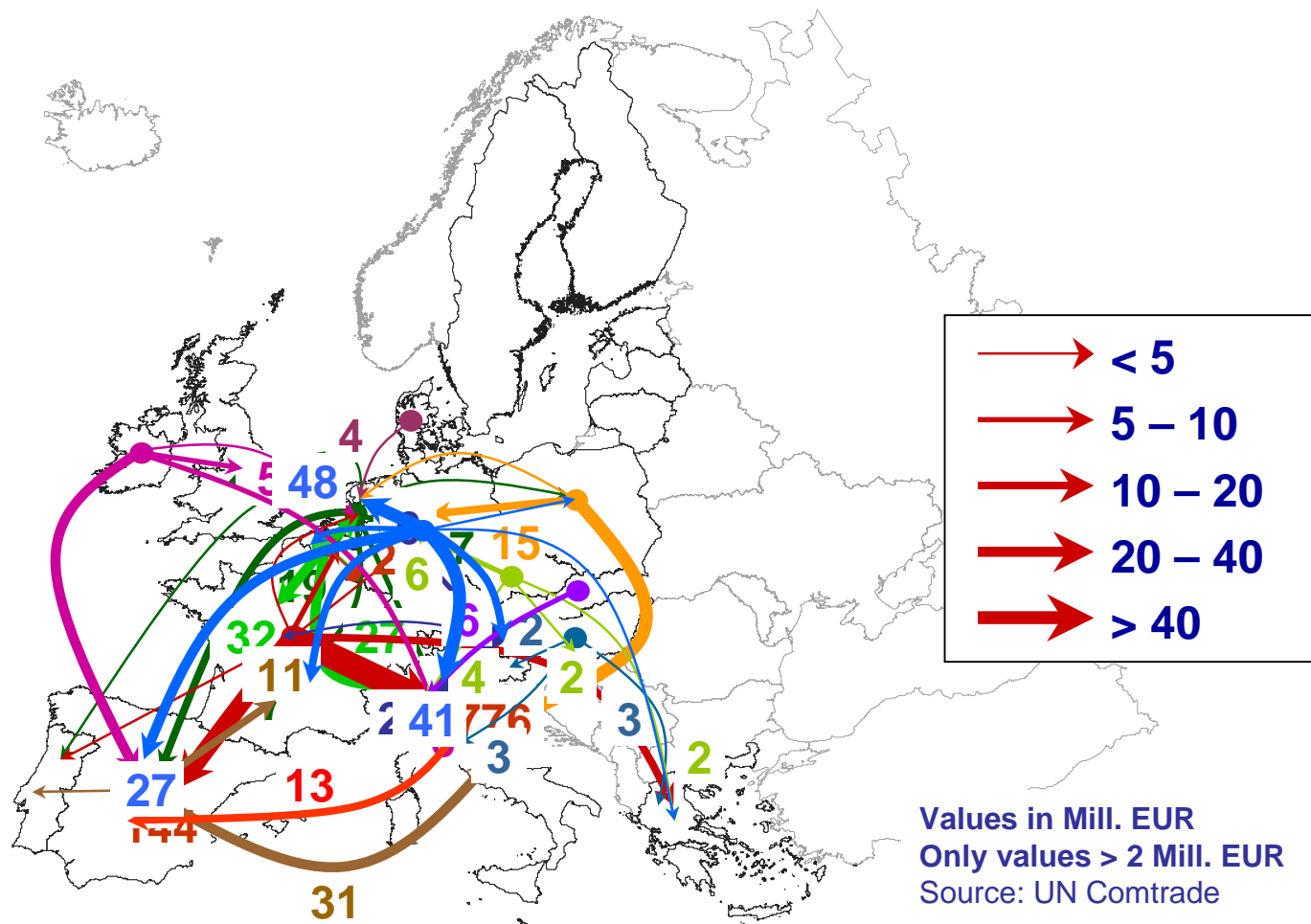
Cattle live trade values in the EU-25

– Average of the years 2001-2003, mill. EUR



Destinations of live cattle in the EU-25

– Average of the years 2001-2003, mill. EUR



Development of the calf numbers from dairy cows in the EU-25 (2003-2013)

