



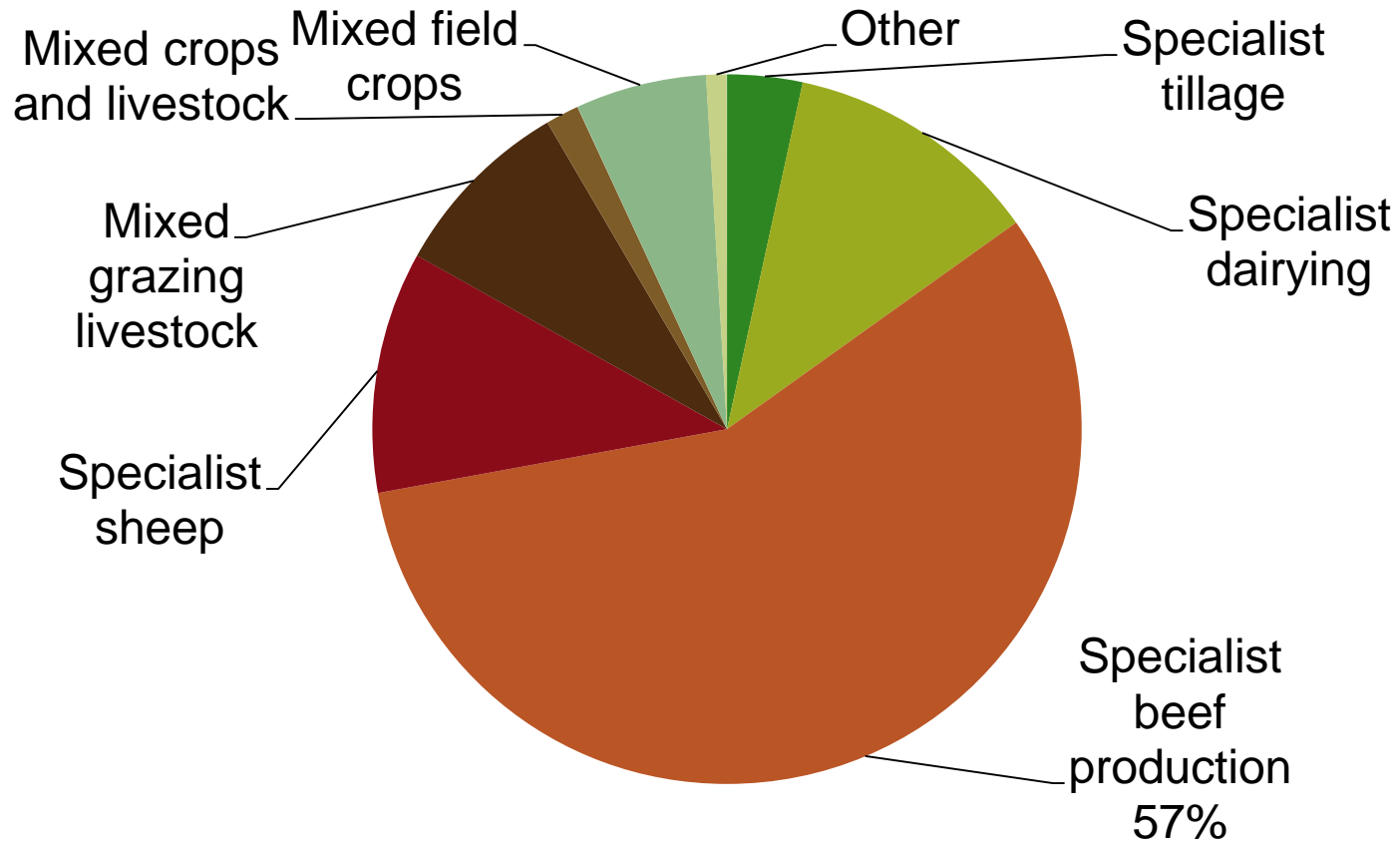
Teagasc Submission - The Future of the Beef Sector in the context of Food Wise 2025

