



# Latest developments in global meat markets

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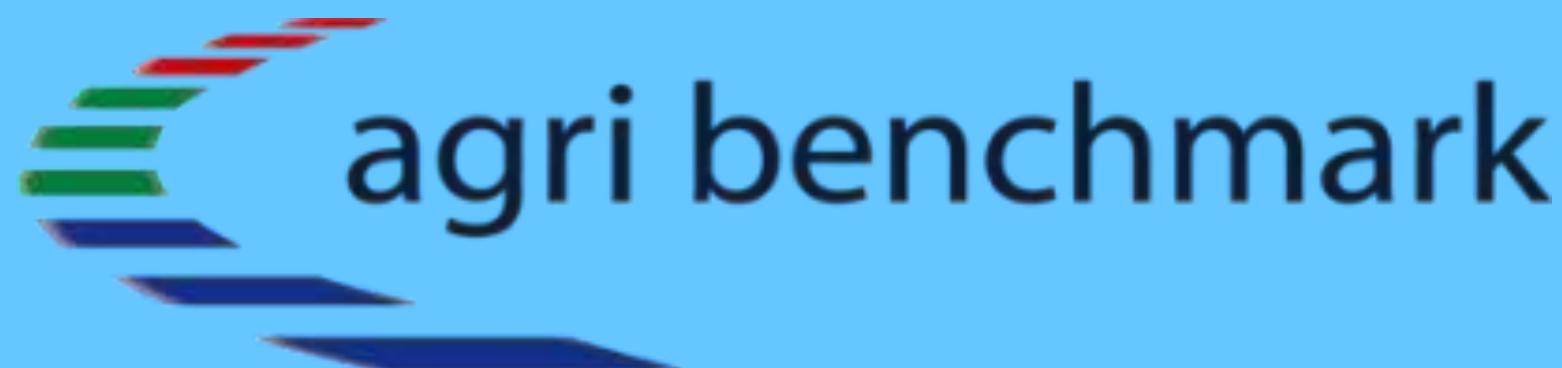
Thünen Institute of Farm Economics



# Content

1. *agri benchmark*
2. Consumption and production
3. Trade
4. Prices and their developments
5. Farm level results
6. Free trade (TTIP) between the US and the EU

**The project behind the data and the people**



# *agri benchmark* – understanding agriculture worldwide



- Our core competence:  
**Production systems and their economics**
- An expert network which started in 2002 >>> more than just data
- Global, non-profit, independent >>> credibility
- Standardised methods >>> global comparability
- Reflecting framework conditions and drivers >>> comprehensiveness

# Target groups and relevance

## Non-profit organisations

- Address global challenges with global overview and systematic expertise locally

