

Global Perspectives on Agri-Food

How do Italian and European dairy farmers compare to New Zealand and the USA

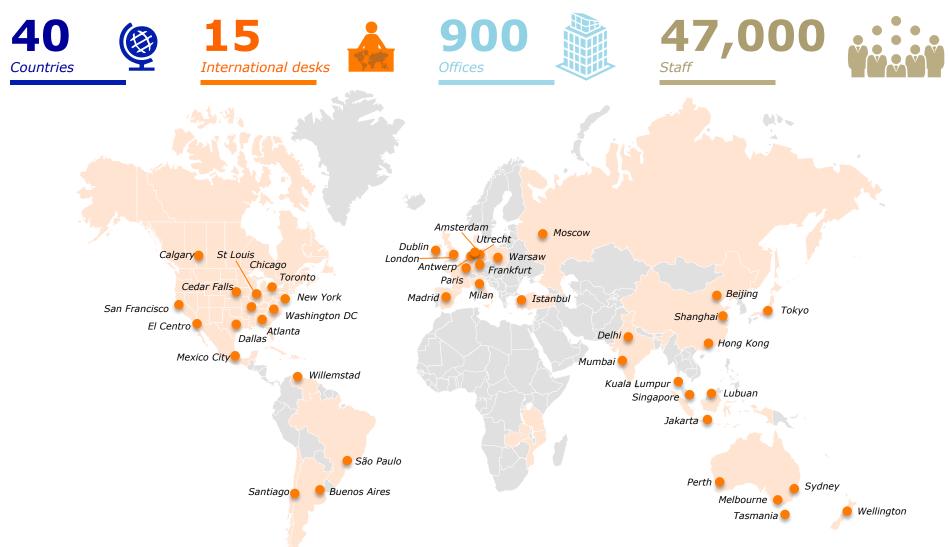
Peter Paul Coppes January 25, 2019 RaboResearch Food & Agribusiness



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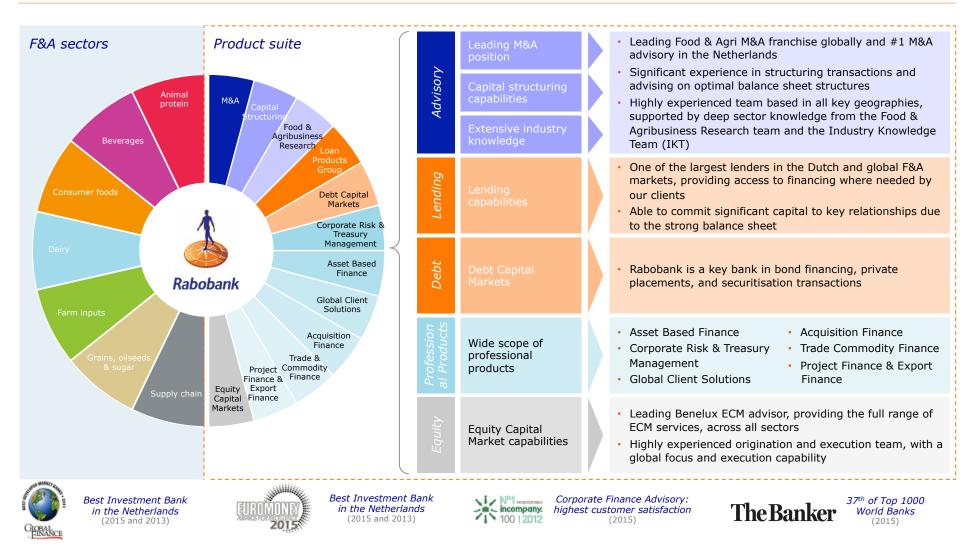
Globally active in banking with offices in 40 countries





Deep sector knowledge in combination with comprehensive product suite





Significant commitments to almost all major players in the industry





Our mission is to be the bank of choice to our F&A clients



F&A Sector Banking

We offer sector-based finance solutions by bringing together our global sector knowledge, our client insights and seamless execution