Joint Committee on Agriculture Food and the Marine
Tuesday 28th May, 2019

Outline

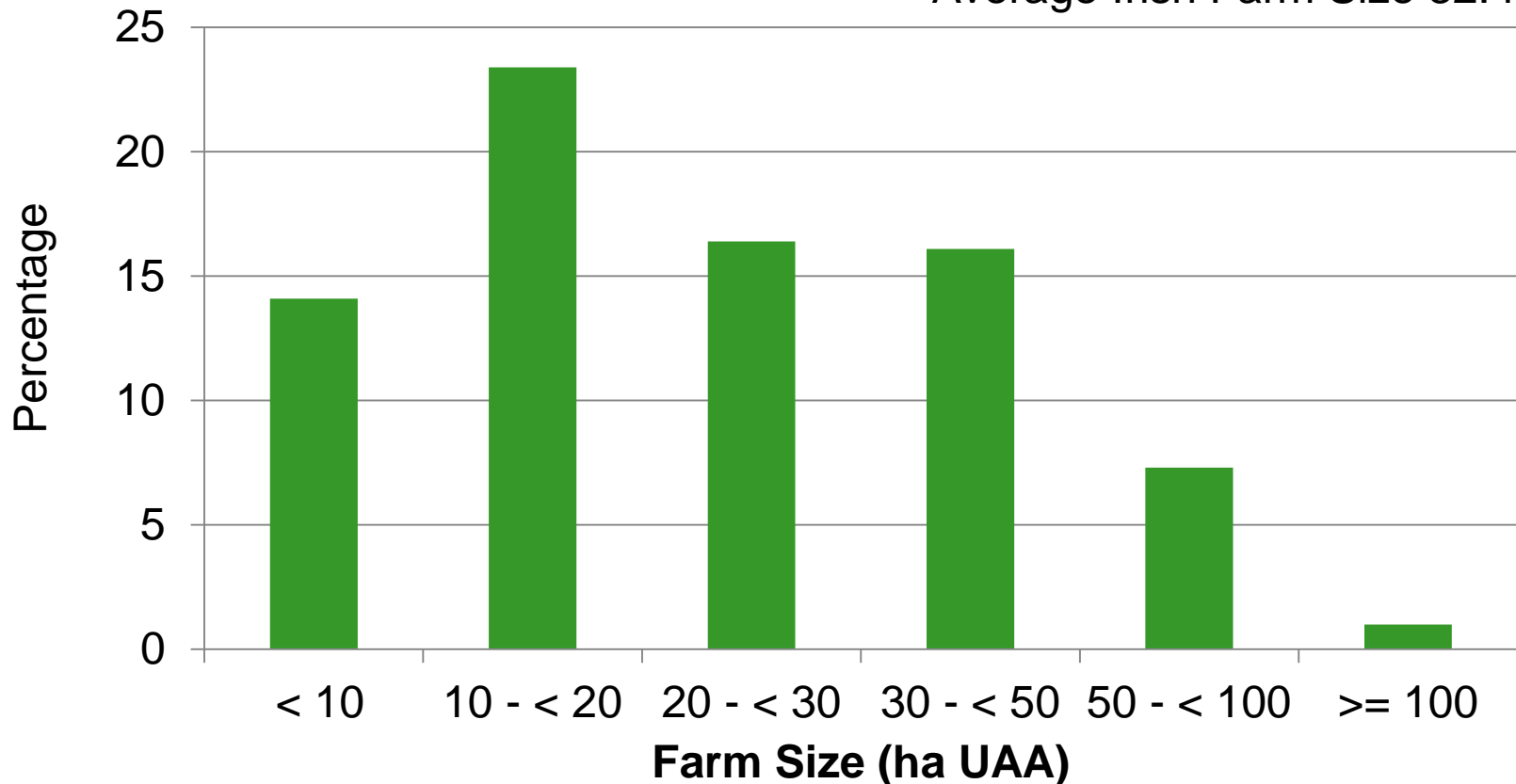
- Structure of the Irish Beef Industry
- Challenges facing the industry
- Profitability and technical performance
- Research and advisory priorities
- On-farm demonstration initiatives
- Recent & New Initiatives in Teagasc Beef Research
- Maximising net margin on beef farms

Farm Types: Farm Structures Survey 2016



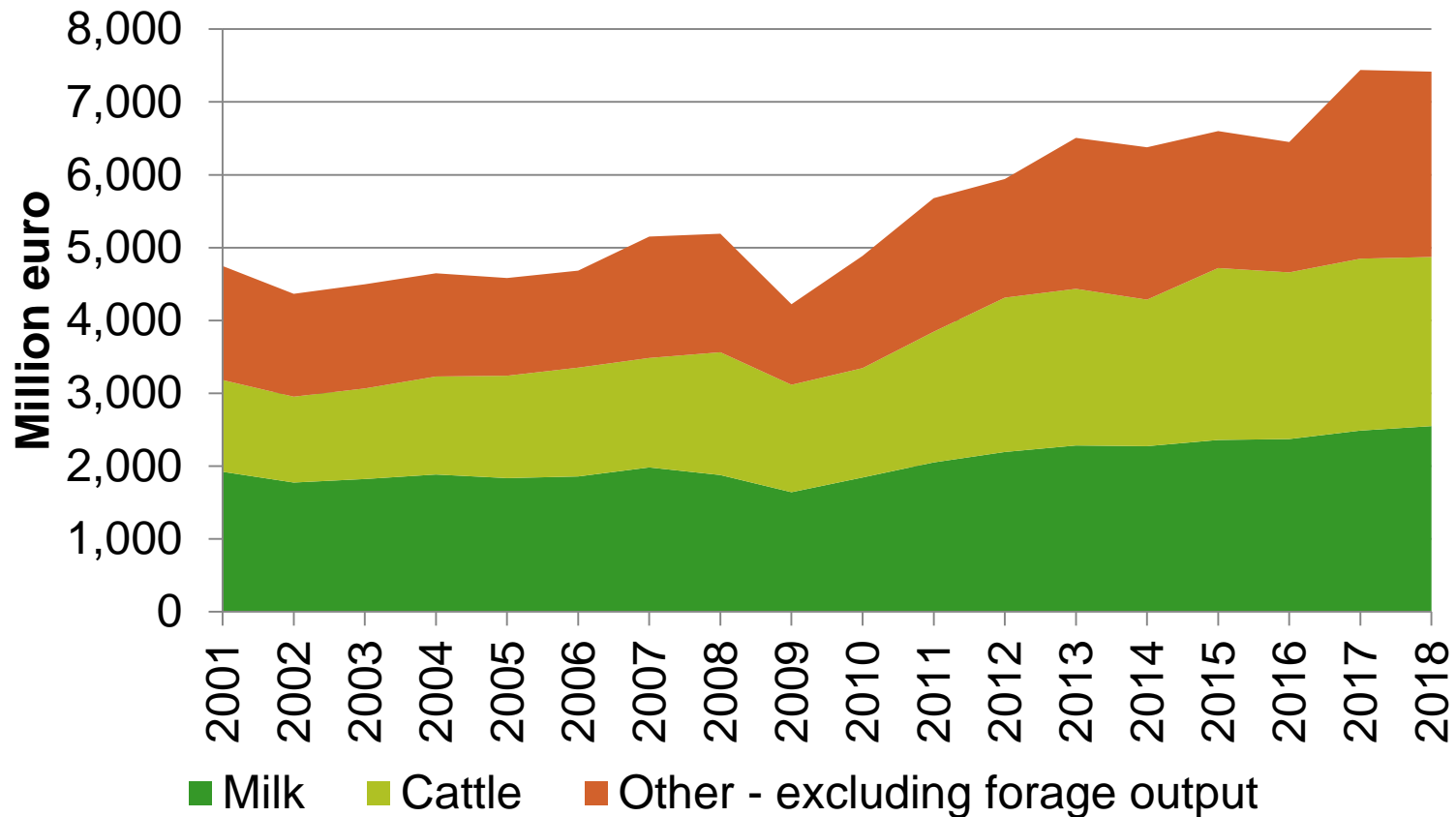
Specialised Beef Producers

Average Irish Farm Size 32.4 ha



CSO Farm Structure Survey 2016

Agricultural Output Shares 2001-2018



CSO Output, Input and Income in Agriculture

Irish Beef Industry facing many challenges...