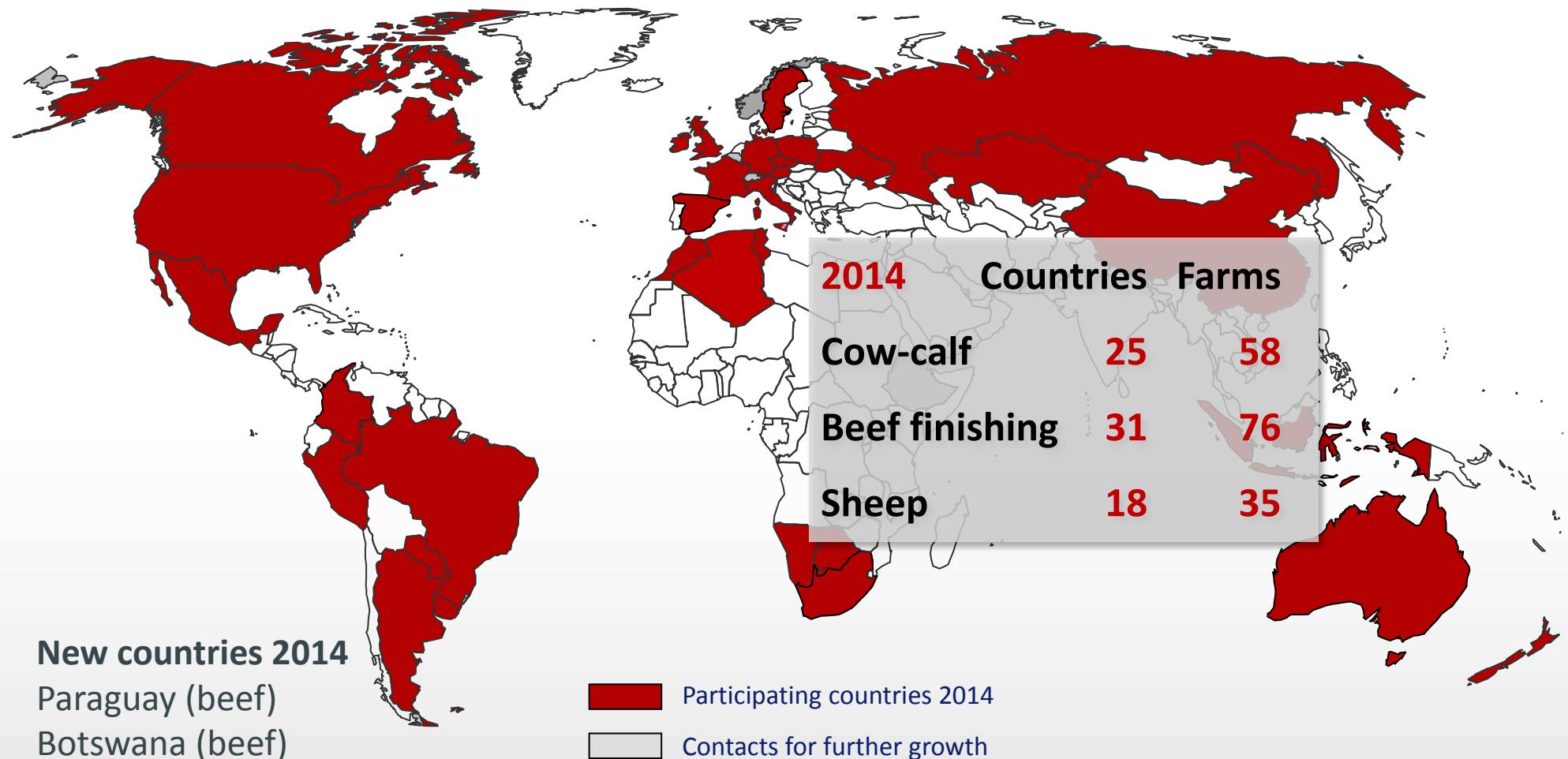
## Producers and their organisations

- Align future production through benchmarking and positioning

## (Agri)Businesses

- Operate successfully through in-depth understanding of markets and customers

# Countries in the *agri benchmark* Network

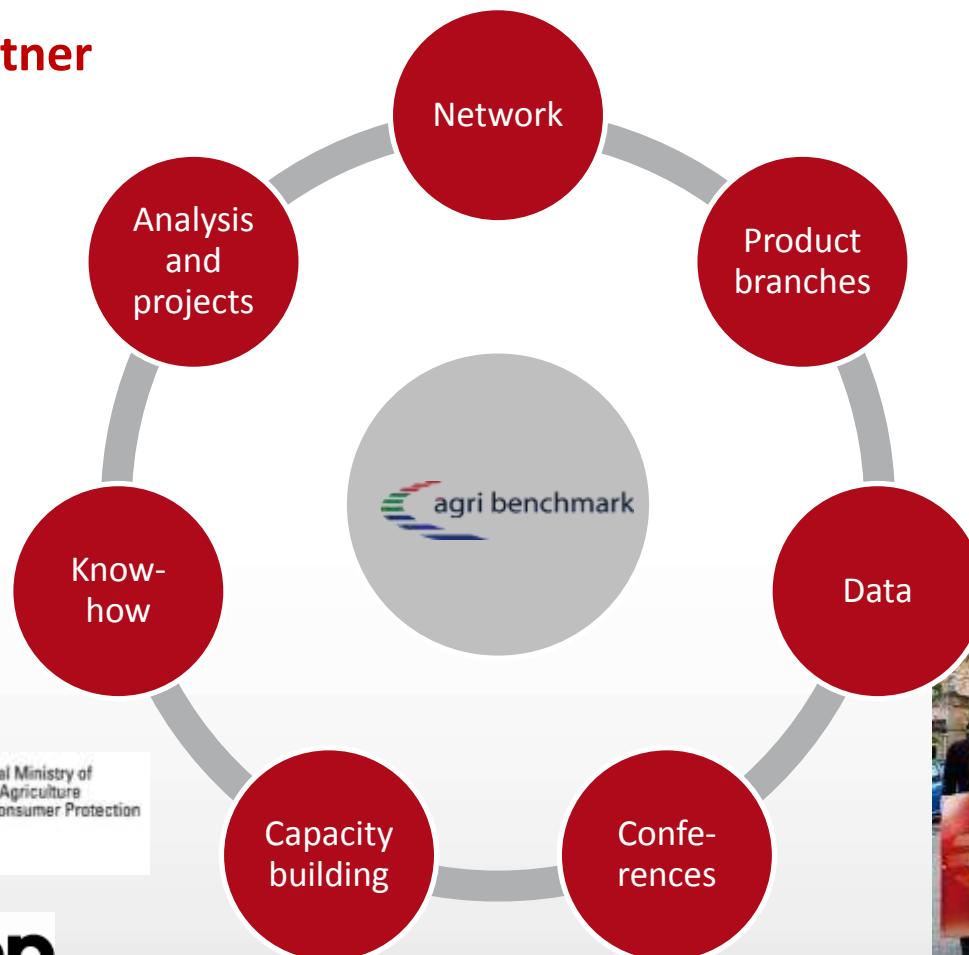


# *agri benchmark* – the main elements

## Main supporting partner



## Clients



## Coordination



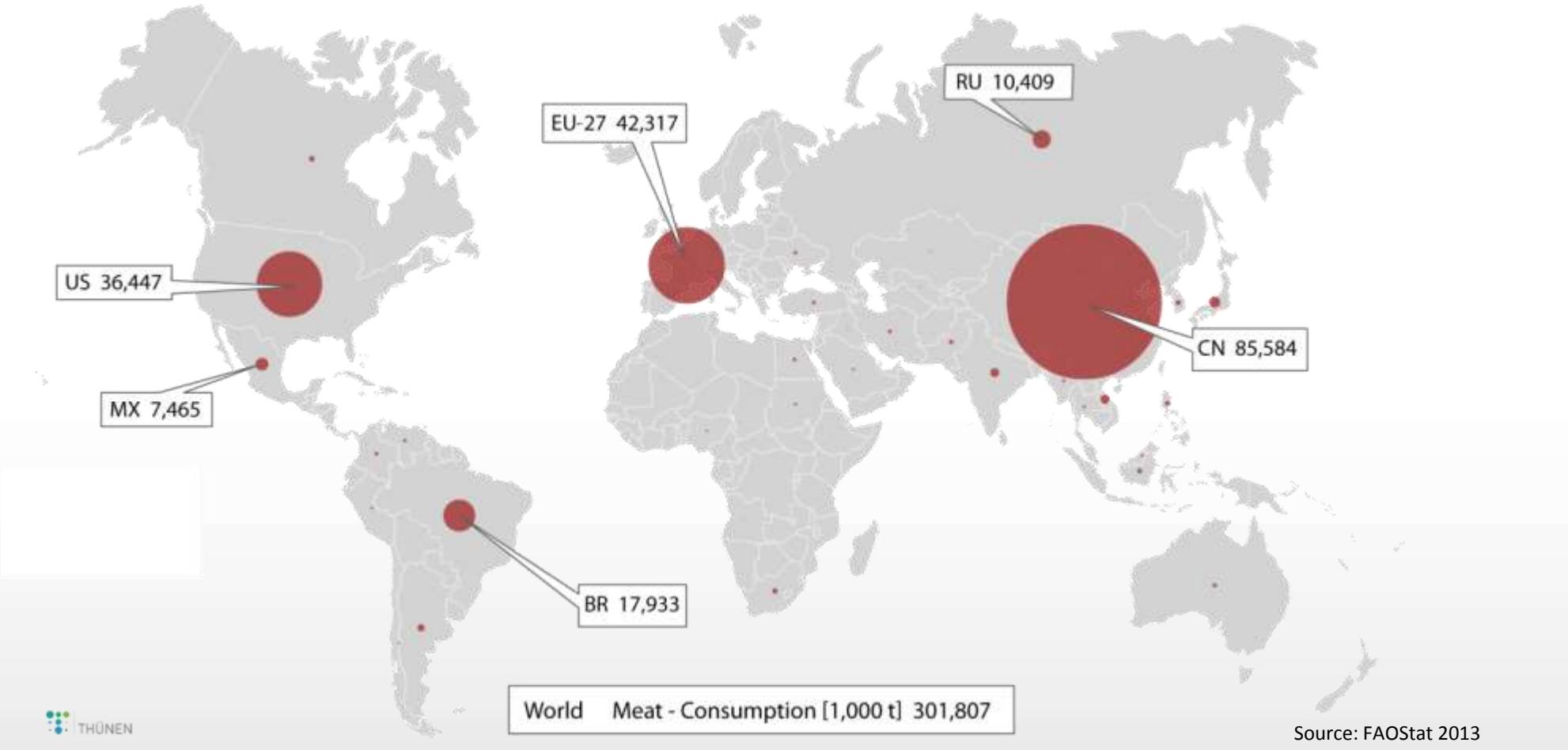
# Our research partners



# Consumption and production

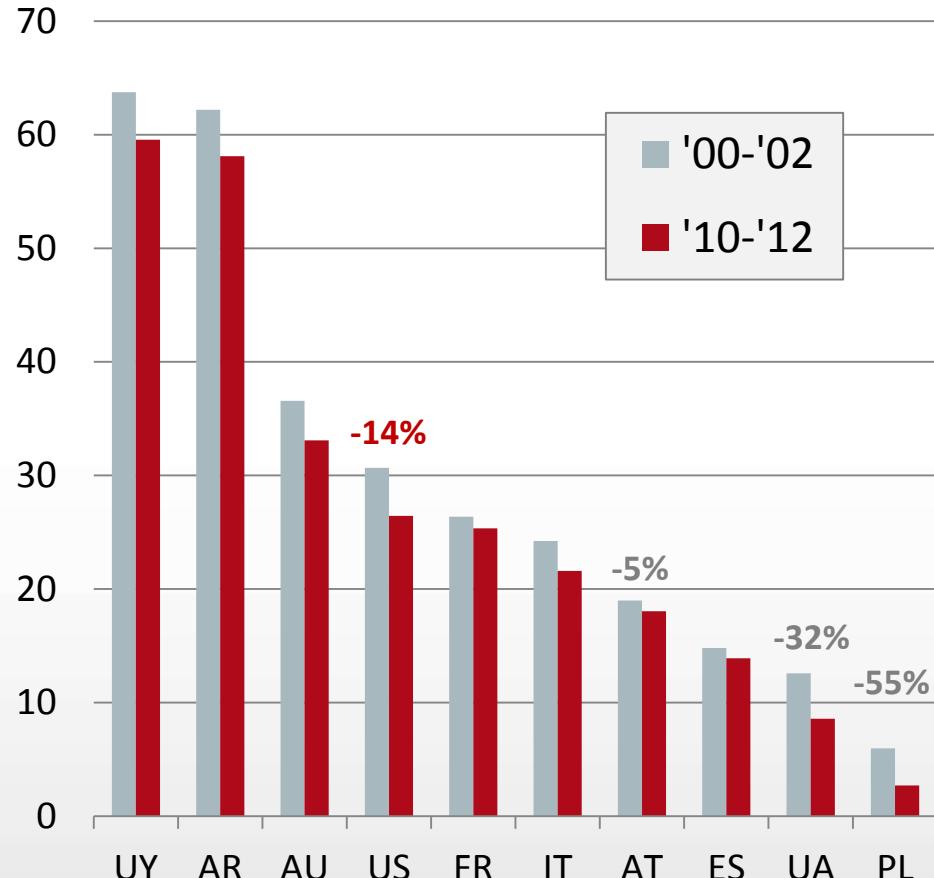


# Total meat consumption 2012 (1000 tonnes)

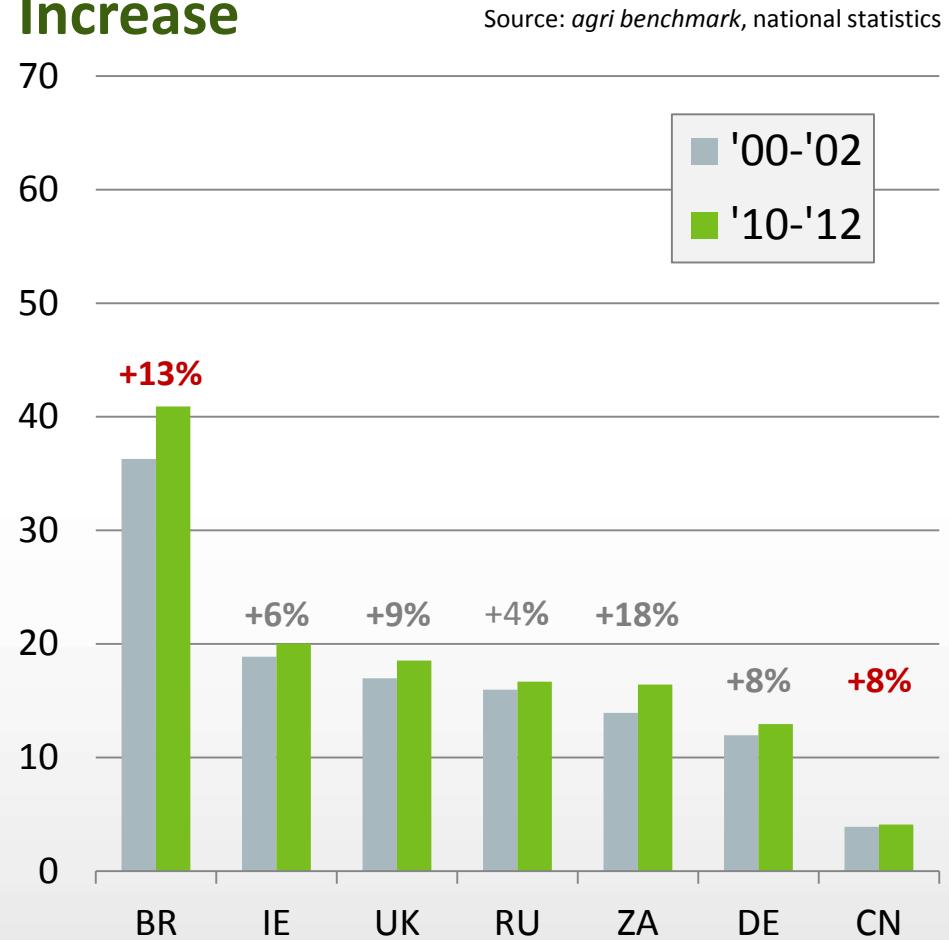


# Change of per capita consumption of beef 2010-2012 vs. 2000-2002 (kg per capita and year)

## Decrease



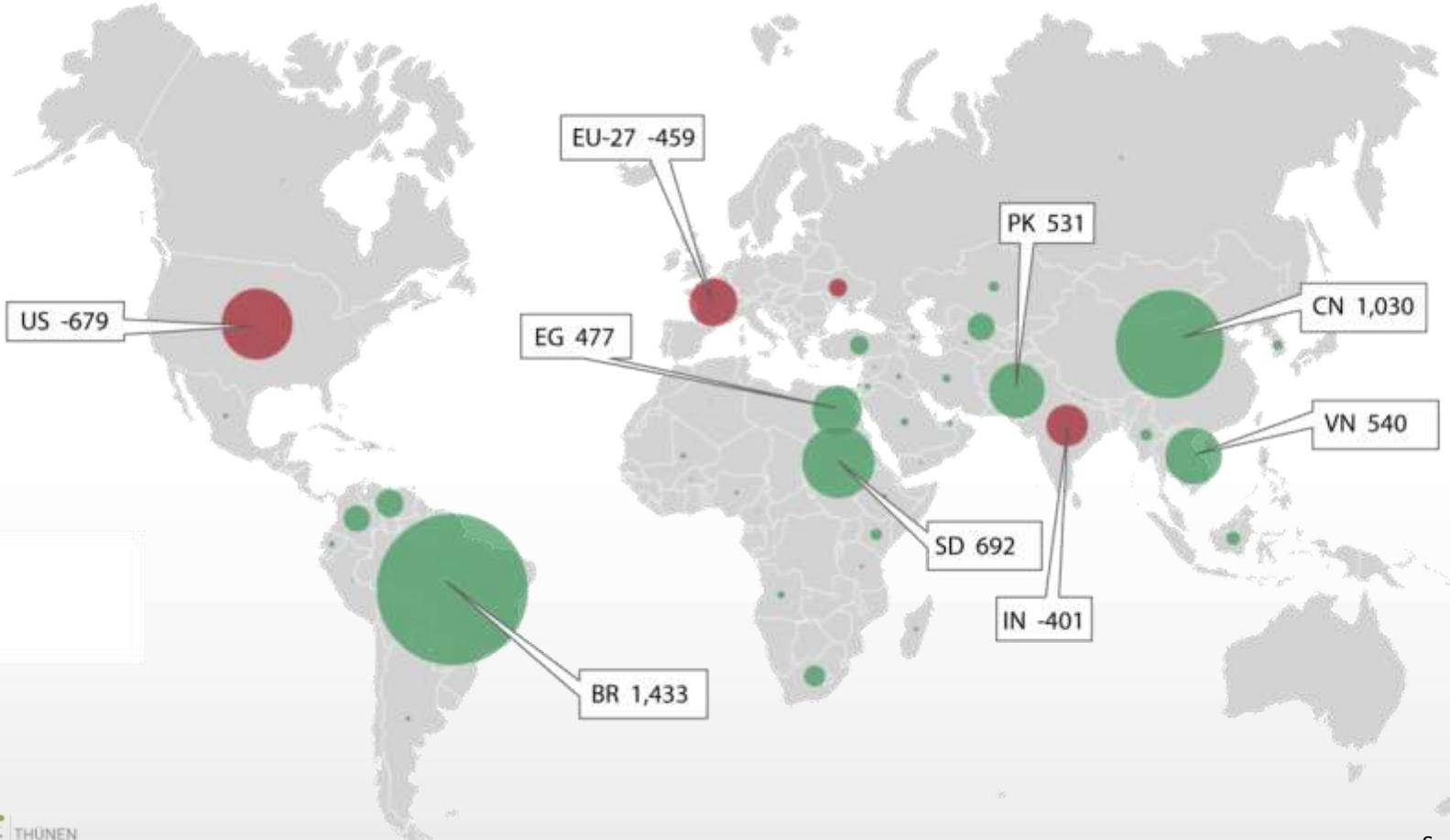
## Increase



Source: *agri benchmark*, national statistics

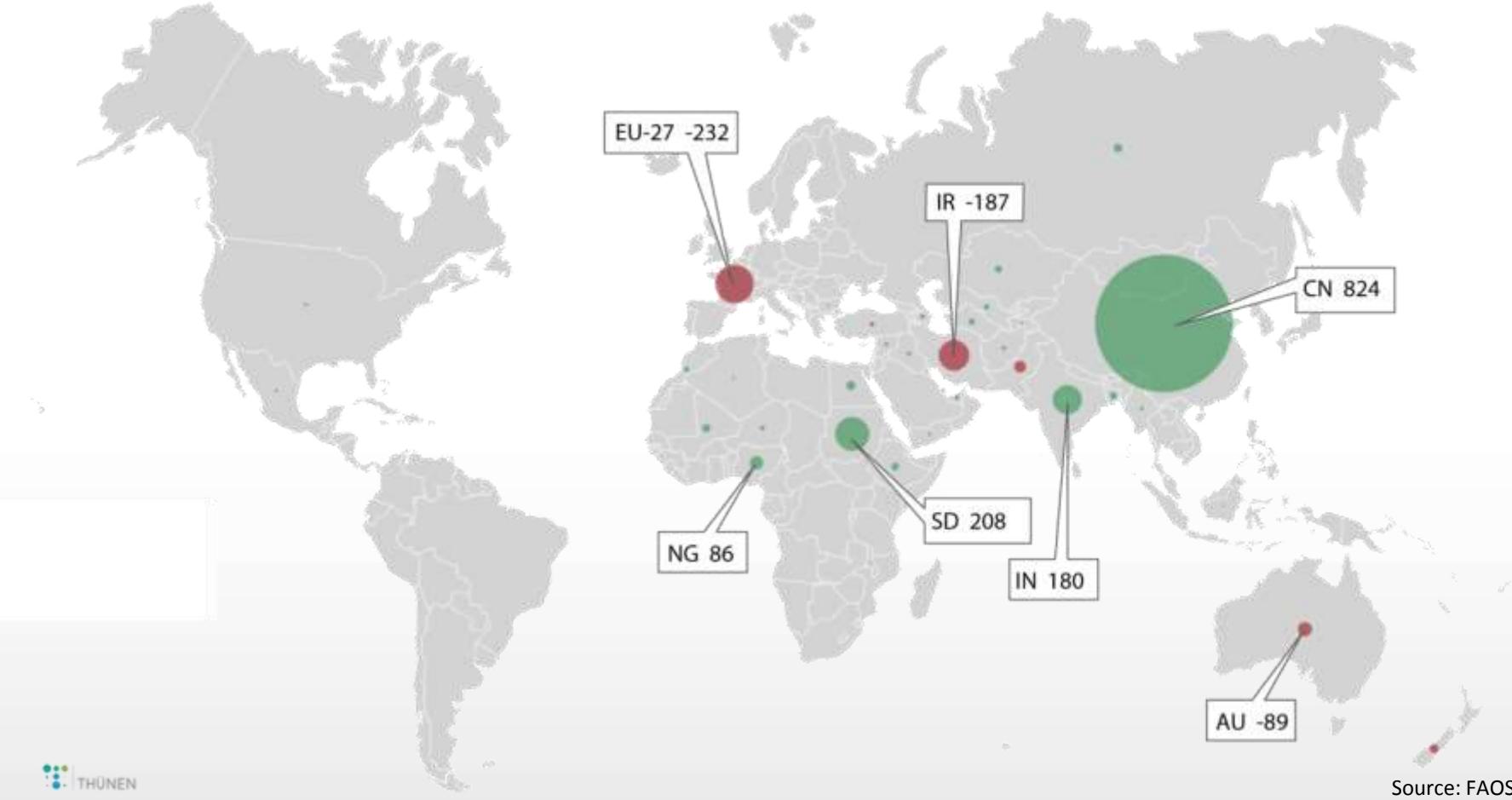
# Change in beef consumption: a mixed situation