Animal protein	Beverages	Consumer foods	Dairy	Farm inputs	Grains, oilseeds & sugar	Supply chain
Pork & beefSeafoodPoultry	 Beer Coffee Distribution Juices Soft drinks Spirits 	 Food services Bakery Confectionary Grocery Other value-added processing 	• Dairy	 Agro chemicals Animal nutrition & health Equipment Fertilisers Seeds 	GrainsOilseedsSugar	Food LogisticsPackaging
Arinal Potein	• Wine	Consumer Root		Familiputs	Grans Oliseets & Sigar	Supply

Sector knowledge

- Fundamental sector knowledge covering the entire F&A chain supported by extensive research from macro-themes, impacting a particular F&A industry, to micro-level analysis of individual companies
- Over 80 dedicated research professionals across 20 offices globally, covering 11 subsectors, working closely with Rabobank's professionals

Client insights

- We champion innovative thinking and idea generation, driven by our knowledge of the clients and their sector, to bring forwardlooking deals and solutions to our clients
- Rabobank Group operates in 42 countries around the world

Seamless execution

 Our Global Sector Heads bring together the local, regional and global network of our bankers and our product suite to support client ambitions and provide disciplined execution of client agendas





- The agricultural policies and farmers' support
- The **costs**, and forecast of feed price

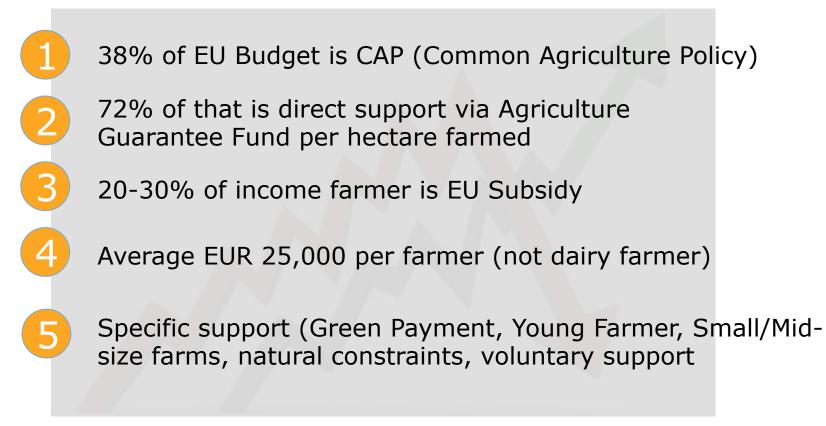
• The creditworthiness assessment

The Agriculture policies and farmer's support



Subsidies in EU







- Yes there are still subsidies for production through the single farm payment
- Yes they are used to subsidise production costs even though they're not meant to be
- Yes in some cases they are the difference between profit and loss
- But
- The commission hasn't completely come to the rescue



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Future of European Dairy Production



- Post quota Europe has increased production it was expected too
- This increase has come in the middle of extremely challenging conditions for the global market and has gone some way to prolong the slump.
- Looking to the future
 - Further investments are unlikely
 - The removal of regulation will level the playing field and EU farmers will need to be more market orientated any further farmer support is unlikely
 - Consolidation will grow in Europe but will be limited
 - Europe will compete but only when it pays too
- Therefore, the opening of floodgates is unlikely and growth will slow
- But, the EU (or parts of it) will be competitive Italy needs to be ready



Subsidies other parts

- Europe
- United States
- New Zealand
- Other countries

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The costs and forecast of milk production



We can classify dairy farm into 3 socio-economic categories



Household farms

Key characteristics: Small farms 1-3 cows, dairy is one income source, 50% of the milk is consumed on the farm, 50% sold.

Key driver: Selling milk provides daily cash for family needs.

Family farms

Key characteristics: Work is mainly done by the family, Size in developed countries 10 up to 100/300 cows?

Key driver: Generate an income.