- BREXIT
- Climate change policy
- EU trade deals
 - Agreed Canada, Japan, South Korea
 - Still under negotiation Mercosur
 - In the DG Trade diary Australia/New Zealand
- Uncertainty on outcome of CAP reform and changes to distribution of direct income supports
- Beef price fluctuations
- Impact of severe weather events on input costs

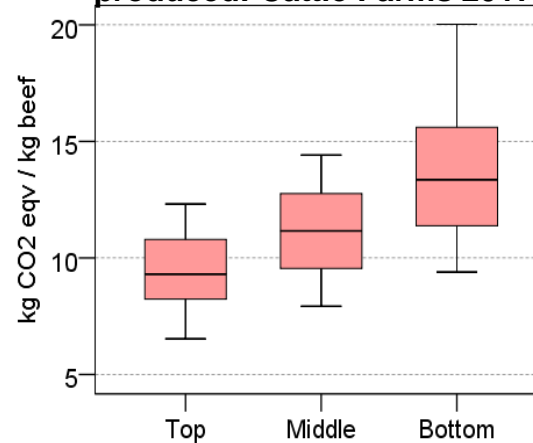
Environmental Credentials

- Irish beef production generally low intensity and environmentally friendly reflected in
 - high rates of participation in CAP Pillar II agri-environmental schemes
 - Environmental sustainability metrics from Teagasc NFS and European Commission JRC

Ag. Emissions intensity – Cattle

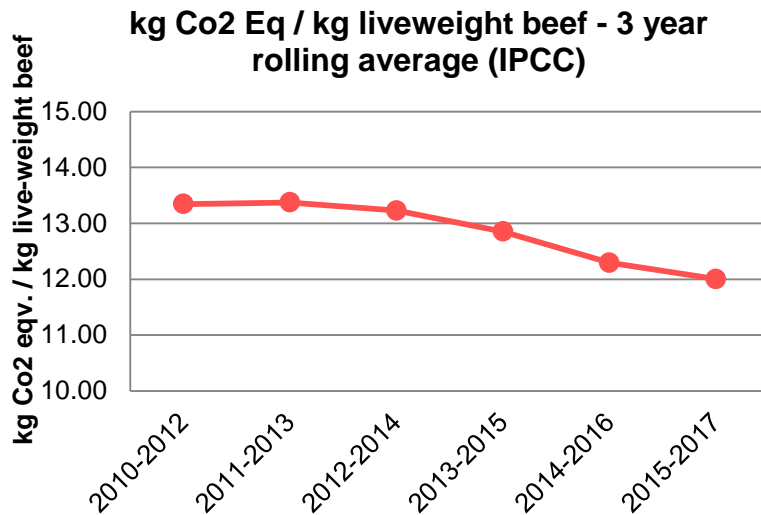
Better performing farms in terms of gross margin earned per ha also perform Better environmentally