## - 1000 tonnes 2010 - 2012 vs. 2002-2004



Source: FAOStat 2013

# China, Asia and Africa drive sheep meat consumption - change 1000 tonnes 2010 - 2012 vs. 2002 - 2004

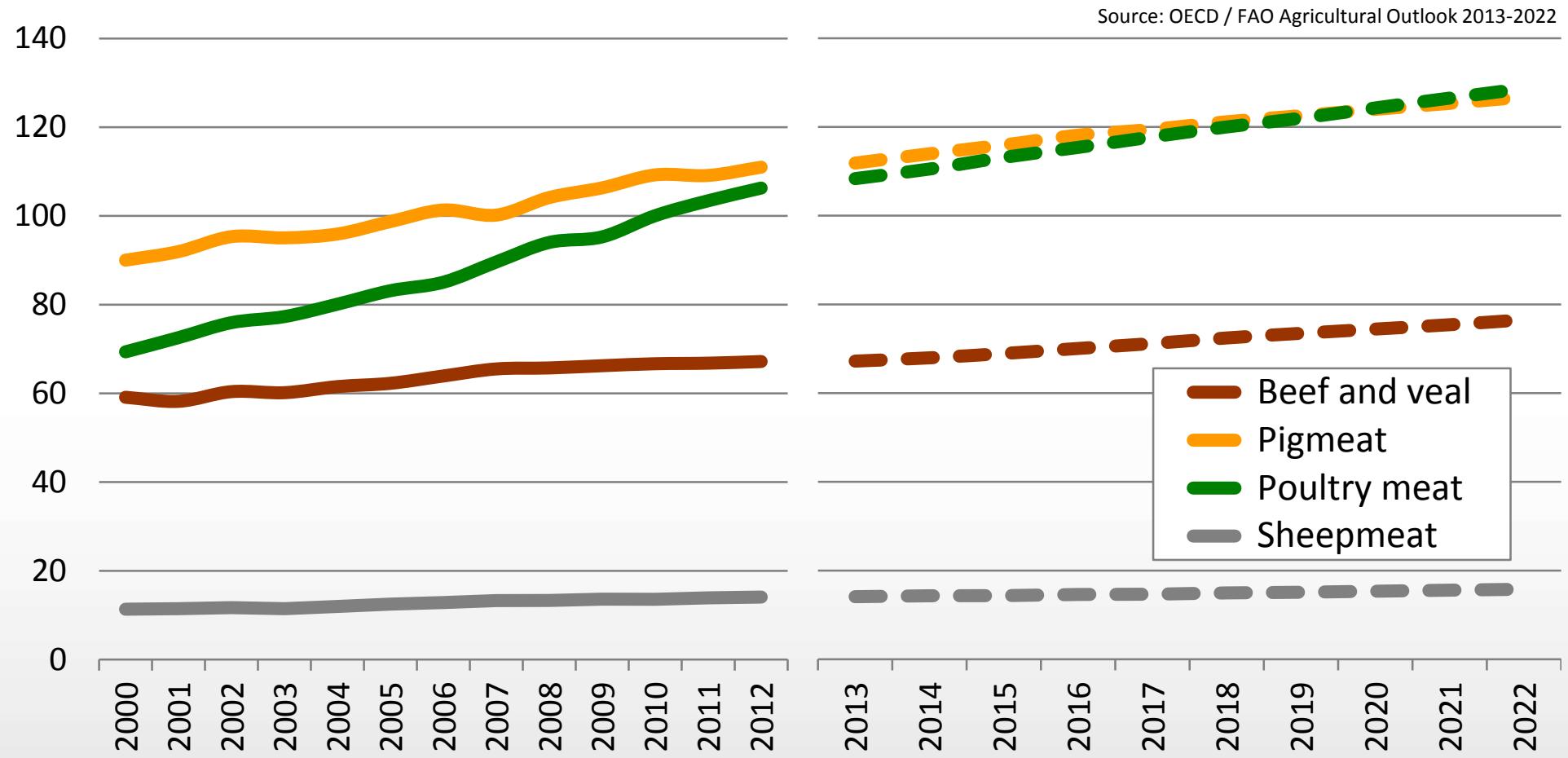


# And the winner of meat consumption is: poultry! - change (1000 tonnes) 2002 - 2004 vs. 2010 - 2012

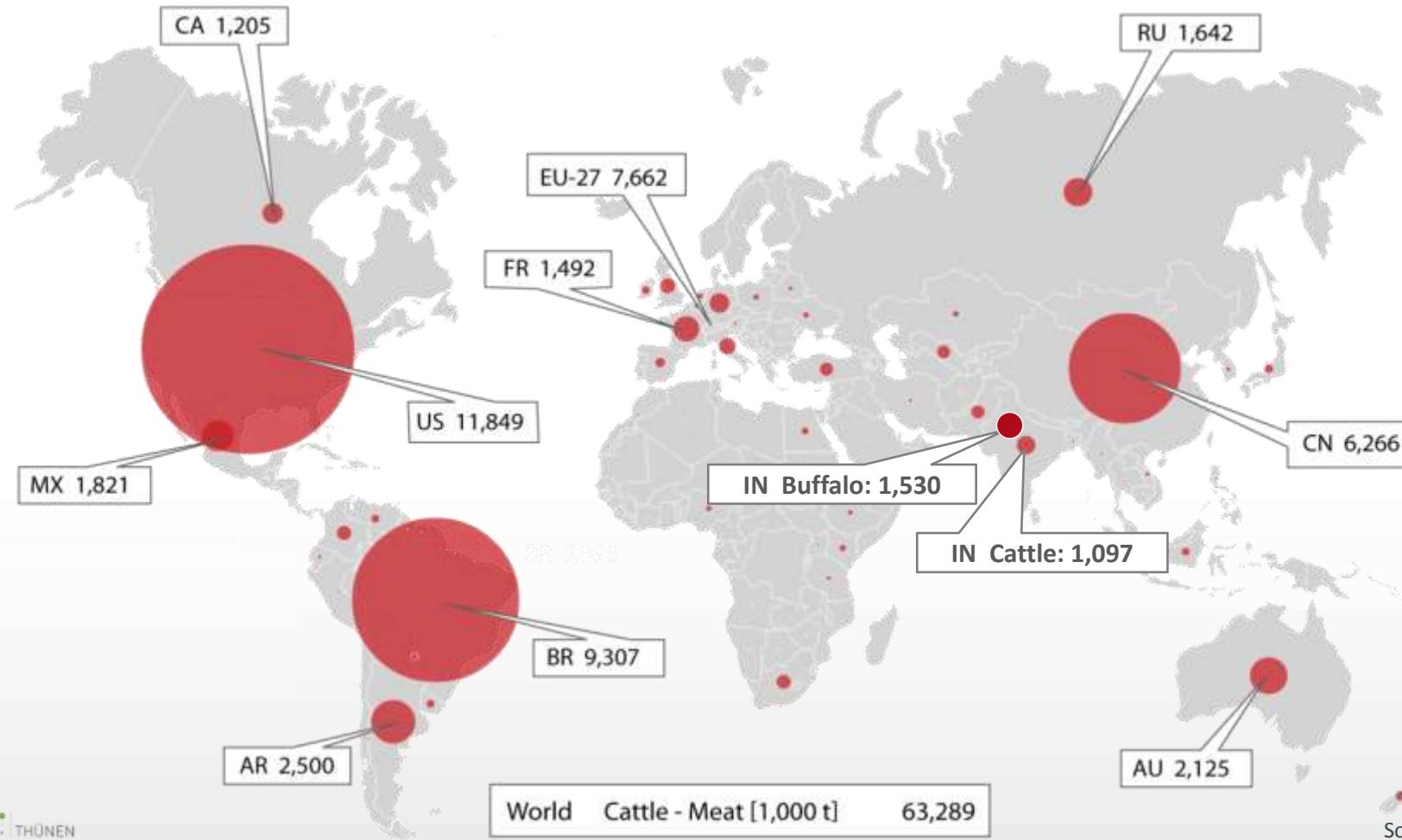


# OECD / FAO global meat production projections

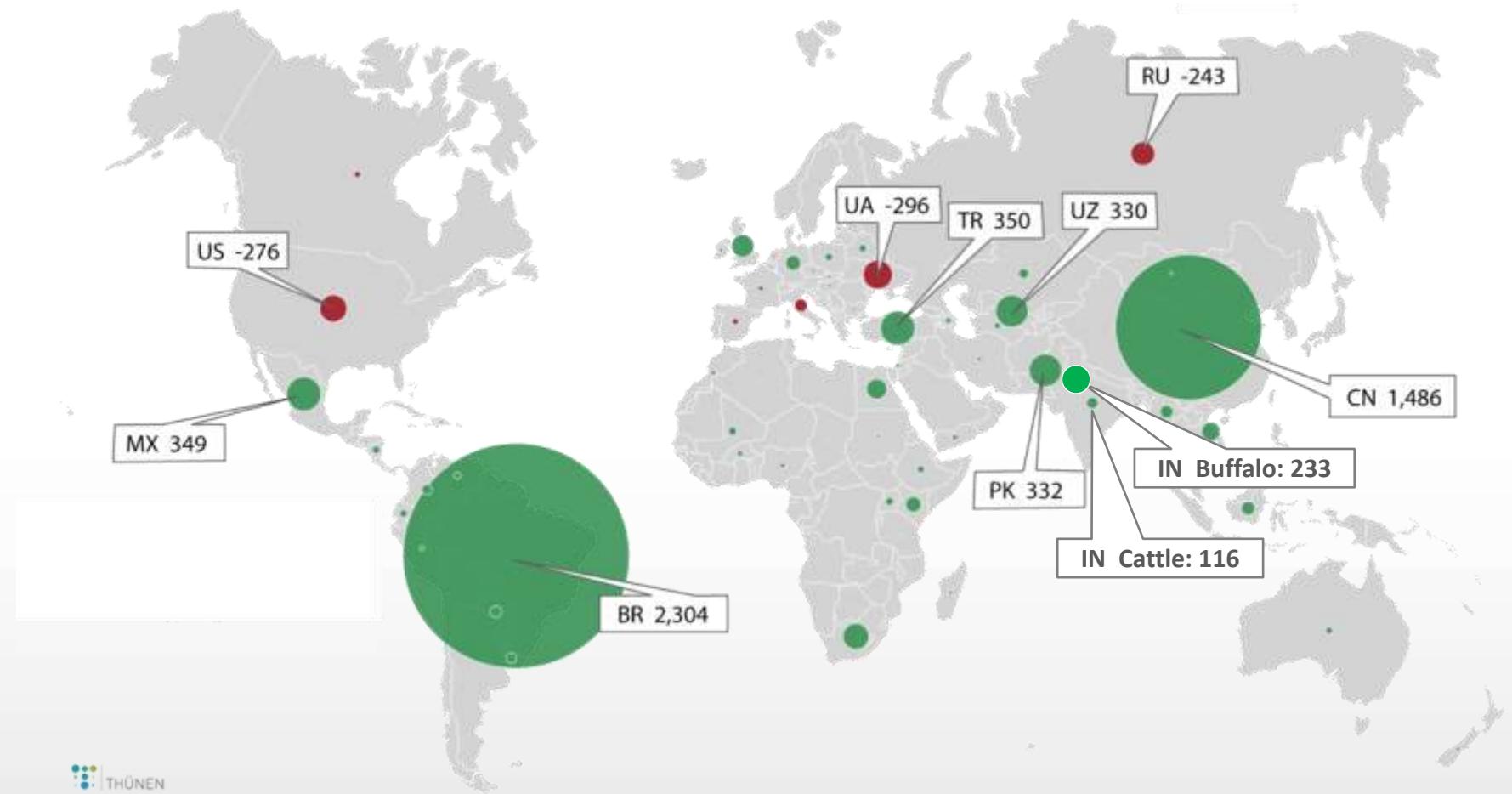
million tonnes



# US remains biggest beef producer in 2012 ('000 t)

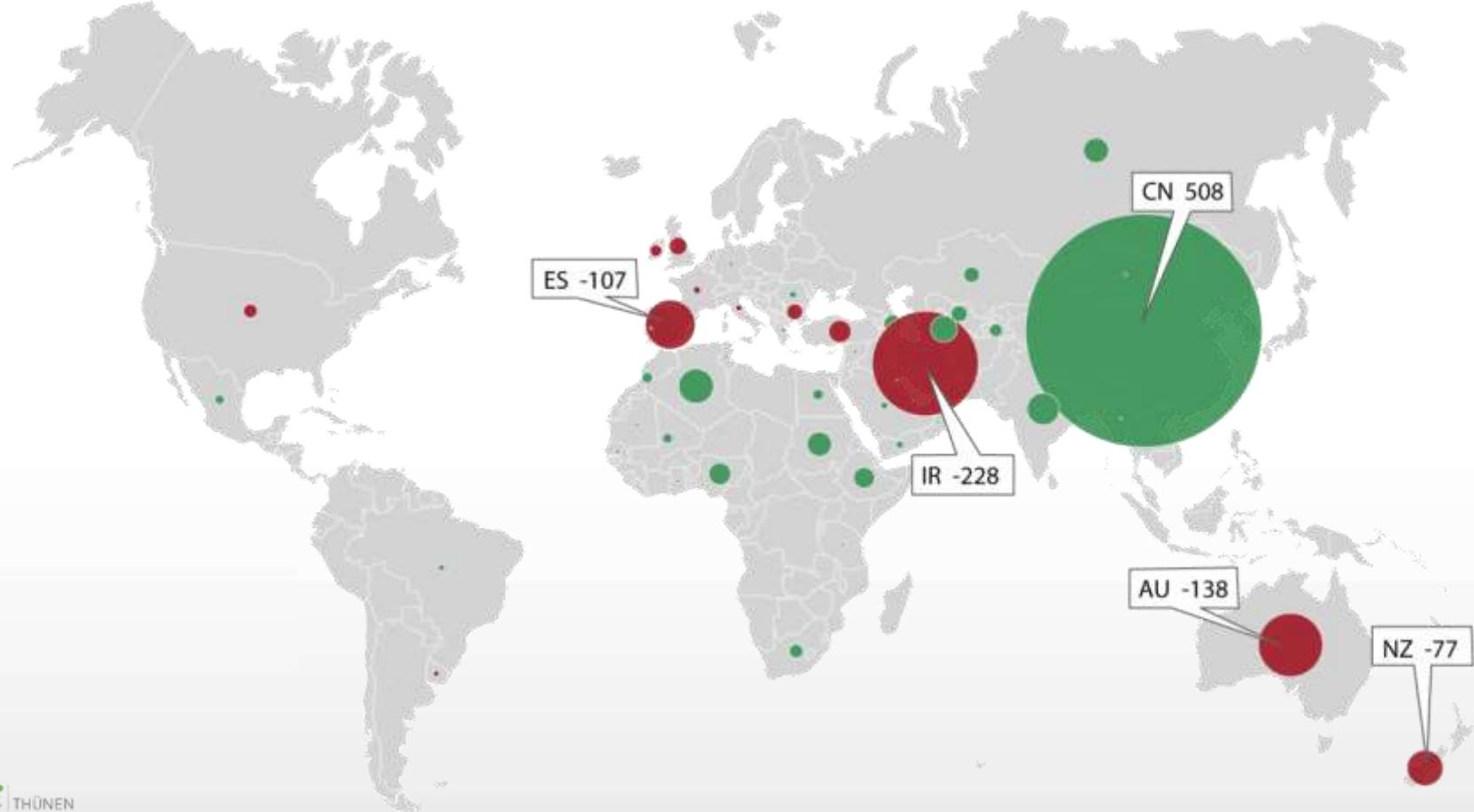


# Brazil and China driving beef production ('000 t) - change 2010-2012 vs. 2000-2002



Source: FAOStat 2014, own calculations

# China dominates sheep production and expansion ('000 t) - change 2010-2012 vs. 2000-2002

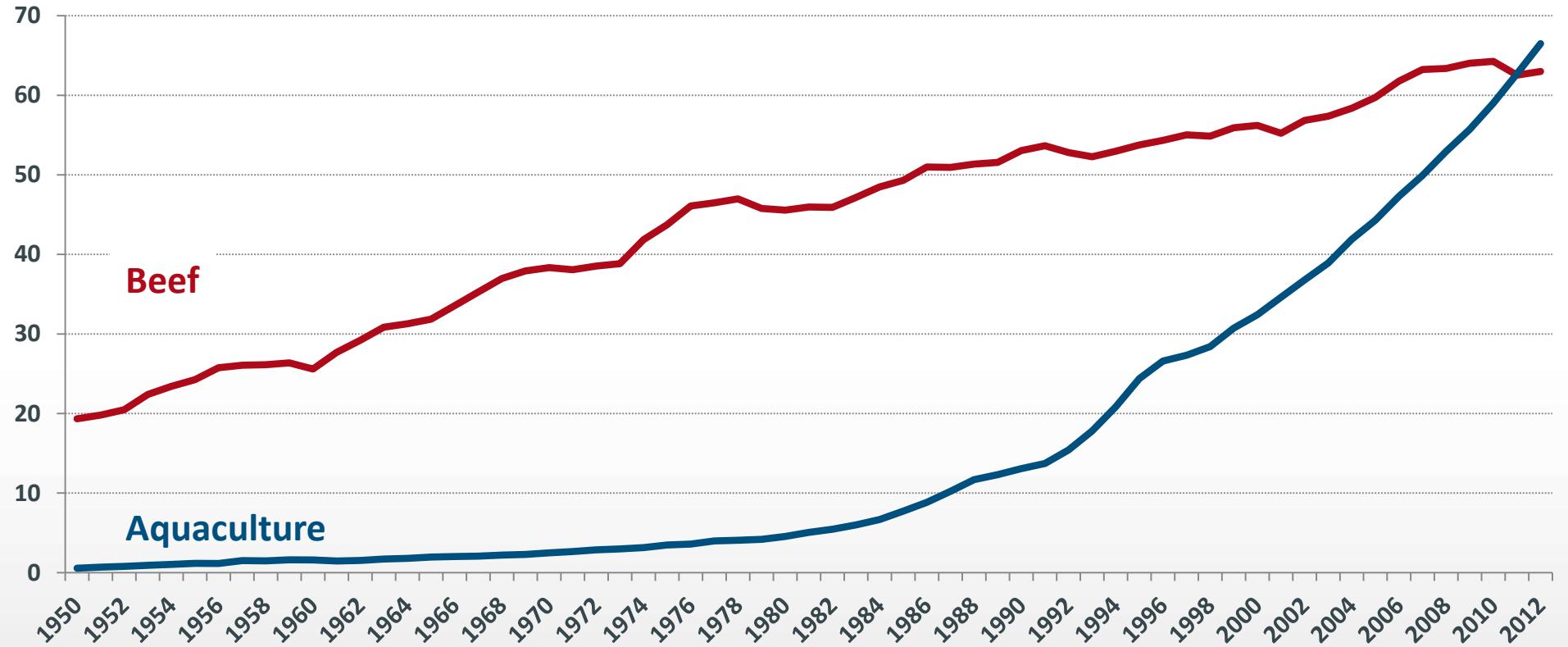


Source: FAOStat 2014, own calculations

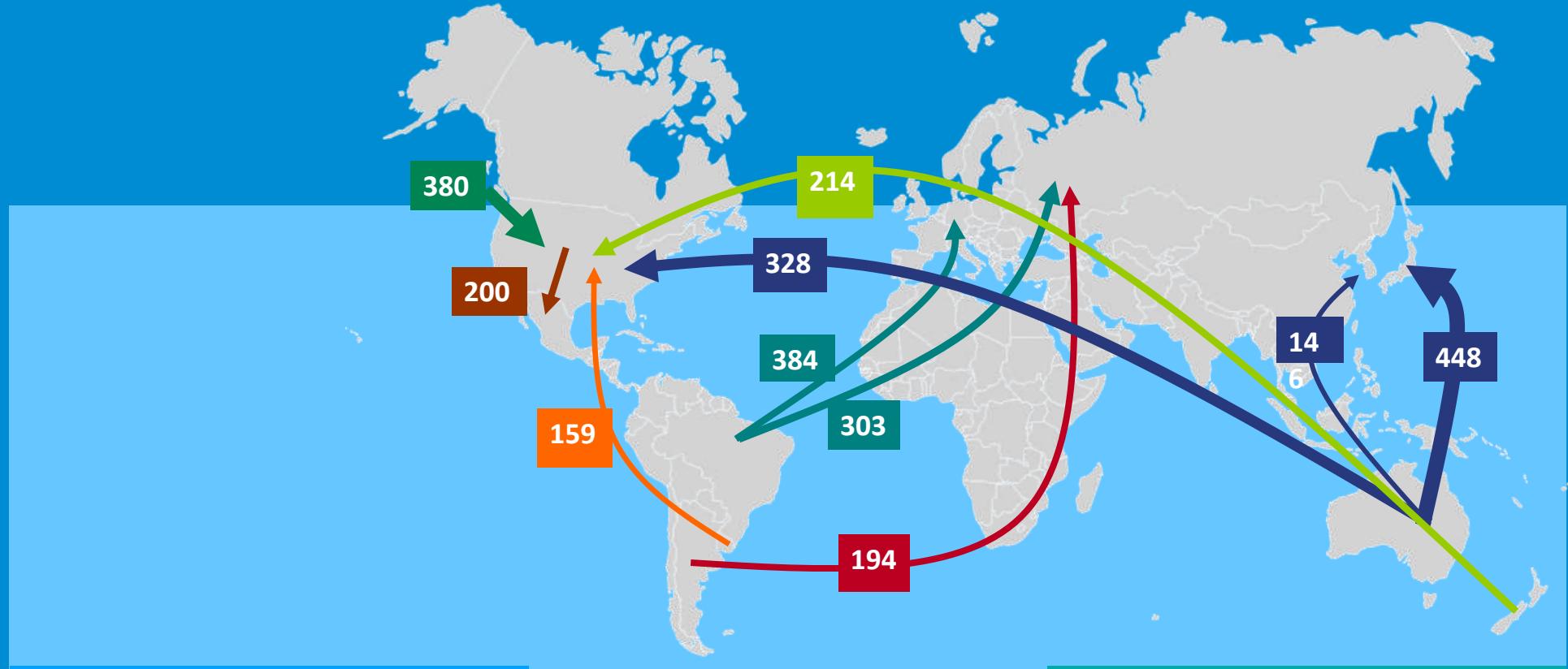
# Aquaculture overtook beef in 2012

million tonnes

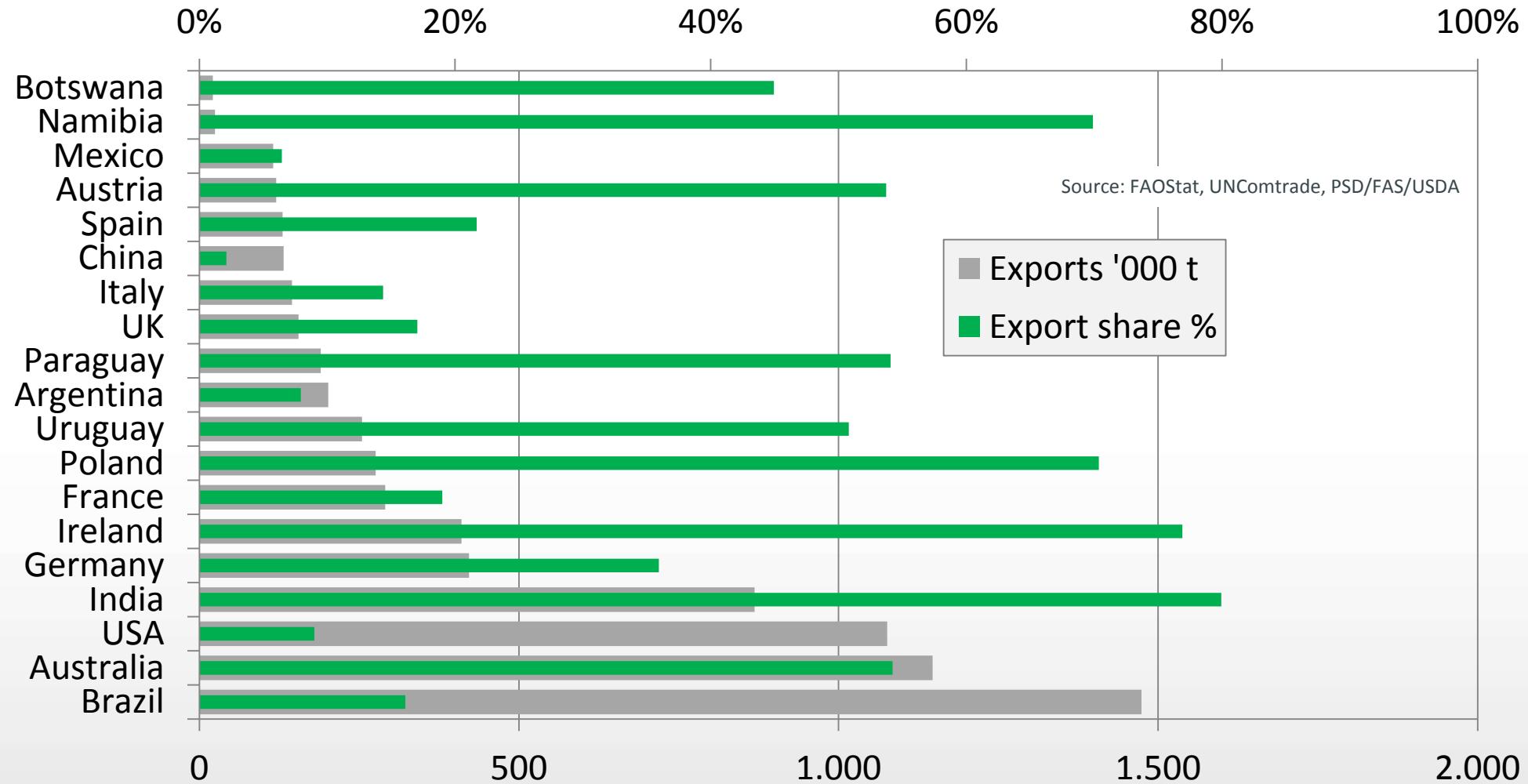
Source: Earth Policy Institute based on FAO / USDA