Business farms

Key characteristics: Work is mainly done by employees, Size in developed countries > 300 cows?

Key driver: Generate the expected ROI.

Structure of dairy farming world wide IFCN Standard Classes for world aggregate 2012 - estimates



% Share in size classes Size classes in Farms Cows Production. cows per farm Dairy farms Dairy cows estimatio 100% > 1000 5% 90% 8% 0.4% 33% 24% 16% >300 - 1000 80% 15% 70% >100 - 300 11% 60% >30 - 100 50% 33% 4% 26% 27% 40% >10 - 30 72% 30% >2 - 10 20% 30% 95% 57% 33% 10% 1 - 2 0%

Data: Farms in Standard Classes based on 91 countries, cows in Standard Classes based on 83 countries. Estimated milk production per standard size class representing 85% of cow & buffalo milk production. 2012 data preliminary or estimated for selected countries.

European farm-gate milk prices remain high, but now falling.

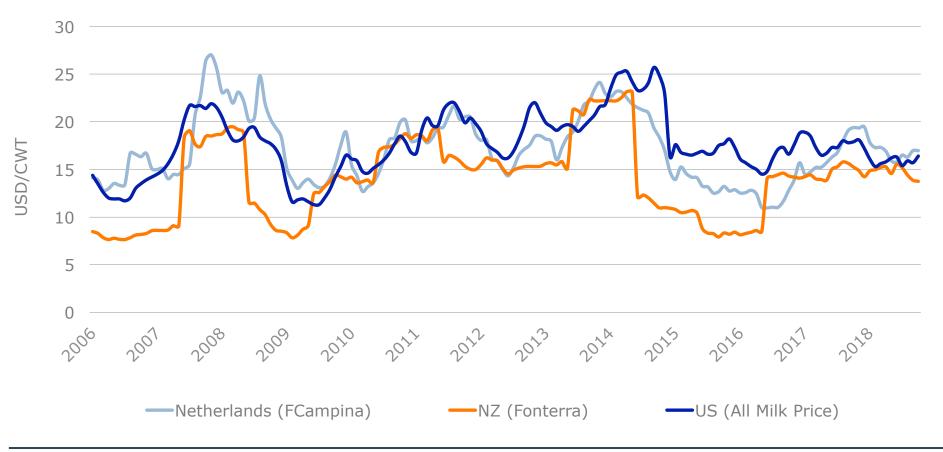




RFC milk prices



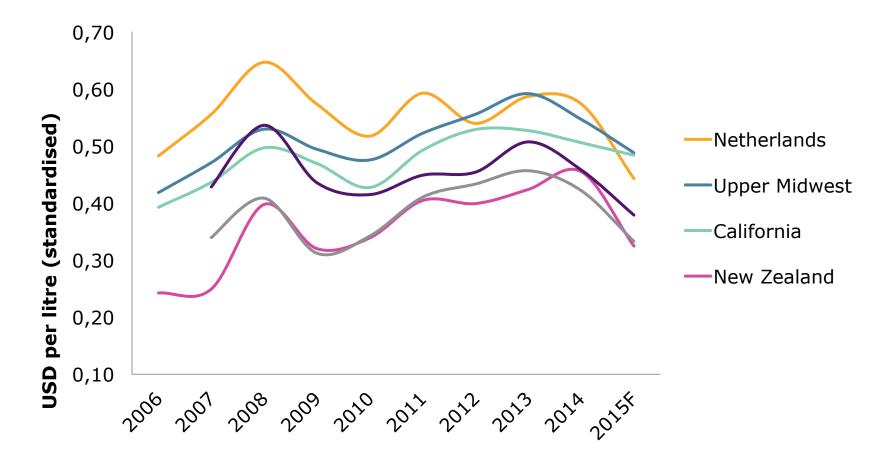
Farmgate milk prices (USD equivalent) - select regions