Ag. GHG Emissions per kg live-weight produced: Cattle Farms 2017

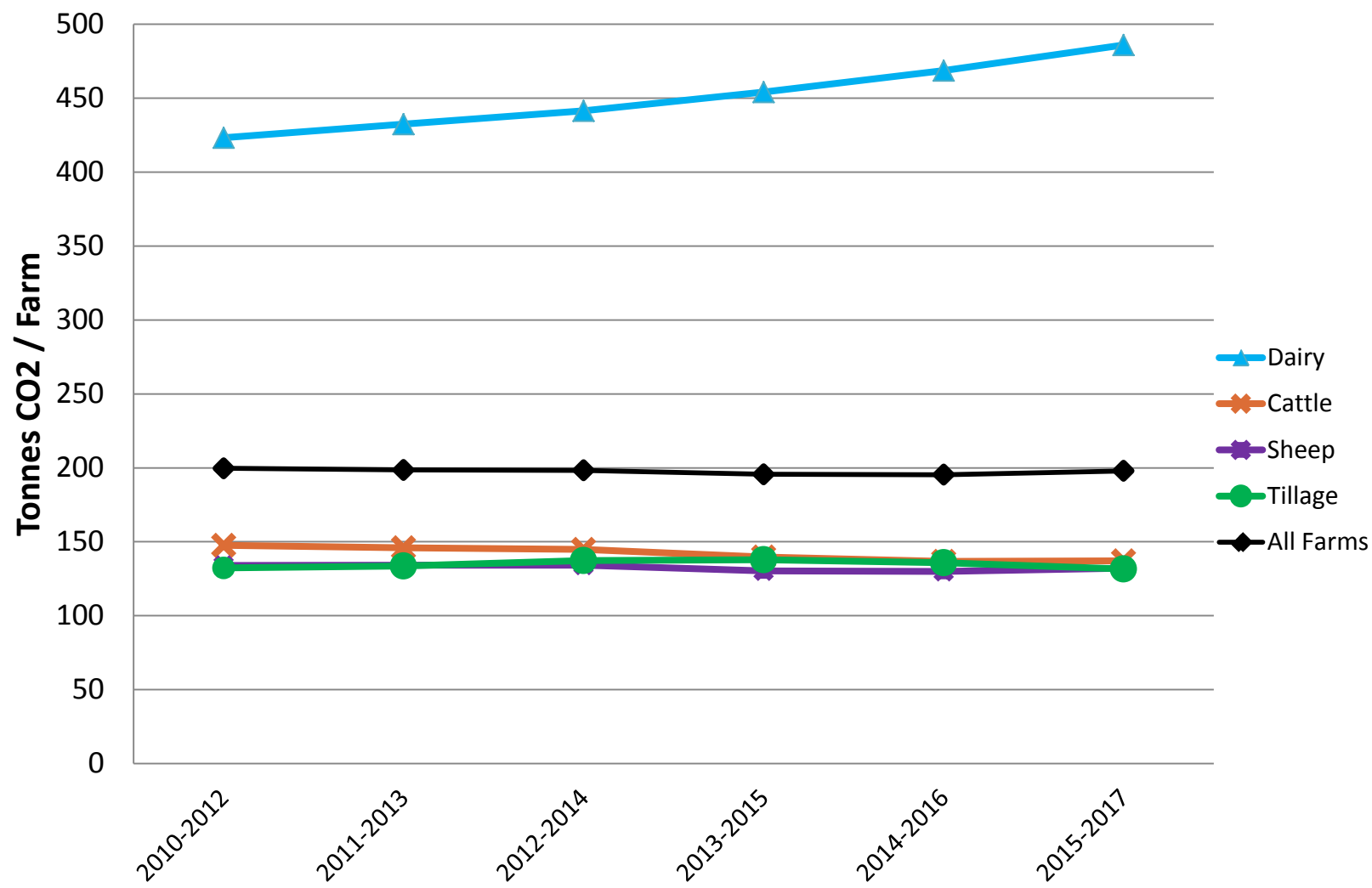


Improvements in environmental Performance as measured here in GHG Emissions per kg liveweight have been Achieved.

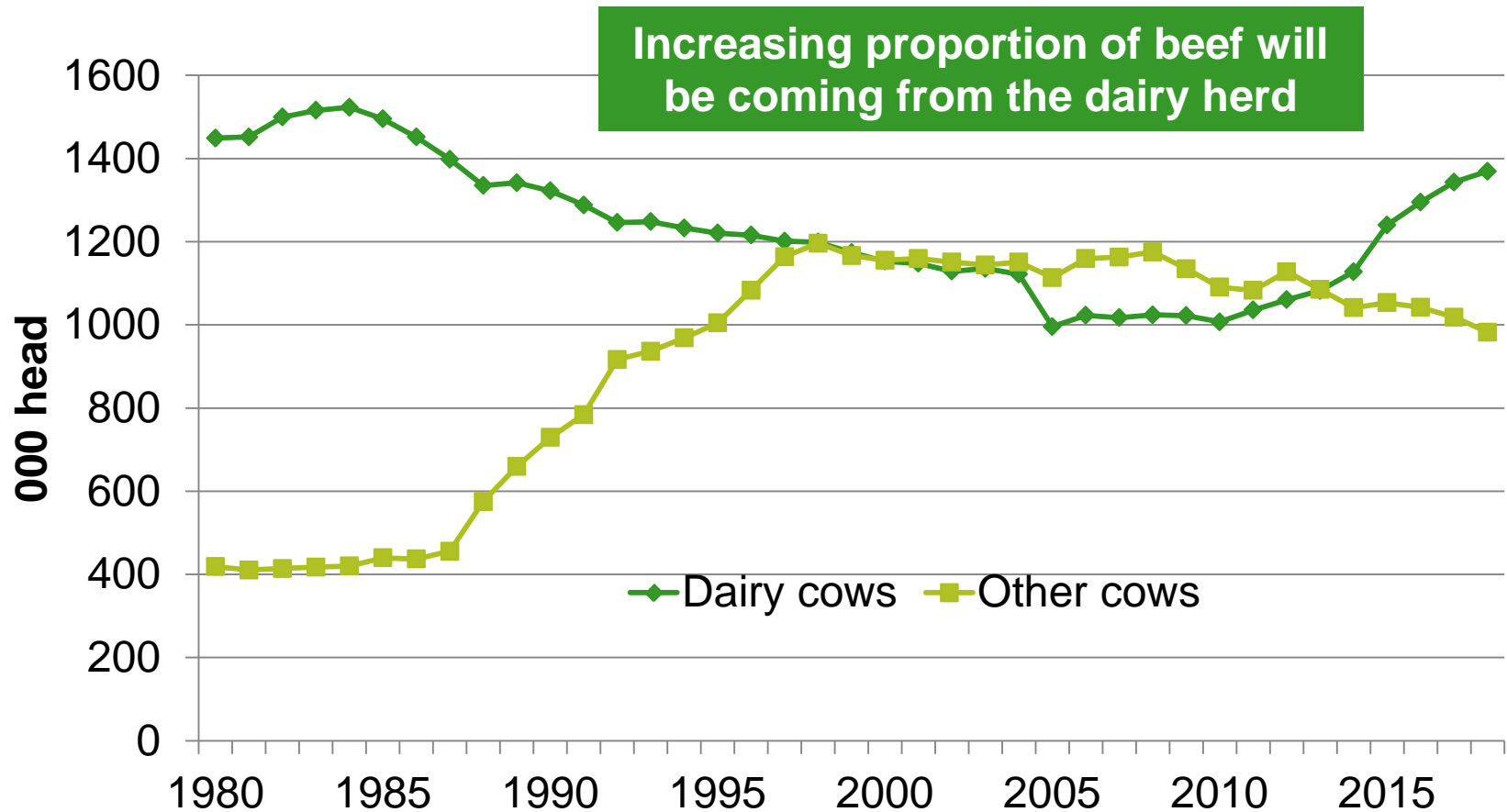
Beef production in Ireland is comparatively efficient with other countries and its performance is improving over time



Total Ag GHG emissions Tonnes CO₂ eqv. by Farm Rolling 3 year average



Evolution of the Irish cow population



Source: CSO December Enumeration

Deteriorating Carcass Quality in Dairy Beef

Year	AA Sire * FR Dam			FR Sire * FR Dam			JE Sire * FR Dam			JE Sire * JE Dam		
	Cwt	% ≤280kg	% ≤ O-	Cwt	% ≤280kg	% ≤ O-	Cwt	% ≤280kg	% ≤ O-	Cwt	% ≤280kg	% ≤ O-
2014	312	18.1%	11.9%	308	21.0%	59.2%	267	65.8%	79.4%	247	83.8%	82.4%
2015	314	17.0%	13.6%	312	17.7%	61.3%	269	62.3%	80.7%	243	76.7%	76.7%
2016	321	12.2%	14.7%	316	13.3%	61.0%	274	59.3%	76.2%	244	81.1%	85.1%
2017	319	13.6%	16.9%	312	17.4%	66.2%	273	57.3%	81.6%	238	81.6%	85.1%
2018	316	16.1%	20.9%	308	21.1%	70.8%	273	60.3%	80.3%	259	70.9%	86.1%