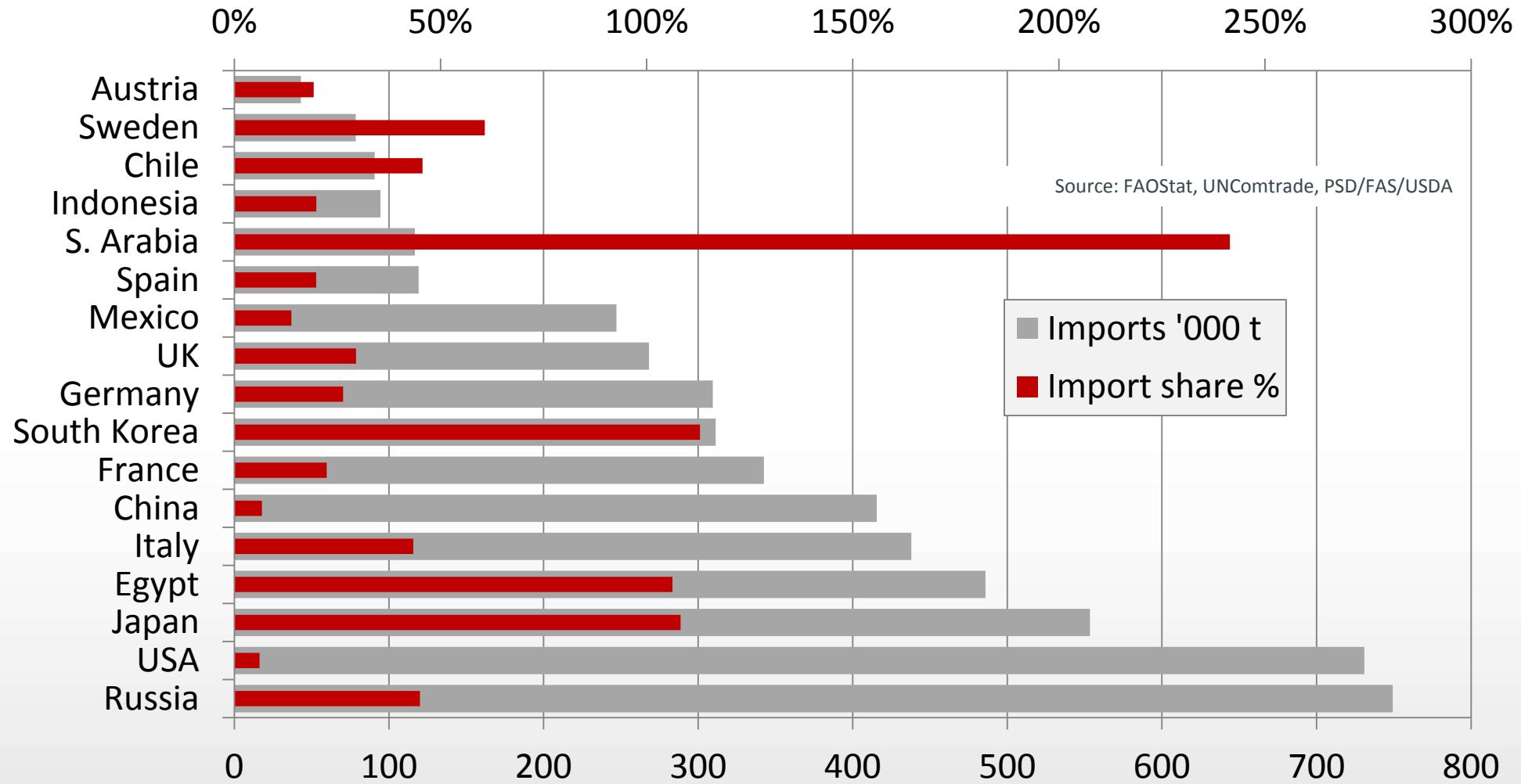
# Trade



# Beef export volumes ('000 t) ≠ export shares (export in % of production) – average 2010-2012

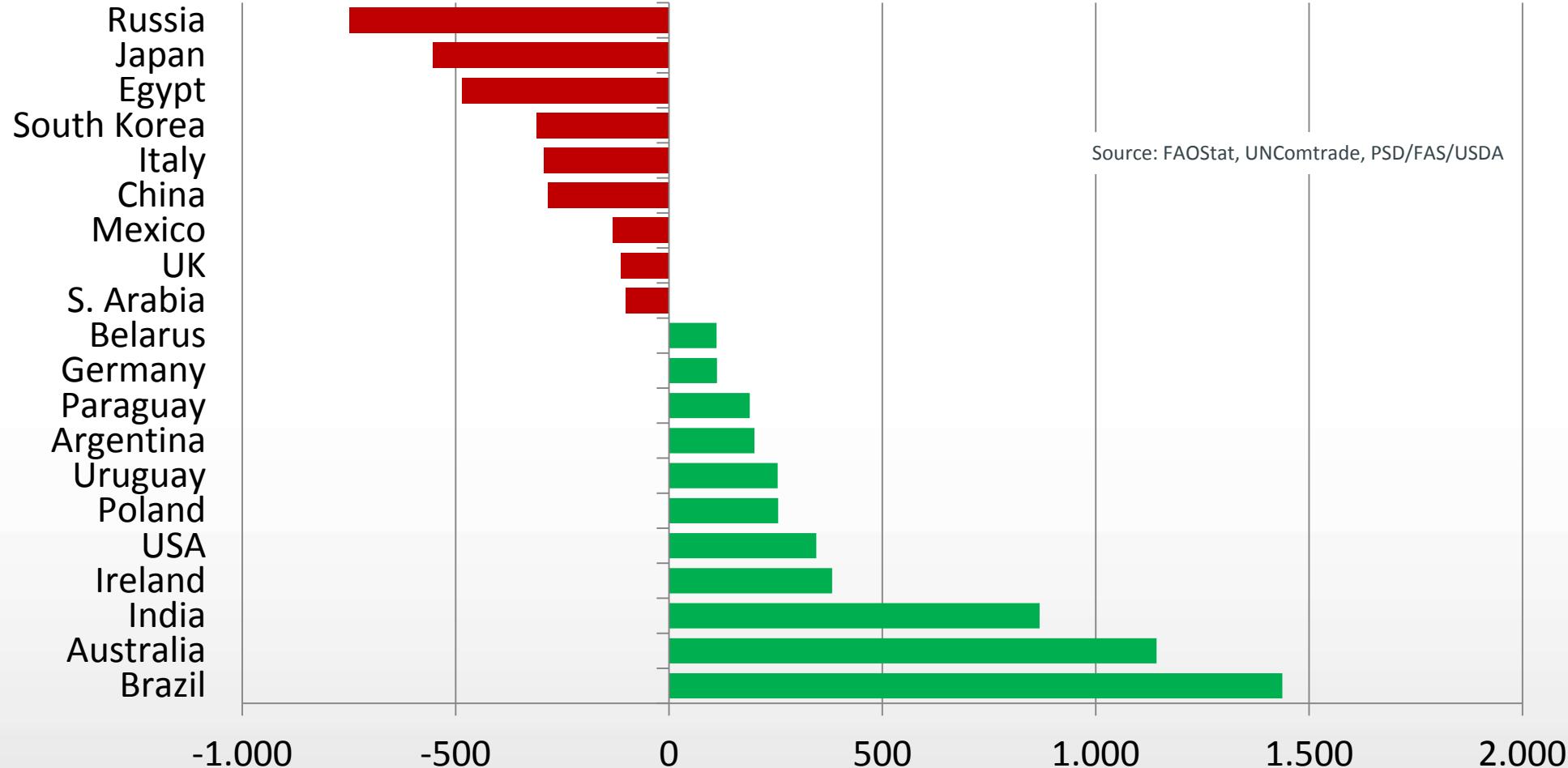


# Beef import volumes ('000 t) ≠ import shares (import in % of production) – average 2010-2012



# Beef trade balances (exports - imports) ('000 t)

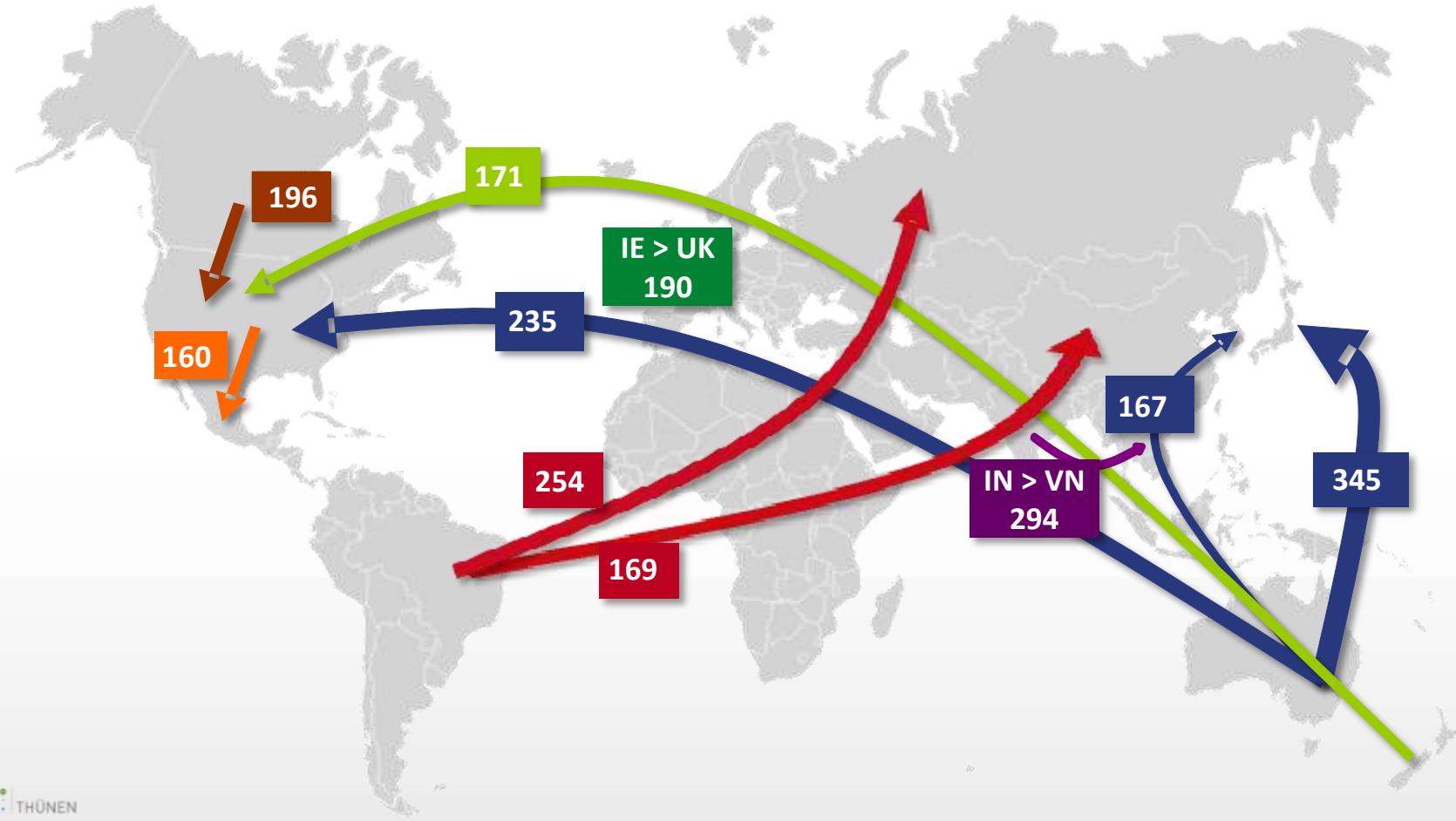
## – average 2010-2012



# Self-sufficiency of beef – average 2010-2012

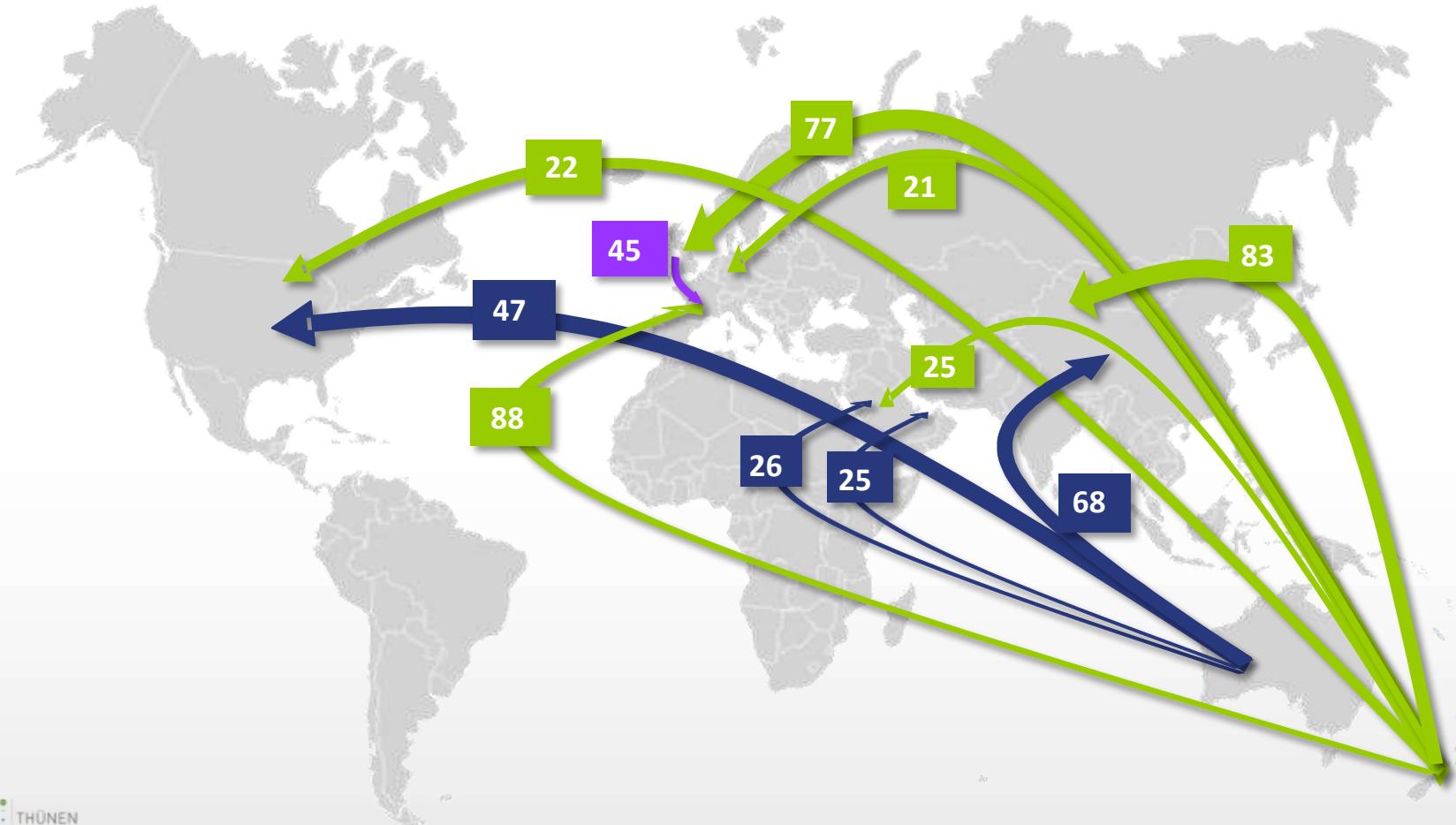