Cost of production

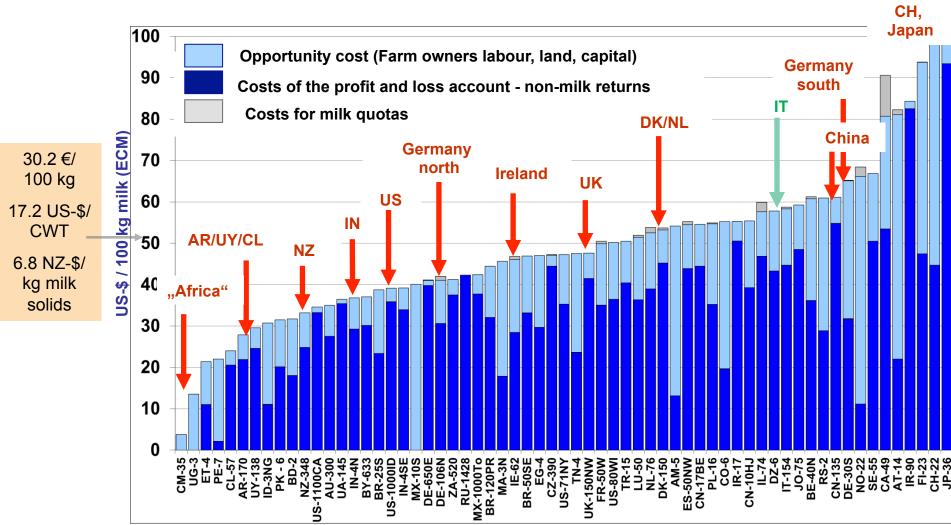


Europe seems to be more efficient but exchange rates have played a big role



Ranking countries by cost of production average farms per country in 2017

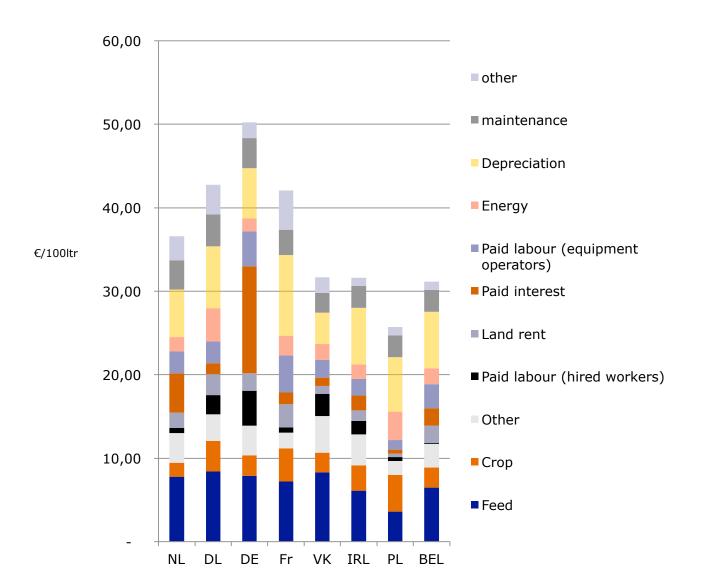




Comment: Average sized farms in the countries, analysed year: ECM: energy corrected milk (4% fat, 3.3% protein). For the conversion on the left hand side 2016 exchange rates used