Source: Irish Cattle Breeding Federation

Industry is addressing this:-

- New Dairy Calf to Beef Index (DBI) launched January 2019
- Teagasc research & demonstration farm programmes

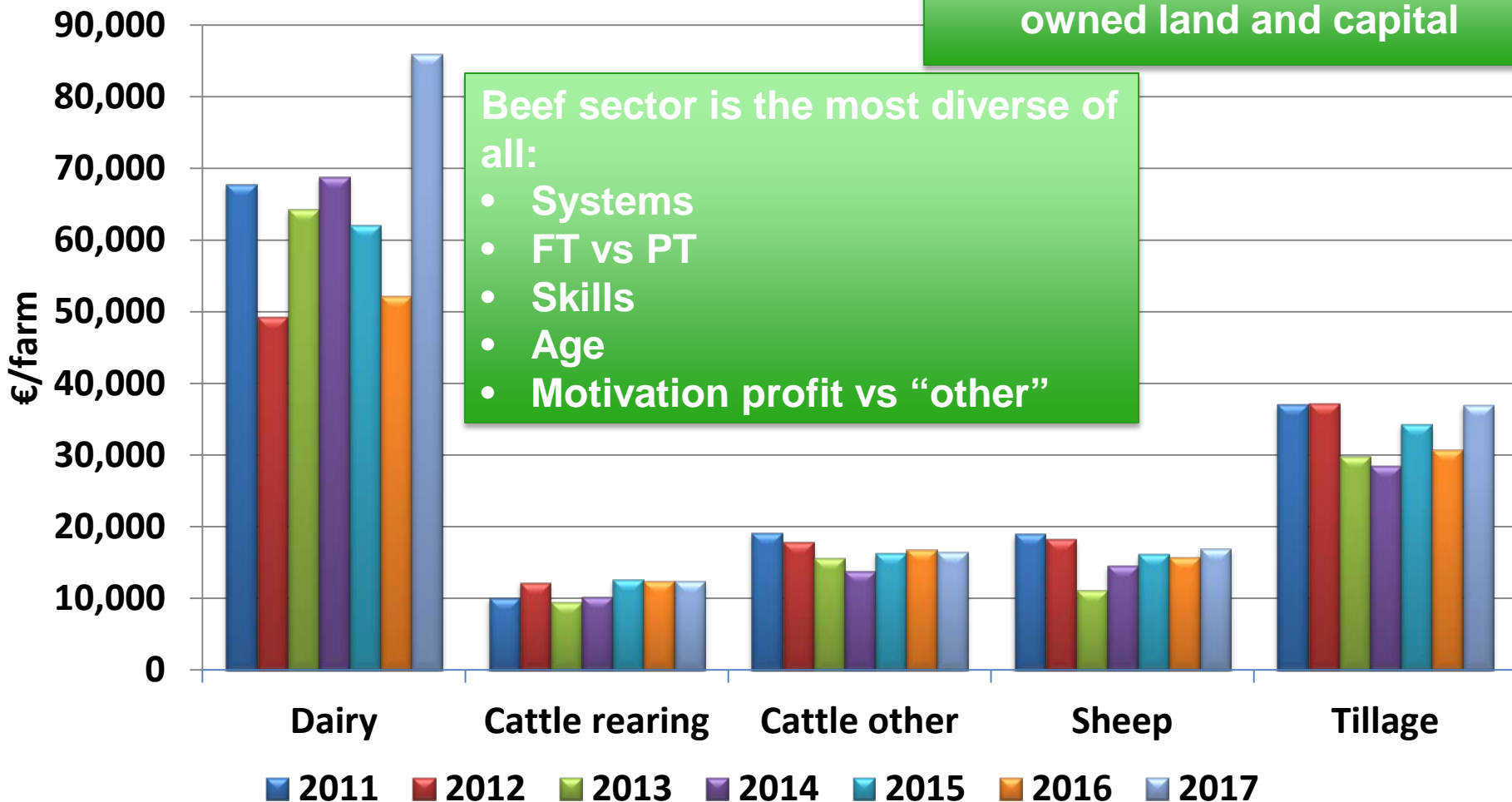
Irish Live Calf Exports

- Significant increase in numbers increasing in recent years.
- To date 143,000 calves exported in 2019
- Versus 107,813 by the same date in 2018 (+33% increase)
- Total calf exports in 2018 were 158,000 (+55% increase versus 2017).
- An important outlet for lower genetic merit calves
 - Over two third of all calf exports in 2018 were male progeny of dairy sires
- Act as alternative to a viable Irish veal industry.
- Extremely high animal welfare standards must be adhered to at all times.