Initial values in 2004

Number dairy cows	23.500.000 Head
Milk yield per cow	5,875 kg/cow/year
Milk quota 2004	138.074 Mio. kg
Milk quota 2013	141.307 Mio. kg
No. calves per cow	0,9 calves/cow/year
Replacement rate	30% annual



Annual development of milk yield in %	Male calves Number	Female calves Number	Total Number	%	
2013 vs. 2004	1,0%	-805.680	-268.560	-1.074.240	-8%
	1,5%	-1.230.366	-410.122	-1.640.487	-12%
	2,0%	-1.634.637	-544.879	-2.179.516	-15%
	2,5%	-2.019.569	-673.190	-2.692.758	-19%
	3,0%	-2.386.173	-795.391	-3.181.564	-23%



Development of suckler cow numbers in the EU-25 (2003-2013)

France
(100 % coupled)

+/- 0 % suckler cows

Spain
(100 % coupled)

+/- 0 % suckler cows

UK
(0 % coupled) *

- 10 % suckler cows
- 1,5 % in EU

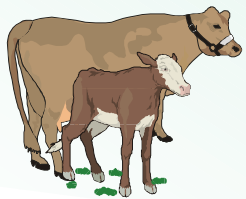
Ireland
(0 % coupled)

- 15 % suckler cows
- 1,5 % in EU

Germany
(0 % coupled)

- 30 % bis - 40 % suckler cows
- 2-3 % in EU

**Total EU:
Less than - 10 %**



Development of the calf numbers from suckler cows in the EU-25 (2003-2013)

**Initial-values
2004**

Number suckler cows

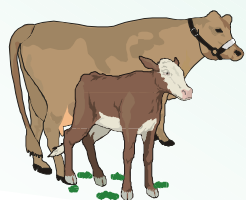
12.300.000 Head

Calves per cow

0,85 Calves/cow/year

Replacement rate

15% annual



**Annual development
of suckler cows**

**Male calves
Number**

**Female calves
Number**

**Total
Number**

%

**2013
vs.
2004**

-5,0%

-234.630

-164.241

-398.871

-5%

-10,0%

-467.962

-327.573

-795.535

-9%

-15,0%

-699.855

-489.898

-1.189.753

-14%

-20,0%

-930.144

-651.100

-1.581.244

-18%

-25,0%

-1.158.632

-811.042

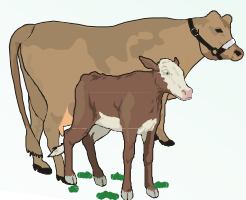
-1.969.674

-23%



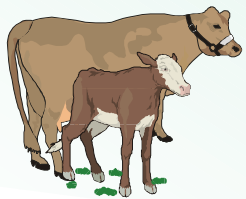
Development of calf numbers in Germany (2003-2013)

Total calf supply	From to	
	Number	%	Number	%
Dairy calves				
Male	-136.084		-412.108	
Female	-45.361		-137.369	
Total	-181.446	-7%	-549.478	-22%
Suckler calves				
Male	-13.842		-69.211	
Female	-9.690		-48.448	
Total	-23.532	-5%	-117.659	-25%



Consequences

- The decrease in calf numbers from the dairy herd is for sure as long as the quota system exists.
- Options to maintain beef production stable:



More calves from
suckler cow herd

More suckler-cows only
without payments (Plafond)

Sufficient calf price
= sufficient beef price

Productivity increase

Production of adult animals
instead of calves

Where does the veal come from?

Max. 20 % substitution effect

Import of beef or live calves
from Extra-EU

Further uncertainties

- How will the next WTO-agreement look like?
More competition from non-EU states
- Will there be a MERCOSUR-EU agreement?
More competition from Argentina and Brazil
- How promising are the market opportunities in the New Member States? **Increased export possible**
- Will there be more quality awareness among German customers? **Willingness to pay would increase**



Conclusions for Germany

- Beef production and suckler cow numbers to drop
- Significantly less beef producers
- More structural change, more specialisation
- Remaining beef producers more competitive
- Germany loses market shares against countries with partial (de)coupling, mainly in cow-calf
- Consumption unchanged
- More pressure from imports
- Quality improvements and vertical integration necessary



We love eating beef!



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