Total costs for farming in Europe



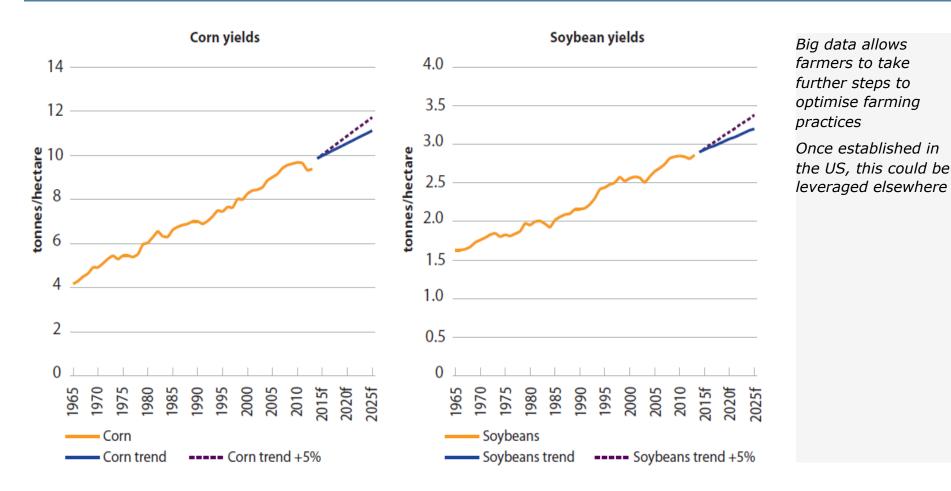


Big data offers a boost to production models

'Big data' allows farmers to optimise yields, incrementally improving margins by lifting yields and reducing inputs



Big data could help lift US crop yields by 20 mln t and reduce inputs by 1-3% by 2025

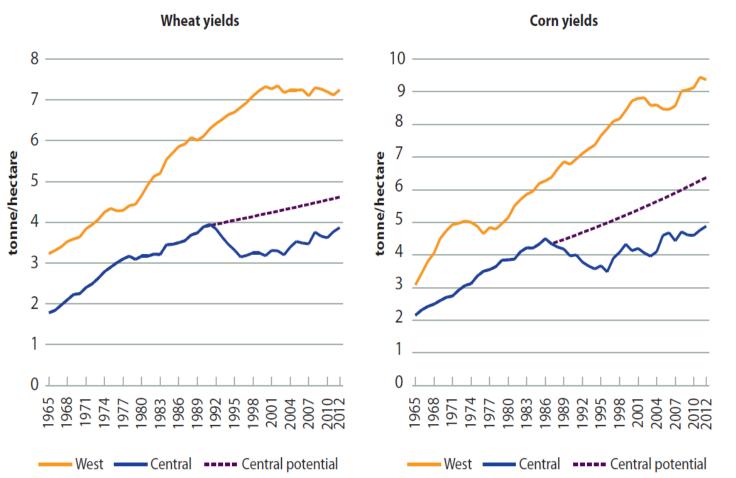


New production models can close the yield gap in central Europe

New production models can sometimes mean transplanting best practice from one region to another, with material impacts



Improving land and adopting modern practices could boost output by 9 mln tonnes by 2025

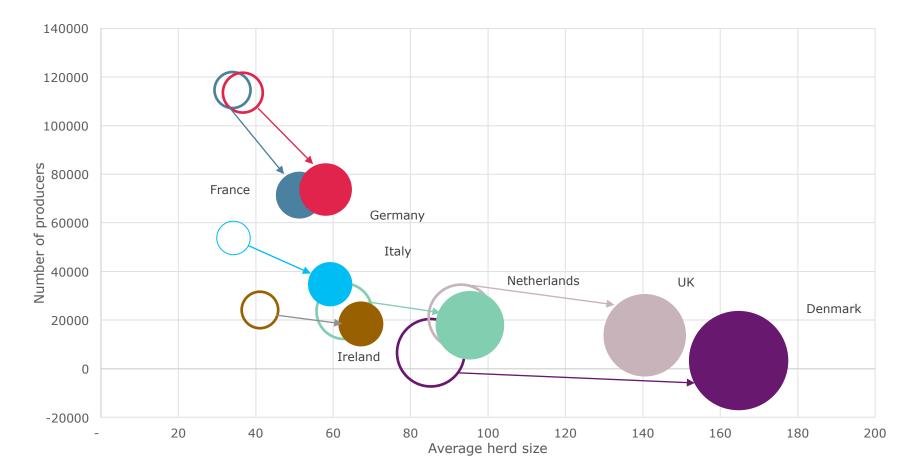


Central and eastern Europe deliver crop yields well below potential

The yield gap could be closed by upgrading ag land, adopting modern agronomic practices and using modern machinery