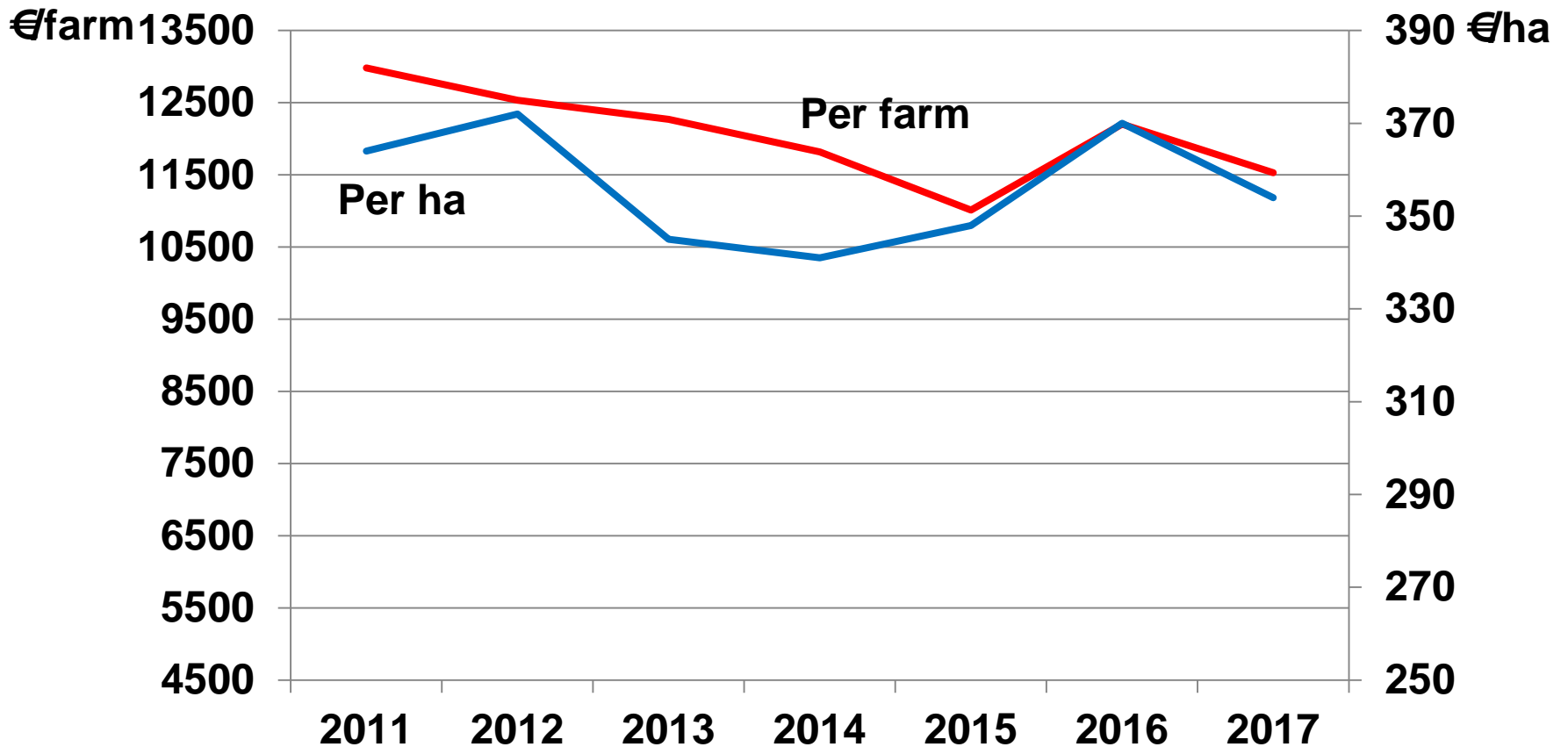
Family Farm Income (FFI): includes DPs

2011-2017

FFI remunerates family labour, owned land and capital



Direct payments* on cattle rearing farms 2011 to 2017



* Excluding environmental payments

Opportunities Exist for Committed Beef Producers

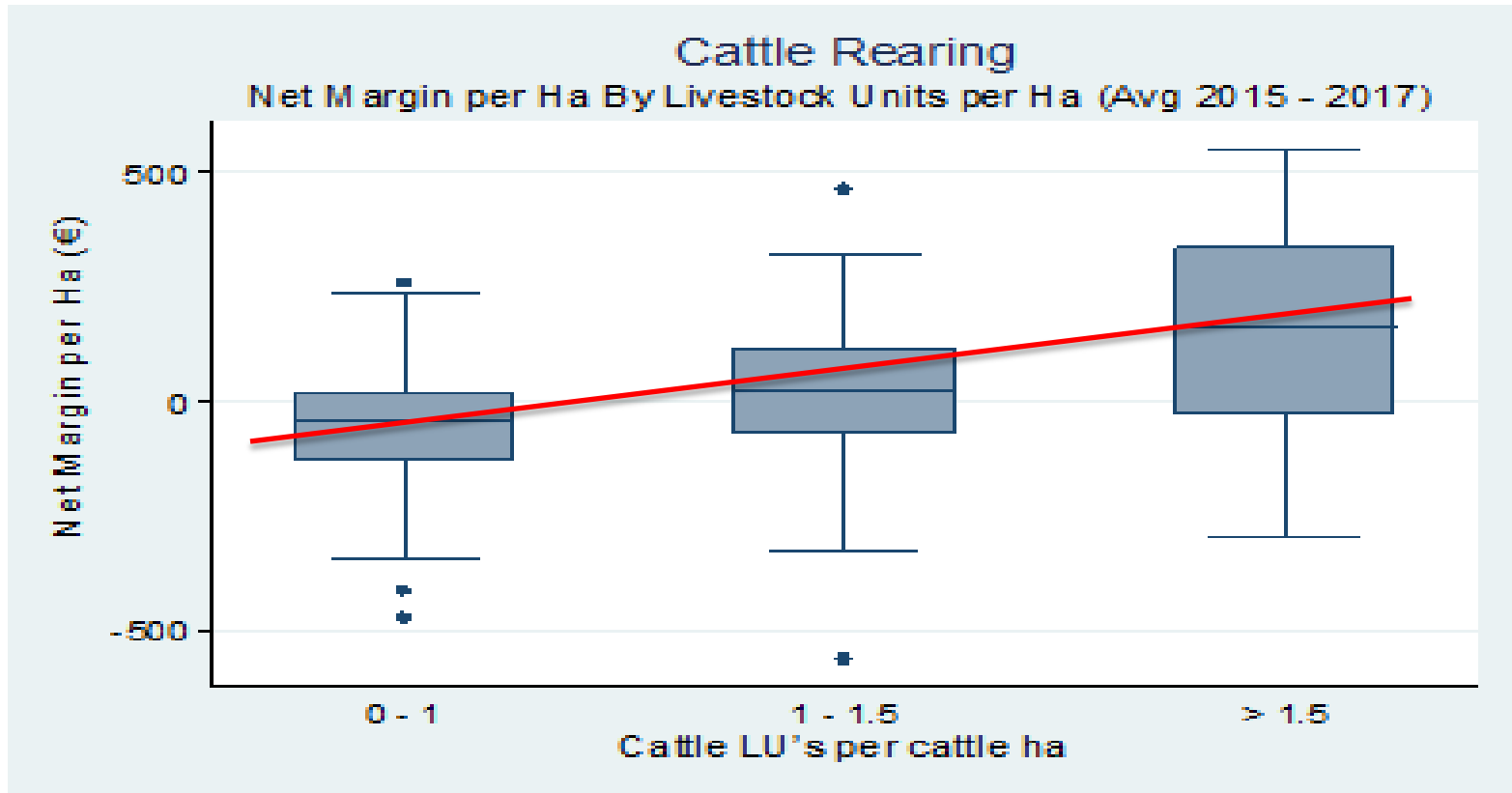
- Small proportion of beef farmers who are making a net profit per hectare (excluding direct payments)
- Potential on a lot of beef farms for improving technical performance
- Profitable beef farms are constantly adaptive and responsive to research and advisory programmes