# Top 10 beef trade flows 2012 ('000 tons)

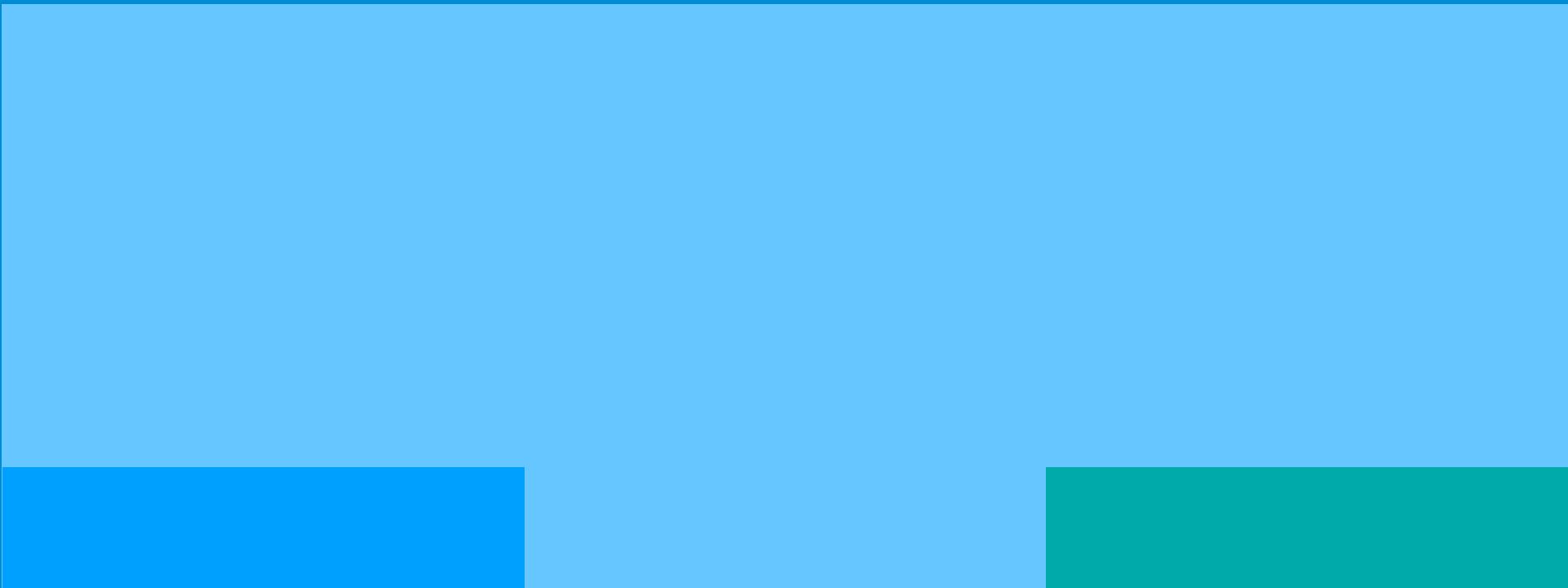


Source: UNComtrade 2014

# Top 10 sheep trade flows 2012 ('000 tons)

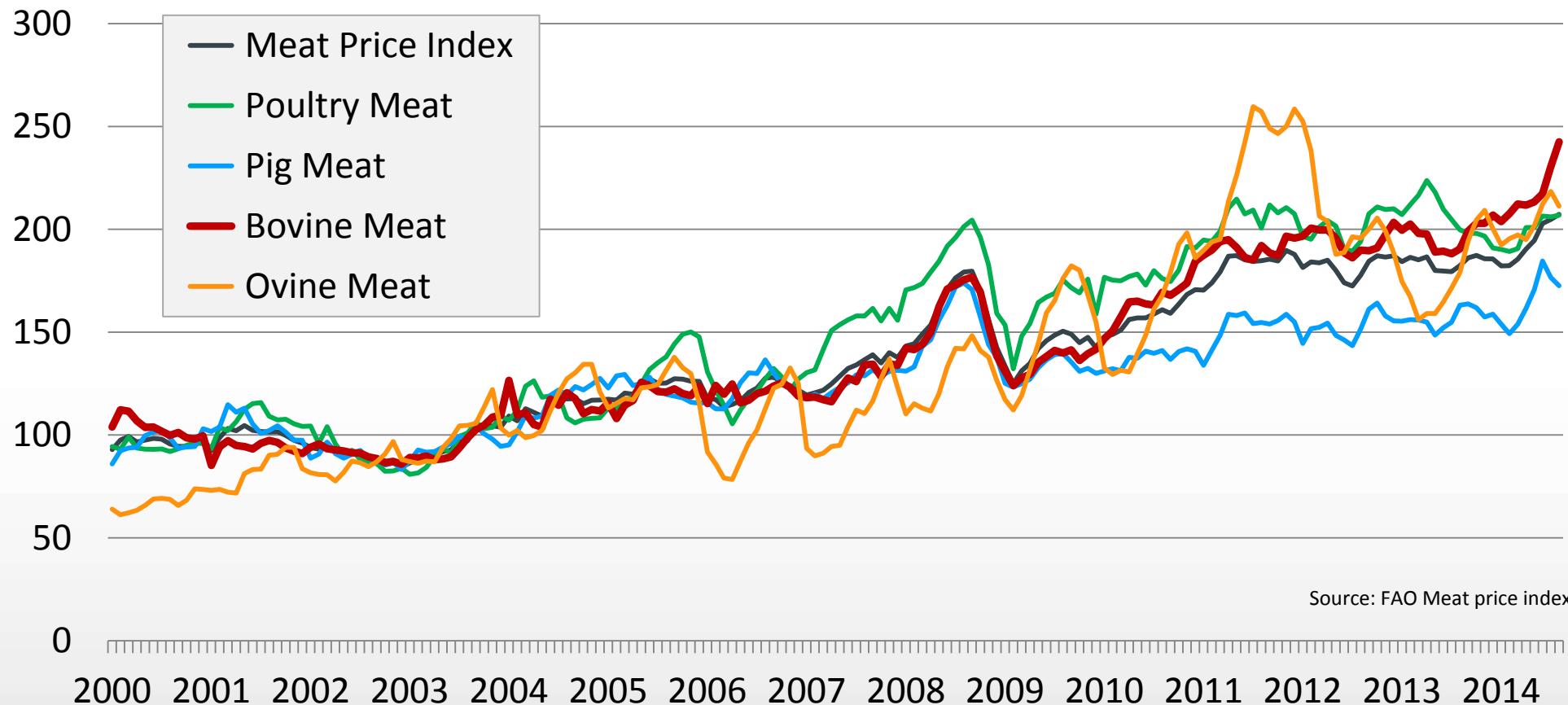


# Prices



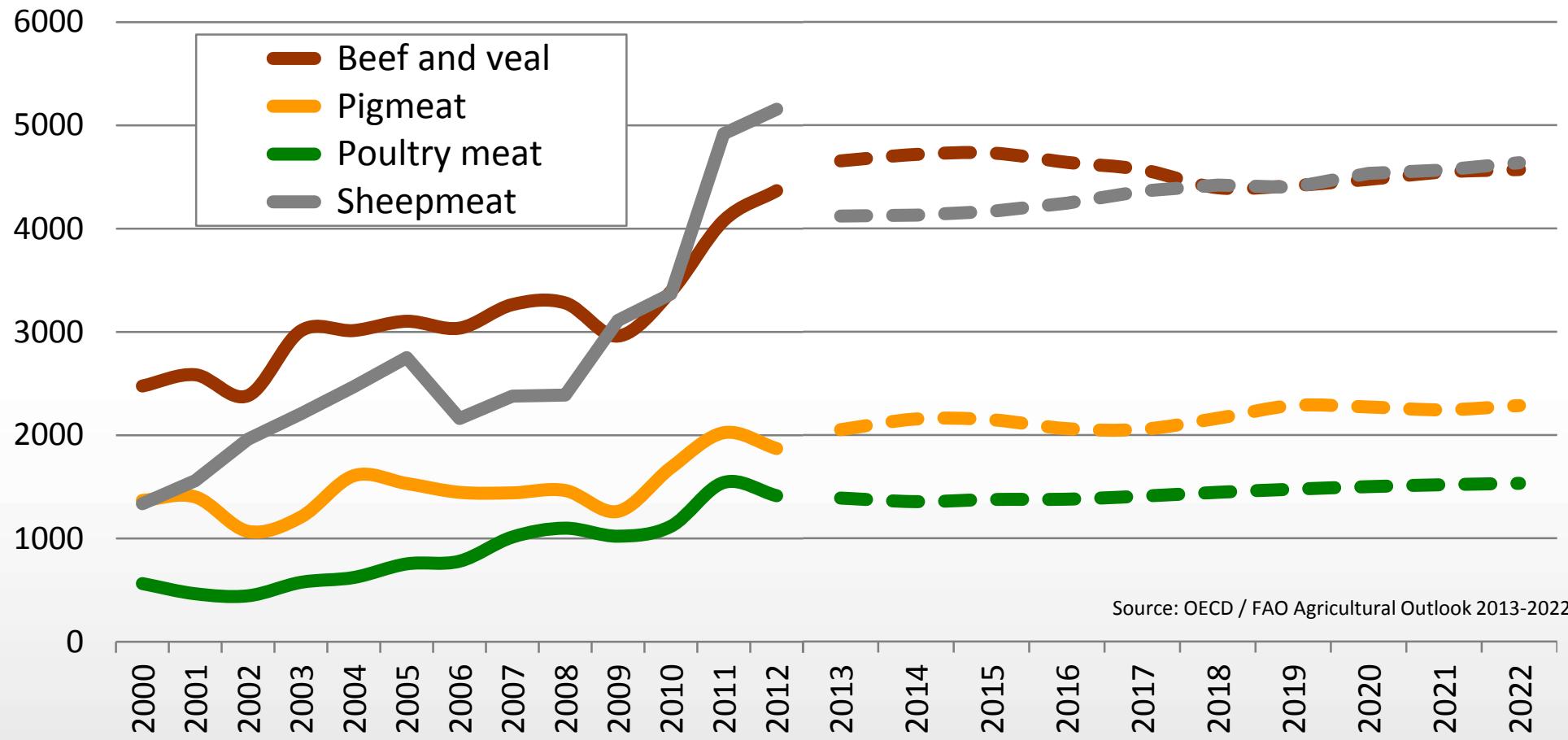
# FAO global meat price index

Index based on USD per ton prices



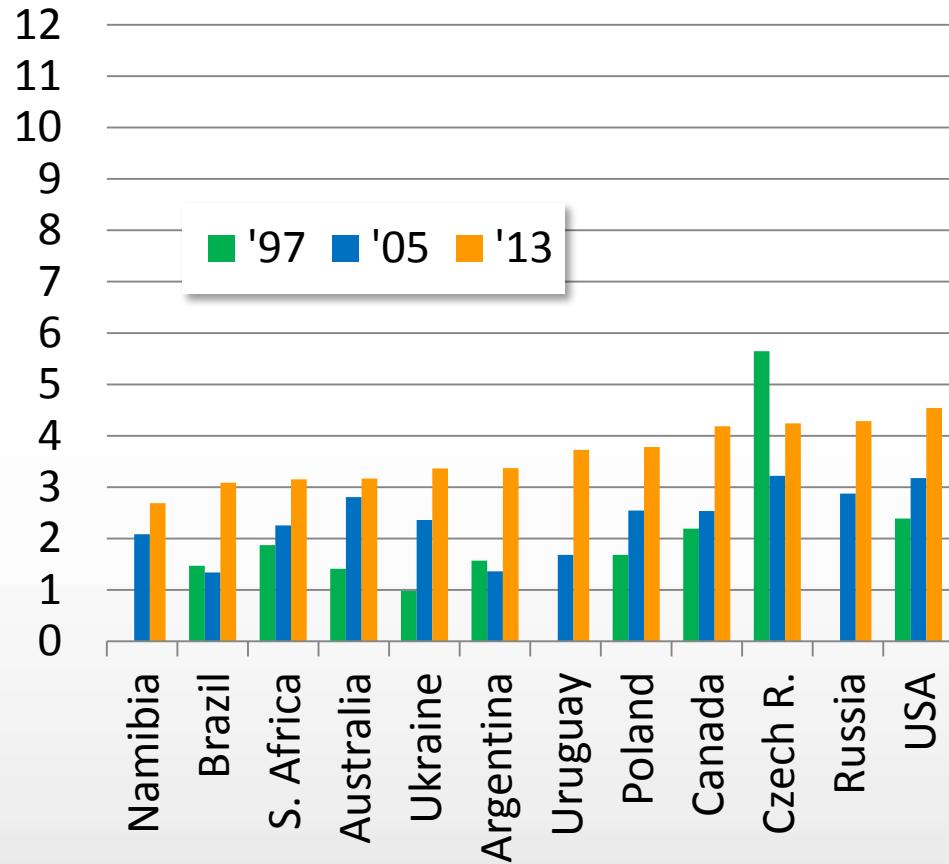
# OECD / FAO global meat price projections