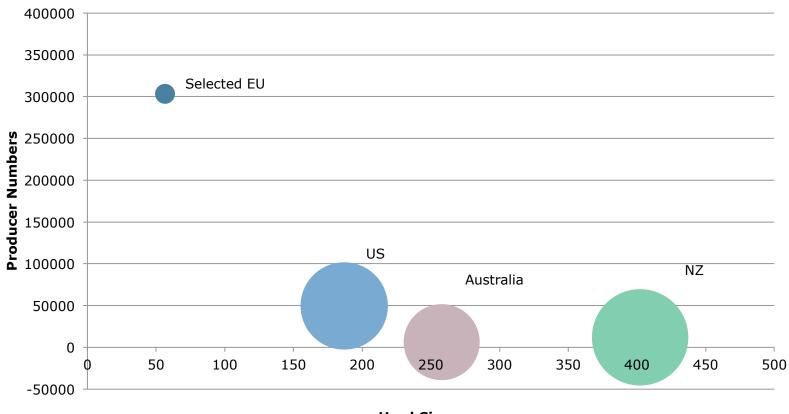
2006/07 - 2016/17 - bubble sizes corresponds to milk solids per farm





But it pales in comparison to our global competitors

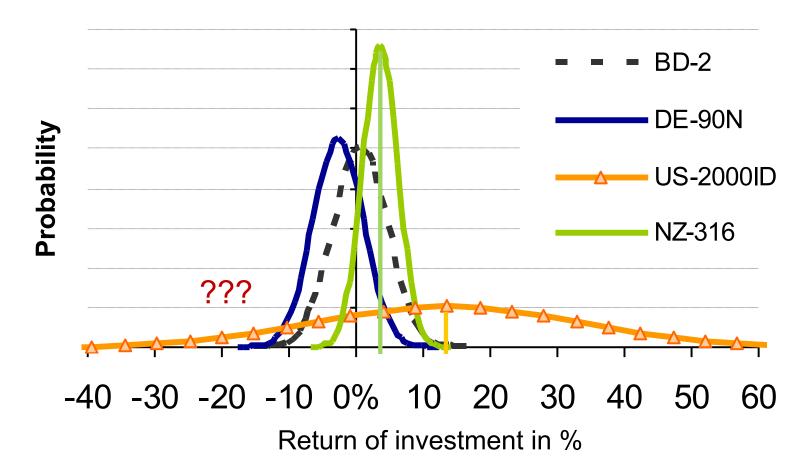
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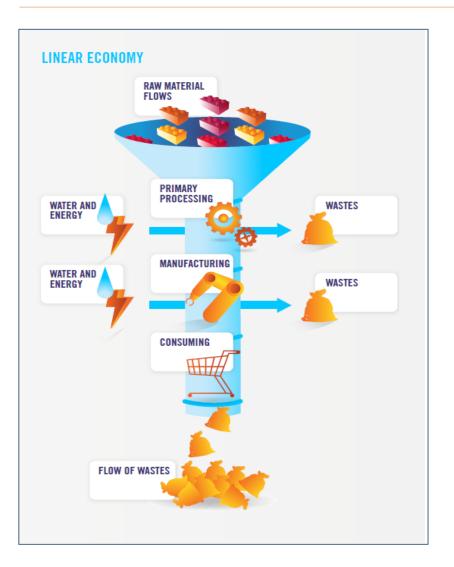


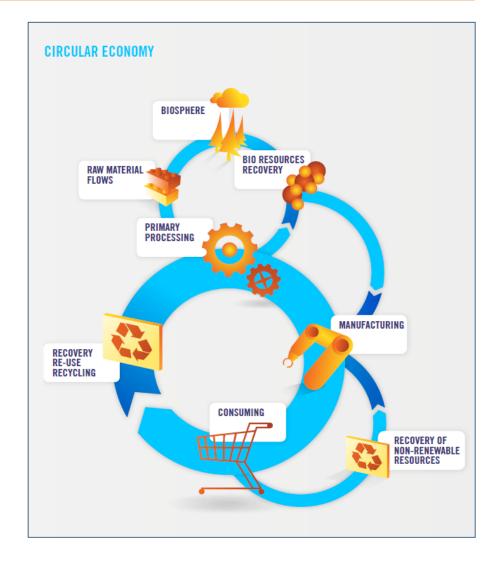
Simulated Return on Investment (ROI) in % for typical farms 2014 – 2016



Circular economy: profit or loss?