Cattle Rearing: Net Margin (€ per forage ha) 2011-2017

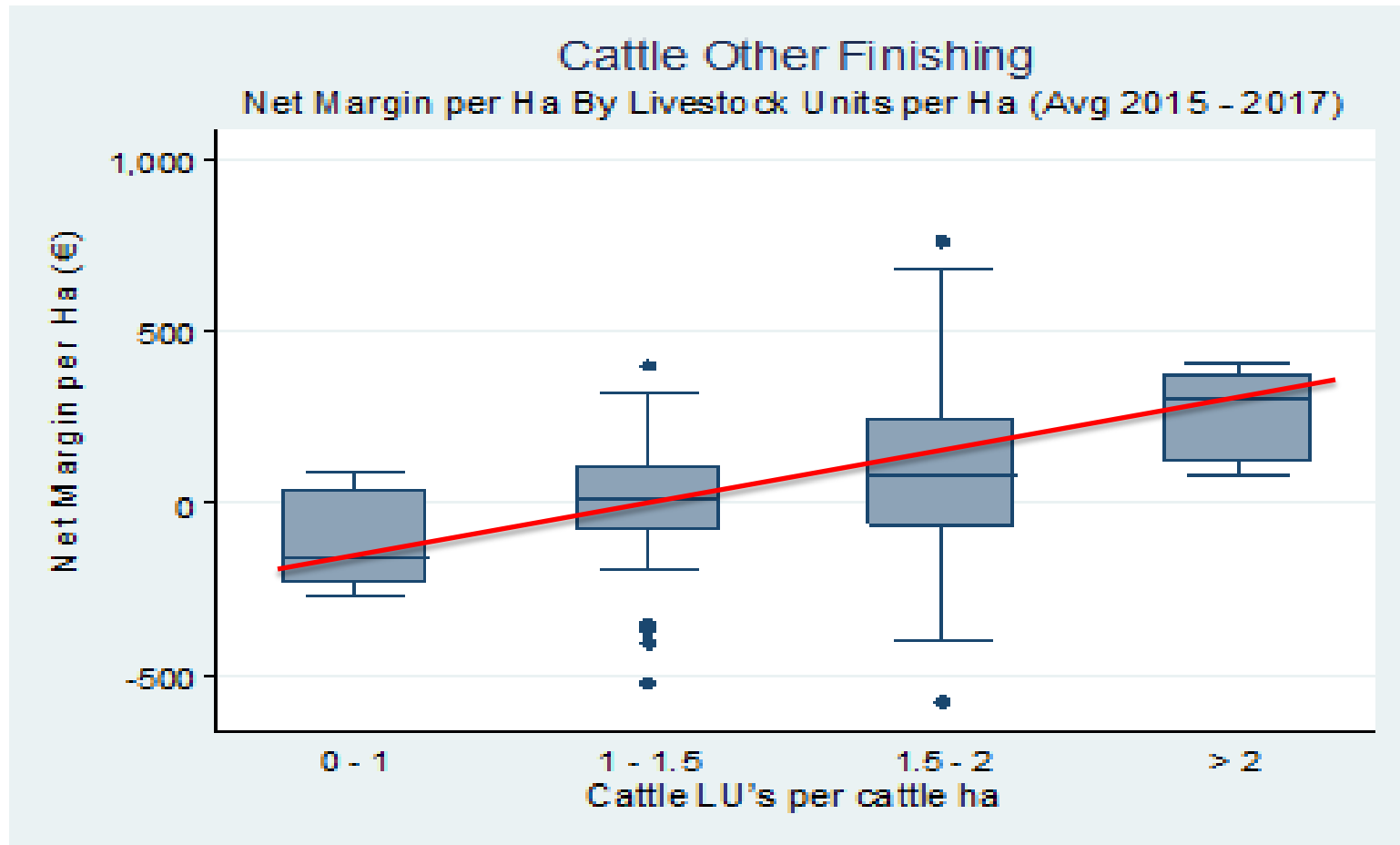
	2011	2012	2013	2014	2015	2016	2017
Top 20%	66	149	48	13	227	220	178
2 nd 20%	17	25	-78	-53	95	71	59
3 rd 20%	-39	-84	-164	-80	-51	-17	-34
4 th 20%	-106	-136	-120	-155	-65	-70	-63
Bottom 20%	-194	-187	-278	-219	-146	-141	-179

“Improving technical performance and stocking rate improves profitability”

Cattle rearing: net margin (excl. direct payments) per for. ha by stocking rate; average (2015-2017)



Cattle other finishing: net margin (excl. direct payments) per for. ha by stocking rate; average (2015-2017)



Some Key Performance Indicators (KPIs) on suckler farms

PBI usage
13%!