USD per ton

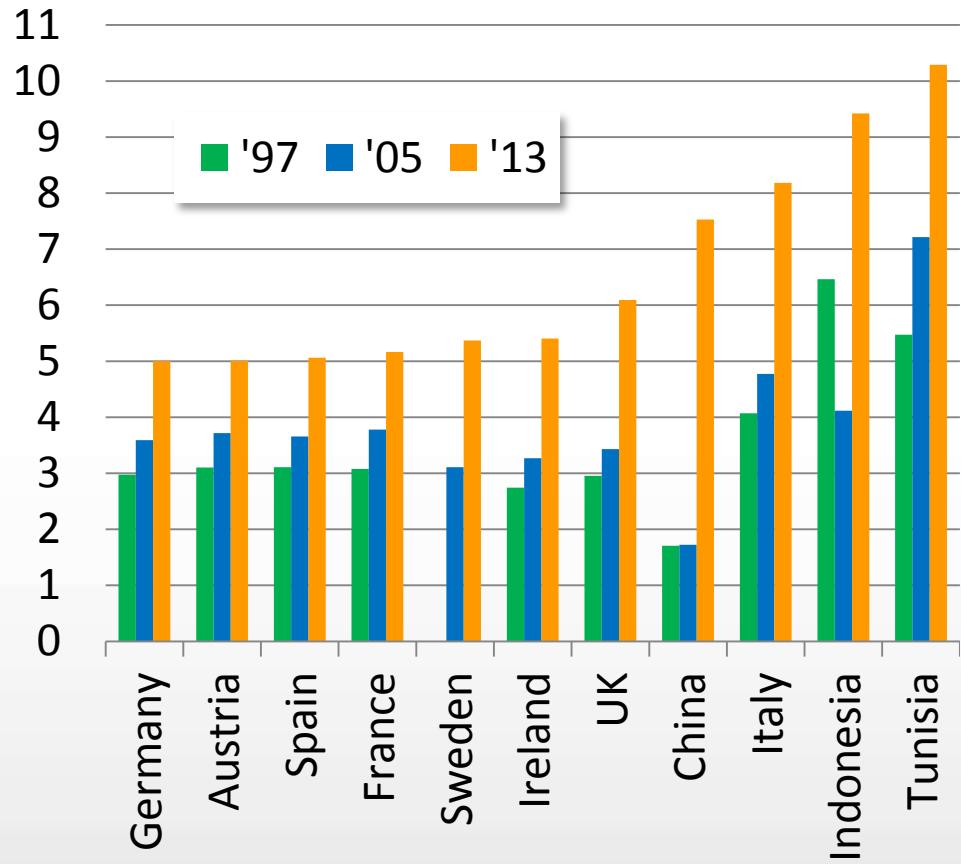


# Beef prices rising (1997, 2005 and 2013)

Less than USD 5.00 per kg CW in 2013



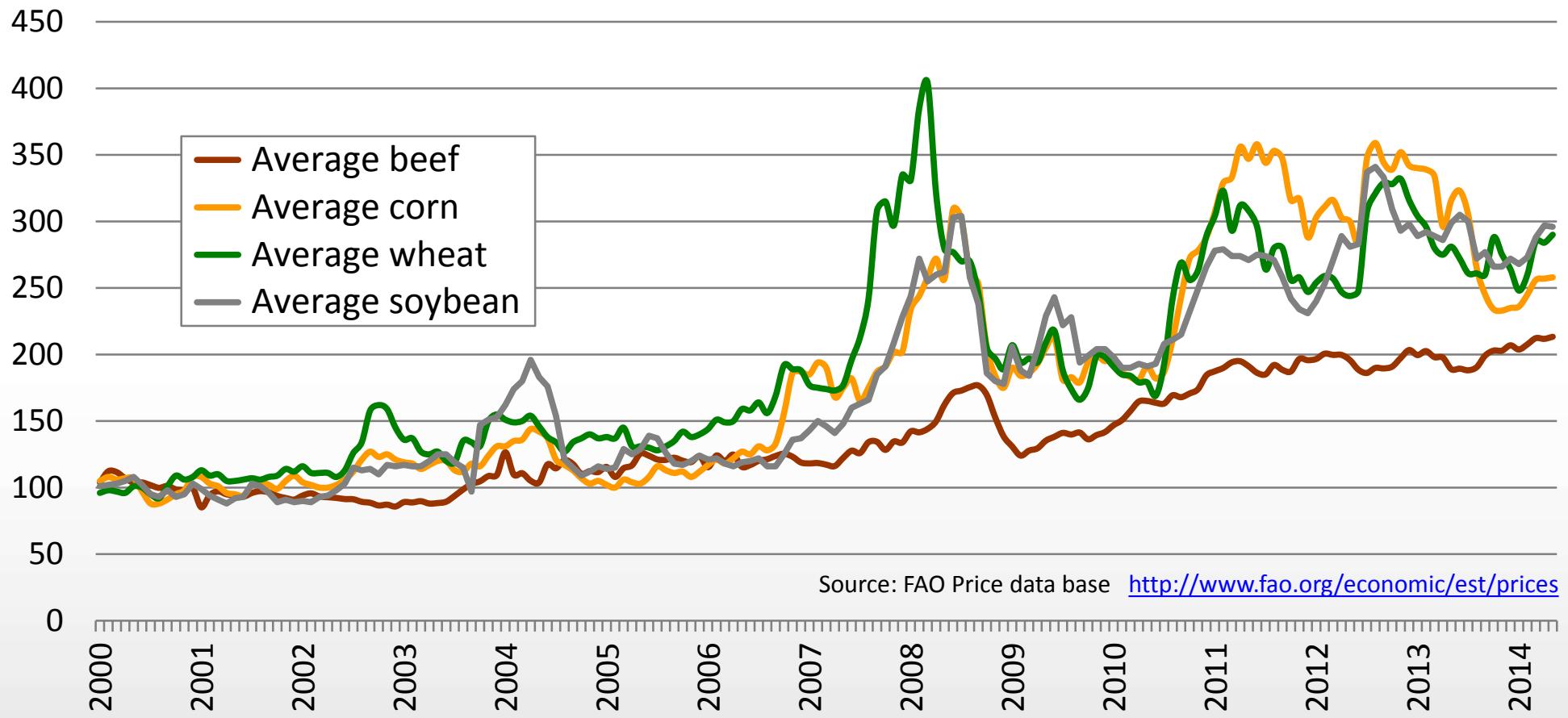
USD 5.00 and higher per kg CW in 2013



Source: agri benchmark, national statistics

# Plant products with higher increase and more volatile than beef

**Index year 2000 = 100**



# Farm level results



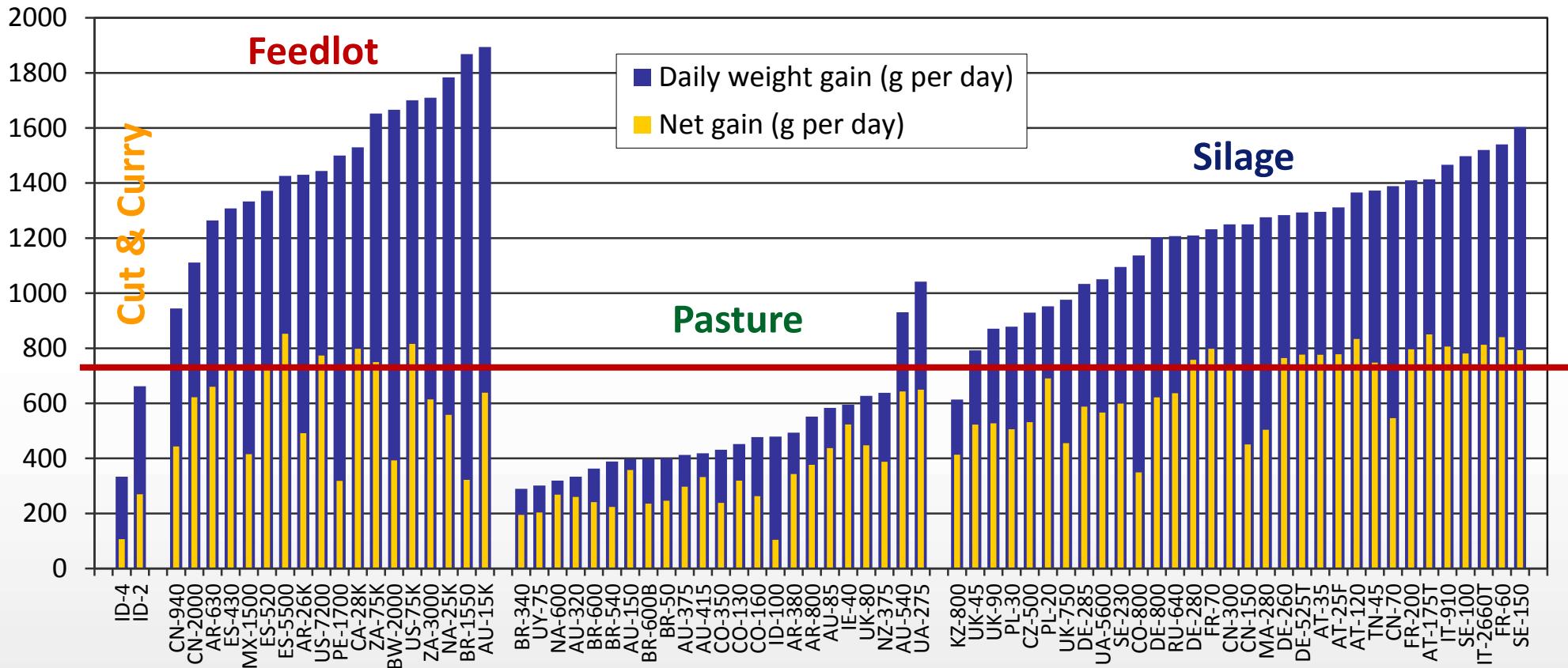
# Production systems in beef finishing

	Feed % in dry matter	Management/Housing	Extent of purchase feed
 <b>Pasture</b>	> 30% pasture	Outdoor year round or part of the year	Low
 <b>Silage</b>	> 30% silage and other forages	Closed or semi-open barns with slatted floors and/or straw bedding	Medium
 <b>Feedlot</b>	> 50% grains and other energy feed	Confined, large, open pens, partially with sun-covers	High
 <b>Cut &amp; Carry</b>	> 30% freshly cut grass & other vegetation	Mix of pens and grazing of paths and paddies	Low

# Daily weight gain and net gain by production system

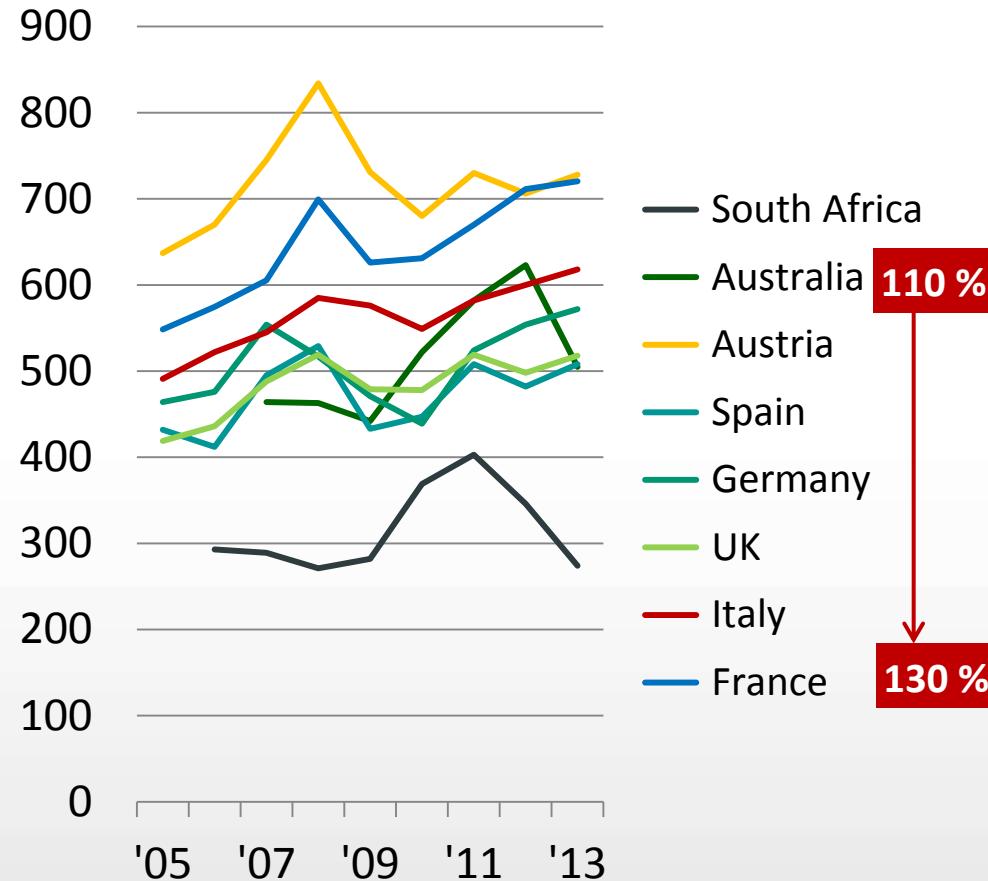
(net gain = carcass weight divided by age at slaughter)