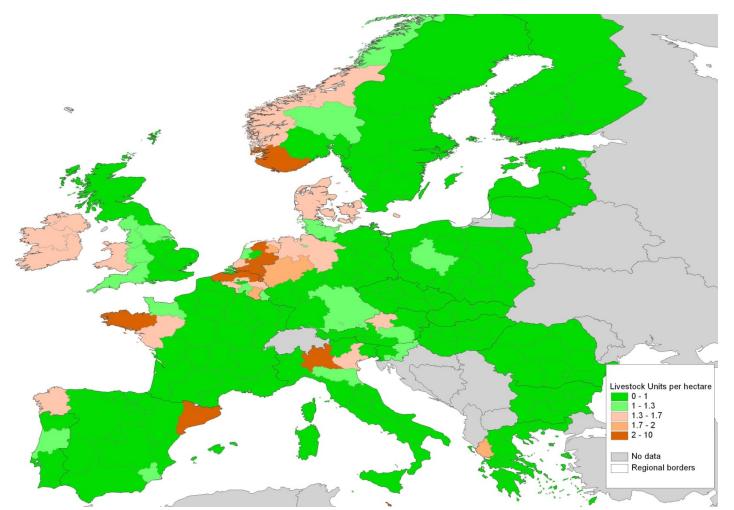


Creditworthiness assessment



Intensive dairy farming regions / land value

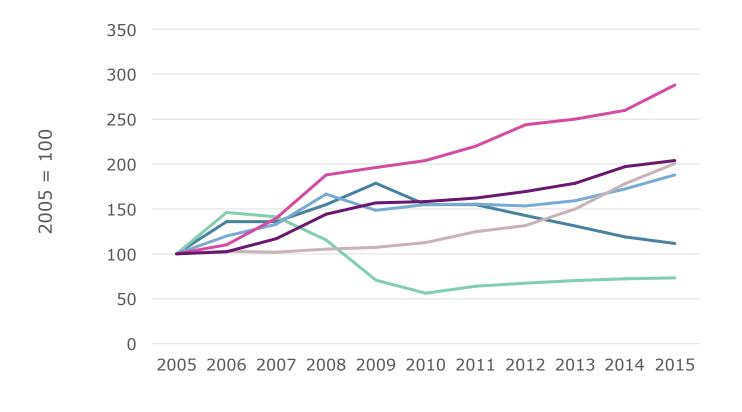




NB: Map indicates LSU's per hectare (how many hectare for cattle weight 450kg) of agricultural land, which implies that in regions where agricultural land is scarce – as in Norway - LSU density gets high quickly

Land price indices







Expansion isn't limitless

Milk production in Europe will continue to grow up to a point. But there are constraints

- Land prices & availability
- Environmental regulations
- Consumer attitudes

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4-star creditworthiness

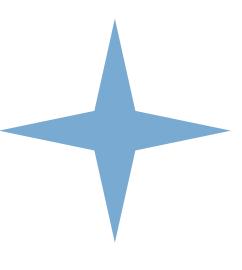


Level financing

- Tenure
- Equity



- Reserves
- Credibility
- Payment history
- Liquidity



Earning Capacity:

- Vision Strategy
- The farmer
- Market developments
- Process Management
- Financial Management

The Farm

- Quality assets
- Replacement investment
- Structure / Organization
- Development

Questions?







Q&A

"The financial link in the global food chain"™