**g per day**



# Cost developments in beef production 2005-2013

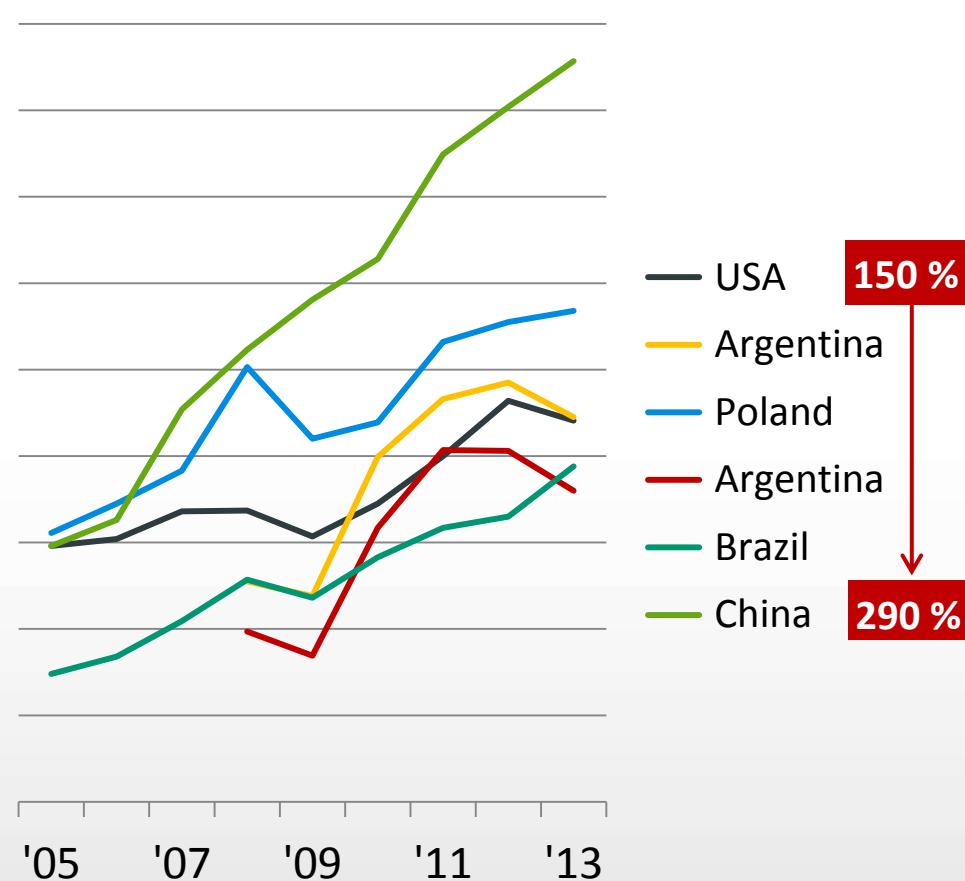
USD per 100 kg carcass weight and increase in percent



- South Africa
- Australia
- Austria
- Spain
- Germany
- UK
- Italy
- France

110 %

130 %



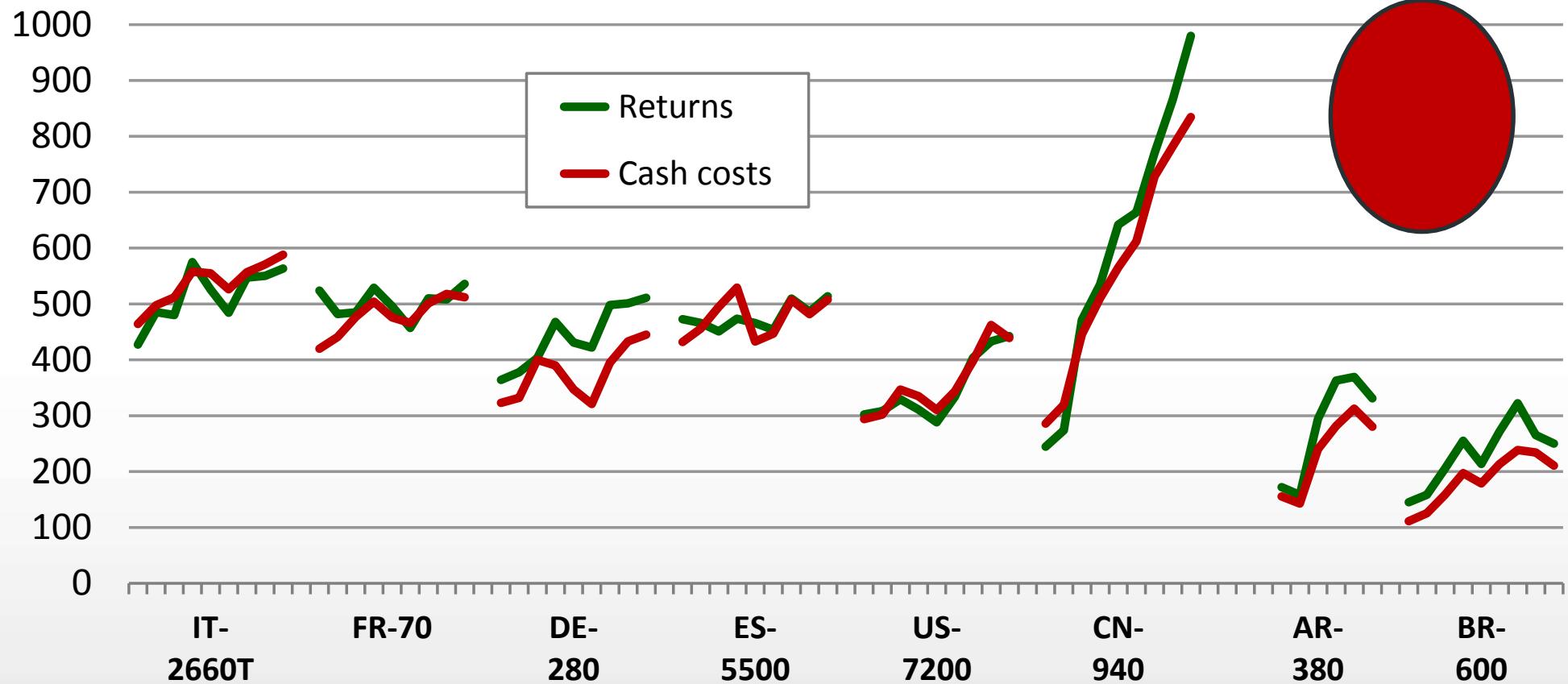
- USA
- Argentina
- Poland
- Argentina
- Brazil
- China

150 %

290 %

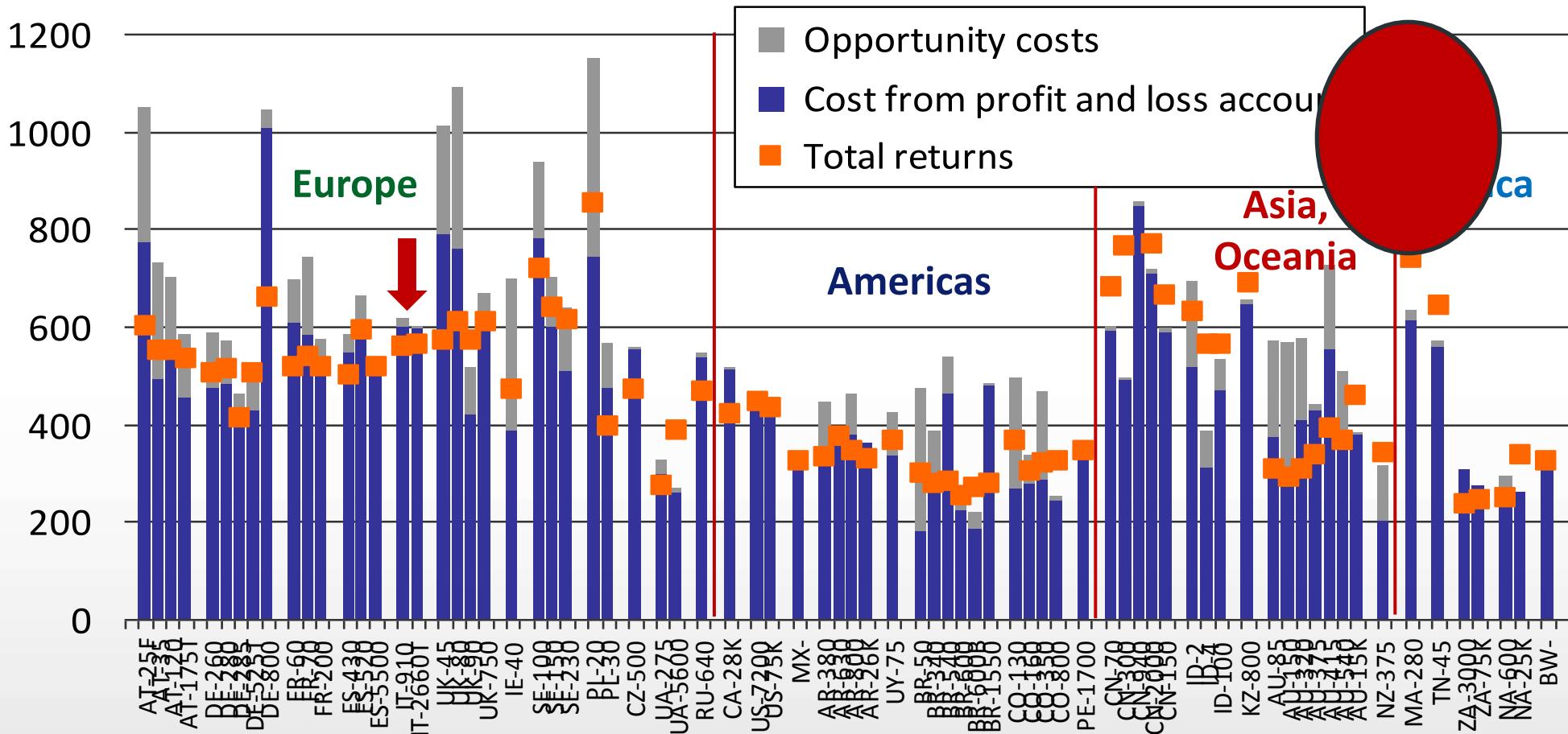
# Margin over cash costs (2005-2013)

USD per 100 kg carcass weight



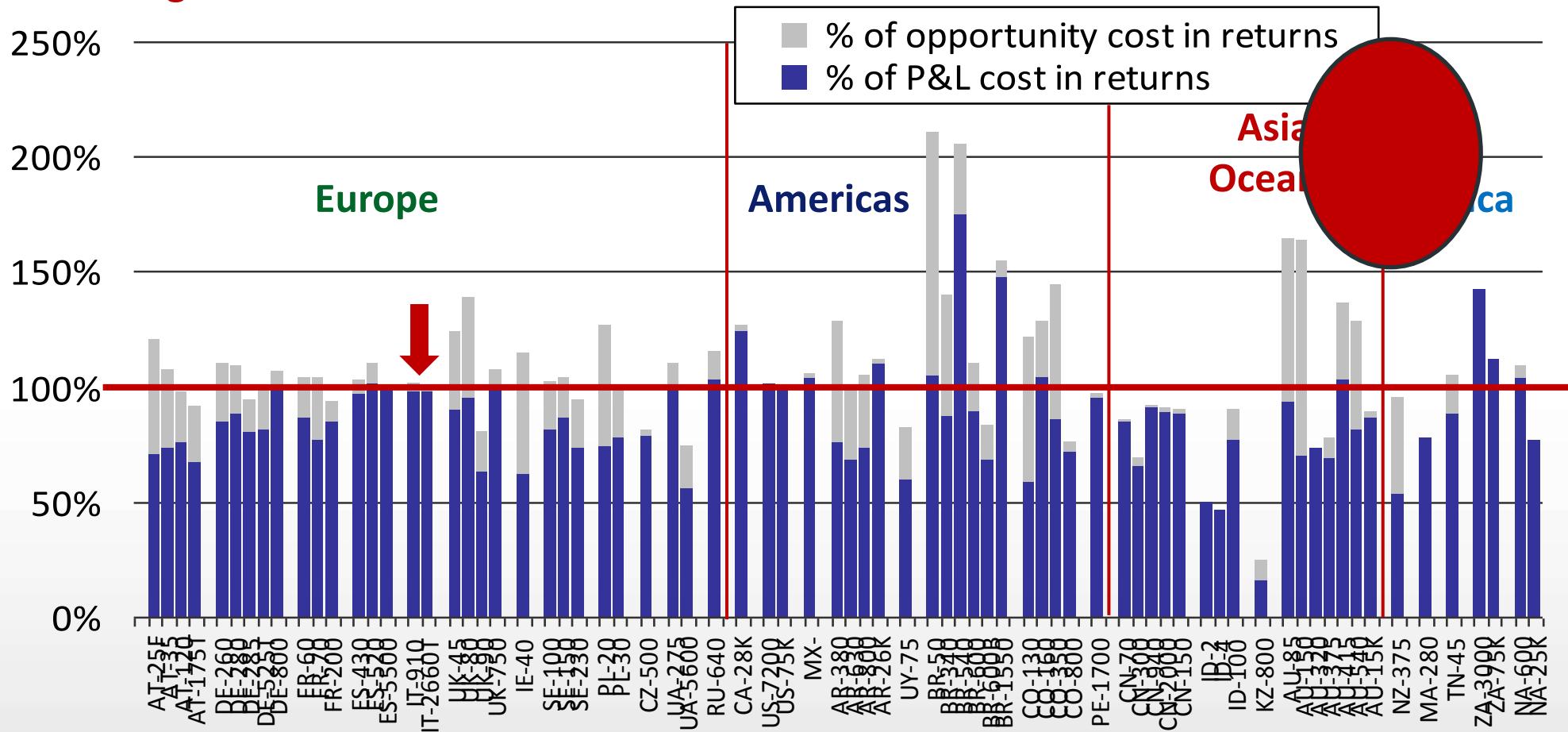
# Mid-term profitable, long-term not (2013)

USD per 100 kg carcass weight

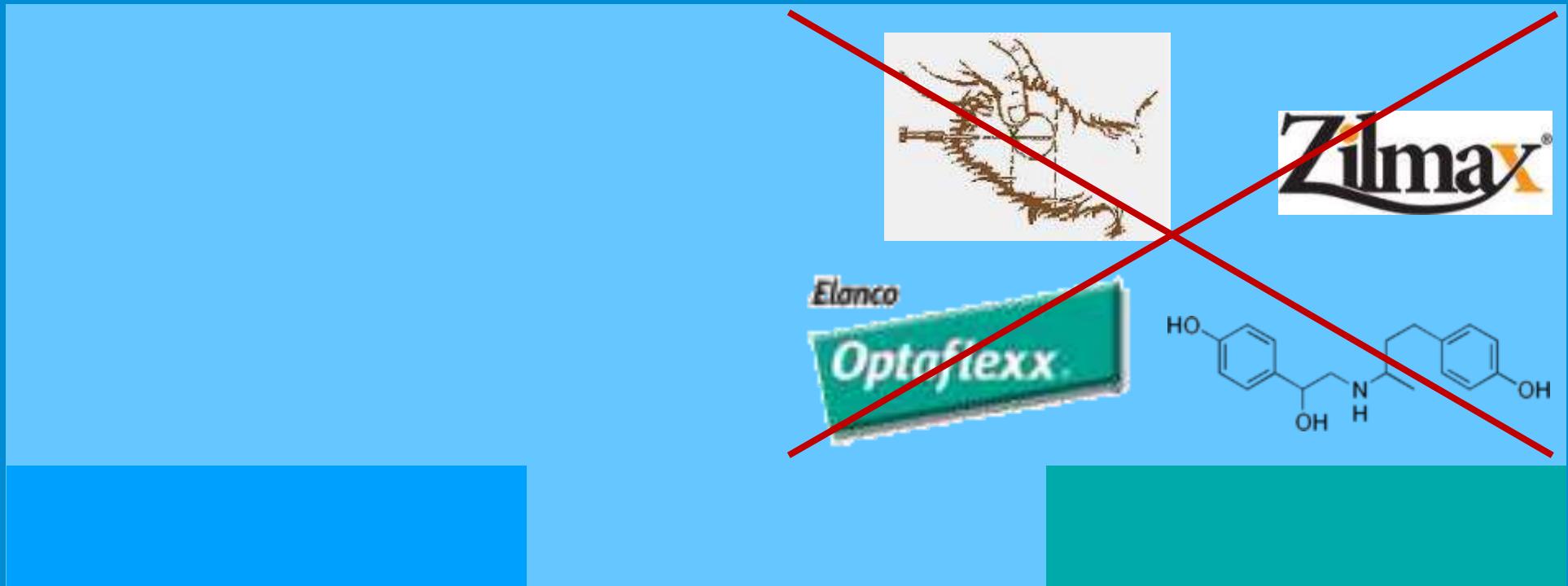


# Slightly better situation on whole-farm level

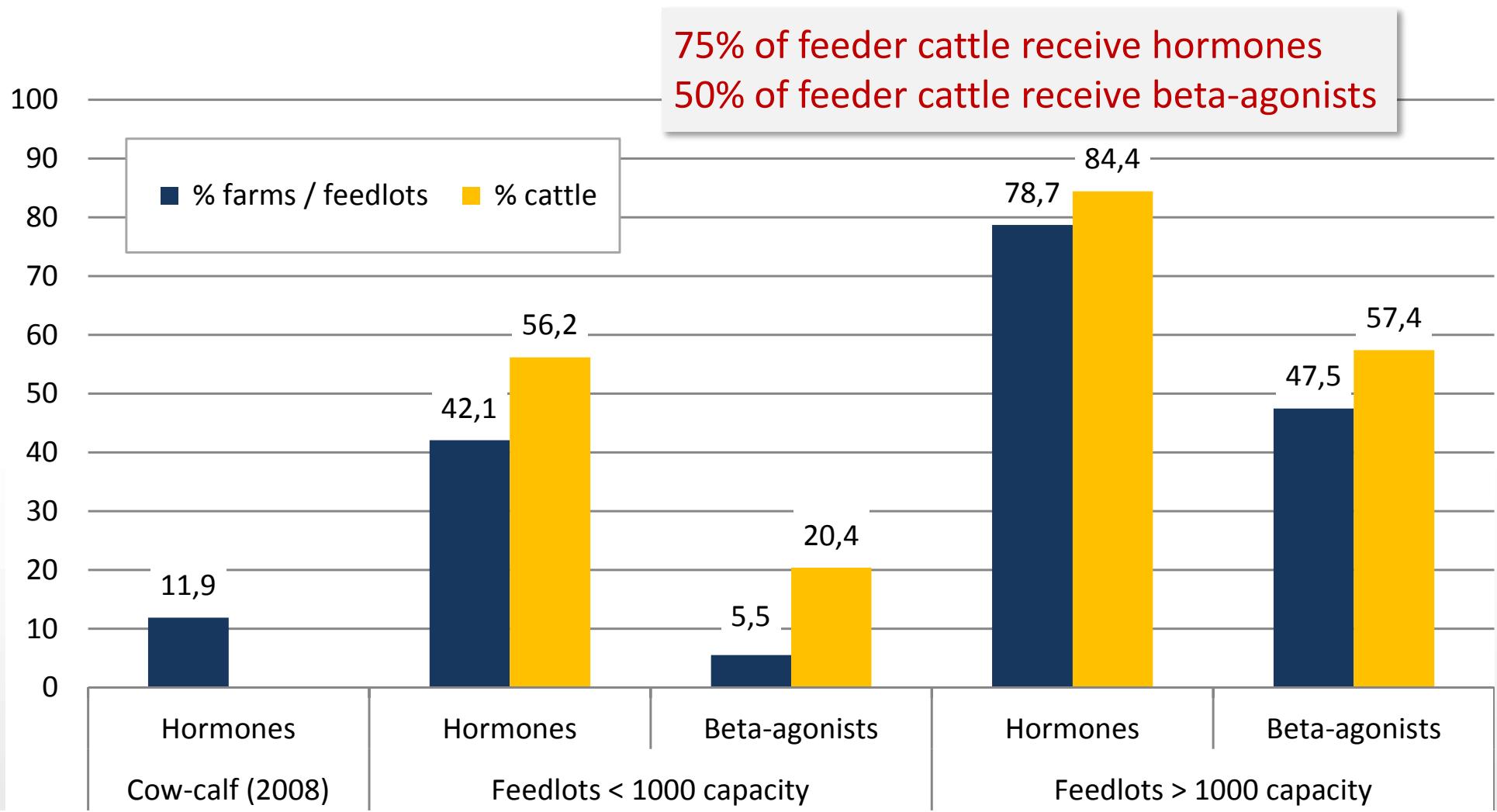
## Percentage of costs in total returns



# Free trade (TTIP) between the US and the EU



# The use of hormones and beta-agonists in the US is common practice

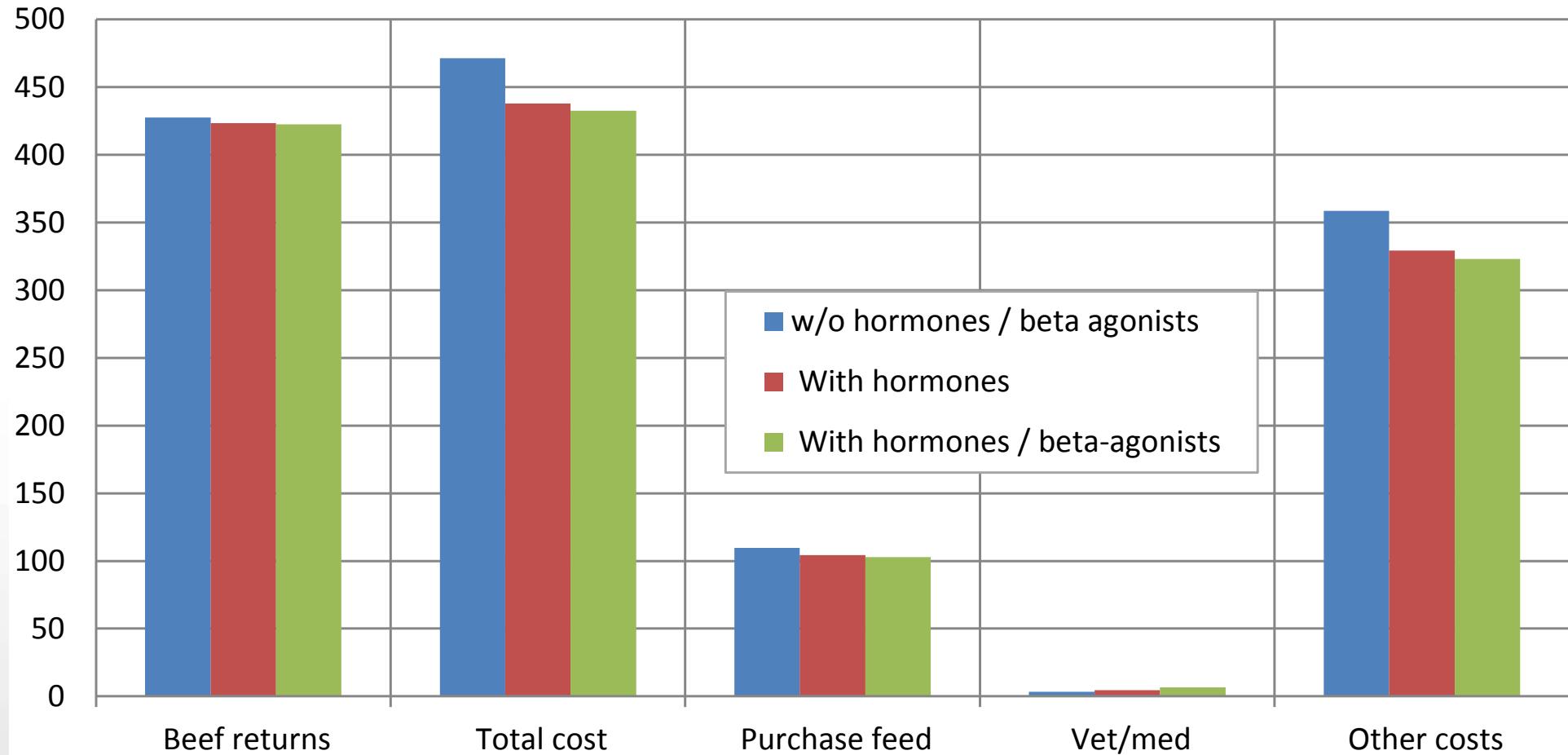


# The use of hormones and beta-agonists increases productivity and carcass yields

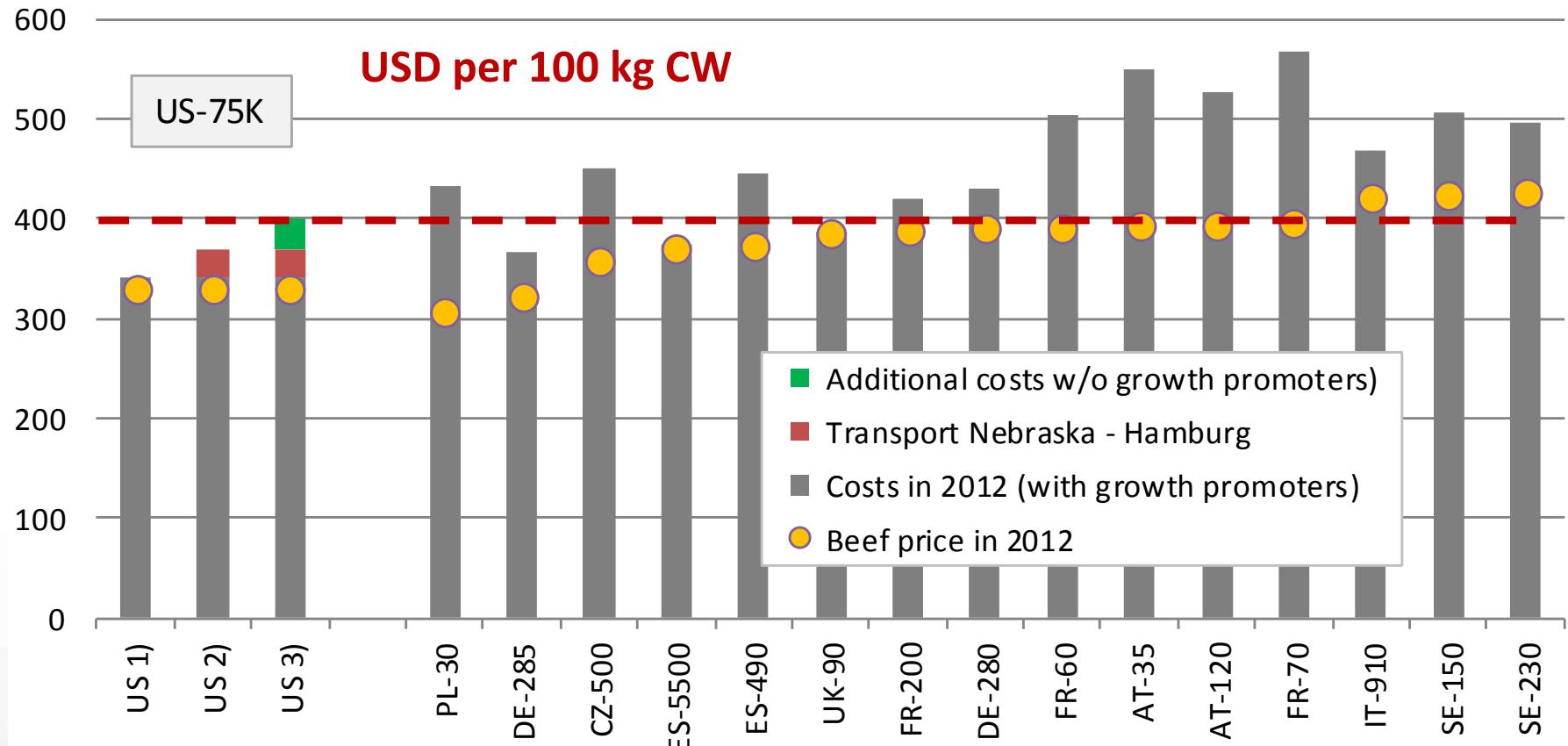
Feedlot USA 75 000 sold	Unit	With hormones Beta-agonists	w/o hormones Beta-agonists	Percentage change
Lower feed conversion rates	Kg feed	5.9	6.9	- 15 %
Higher daily weight gain	g per day	1 650	1 350	+22 %
Higher final live weight	Kg	580	540	+ 7 %
Higher carcass yield	%	64.1	62.5	+ 3 %
Higher carcass weight	Kg	370	335	+ 9 %

# The increased performance results in a cost advantage of approximately 10 percent

USD per 100 kg CW



# Reflecting transpost costs and the non-use of growth promoters brings US-costs close to EU price level

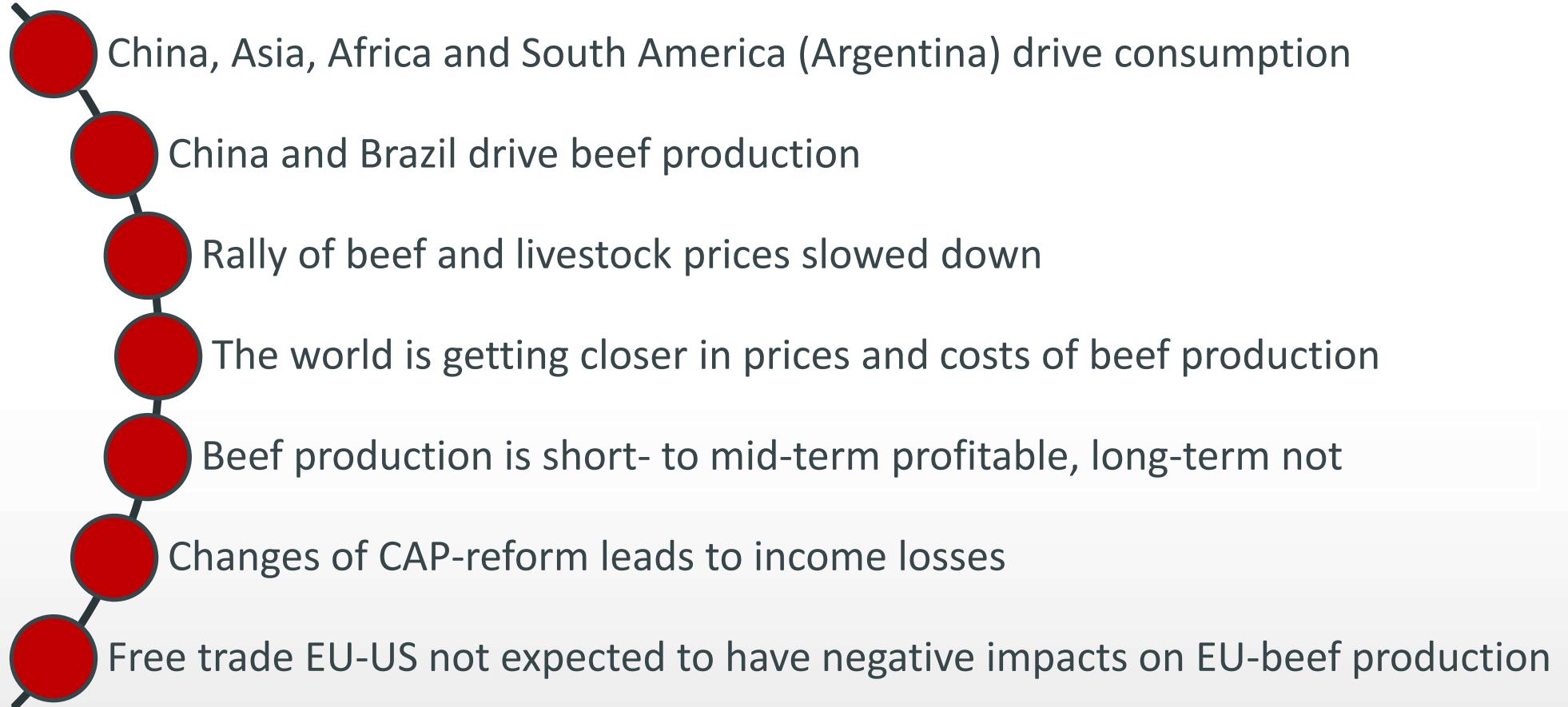


US 1) Total costs in 2012 (with growth promoters)

US 2) = 1) + Transport cost Nebraska - Hamburg

US 3) = 2) + Additional cost without growth promoters

# Summary

- 
- China, Asia, Africa and South America (Argentina) drive consumption
  - China and Brazil drive beef production
  - Rally of beef and livestock prices slowed down
  - The world is getting closer in prices and costs of beef production
  - Beef production is short- to mid-term profitable, long-term not
  - Changes of CAP-reform leads to income losses
  - Free trade EU-US not expected to have negative impacts on EU-beef production

# *agri benchmark* – passionate about facts



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