KPI*	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017
Grass utilised tDM/ha	5.3	5.4	5.5	5.6	5.6	5.8
% heifers calving 22 - 26 mths	15	16	14	18	21	23
Calving interval days	n/a	n/a	401	407	406	402
Kgs GHG/kg LW	n/a	14.1	13.7	13.1	12.7	12.7

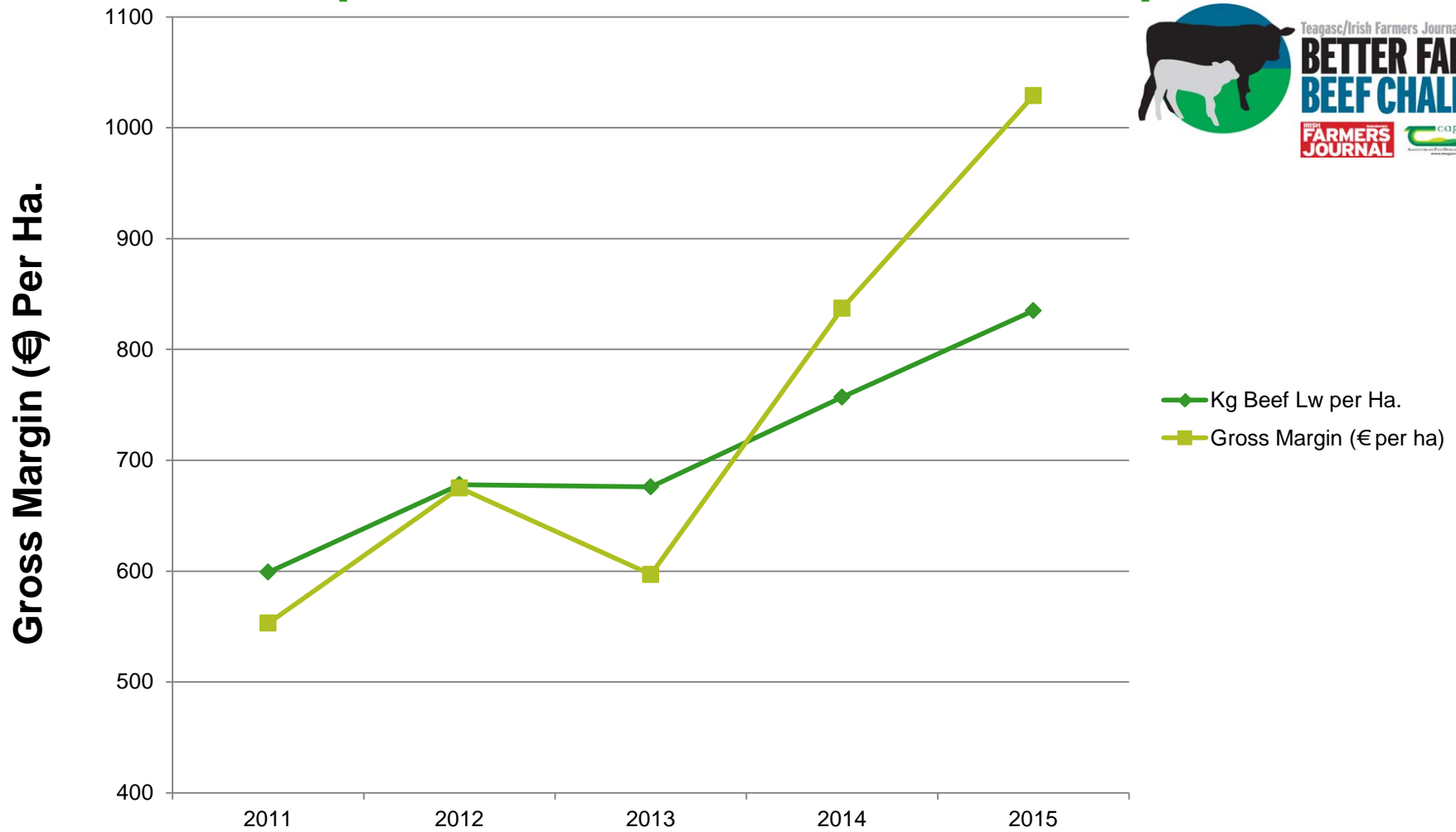
* 3-year rolling averages

KPIs continued

Key performance indicators (KPI)	National average farms	High performance farms	Difference in net margin per cow
Reproductive KPI's			
Calves weaned per cow/year	0.85	0.95	€87
Age at first calving (months)	32	24	€50
6-week calving rate (%)	55	80	€28
Productive KPI's			
Calf average daily gain to weaning (kg)	1.05	1.25	€86
Concentrates fed to cow/calf unit annually (kg)	450	200	€52
		Total	€303

“Farmers can make real progress by adopting best technology”.

Teagasc-IFJ BETTER Beef Programme (2012 -2016, n= 35 farms)





Teagasc Green Acres – Dairy Calf to Beef Programme (2015 – 2018; n = 10 farms)

Per Hectare Performance (2017 versus 2014)

	Average 2017	Average 2014
Stocking rate (LU/ha)	2.5	1.83
Output (kg/ha)	1,296	759
Gross output (€/ha)	2,424	1,459
Total Variable Costs	1,366	946
Gross Margin	1,058	513
Fixed Costs	584	553
Net Margin	475	- 40

Teagasc Research and Advisory priorities

Our goal on beef farms is to improve

- Genetic merit
- Reproductive efficiencies
- Grassland management
- Animal health
- Financial performance
- Environmental sustainability

Teagasc Support for Beef Farmers

- Over 300 Knowledge Transfer beef discussion groups with 5,000 beef farmers as members
- Over 100 Business & Technology Beef Advisors giving one to one advise to beef farmer clients
- Teagasc-Irish Farmers Journal BETTER Farm Beef Challenge demonstrating best practice on suckler farms
- Teagasc-Green Acres Programme demonstrating best practice on dairy calf to beef farms
- Involved in the Newford Suckler Demo Farm in Athenry
- Have research demo farms – Derrypatrick Suckler Herd & New Calf to Beef Demo Herd (both in Teagasc Grange)
- World recognised beef research programme with genetics and grassland platforms across livestock centres in Moorepark, Grange and Athenry.

Teagasc Demonstration Initiatives

- Teagasc Derrypatrick Herd (Suckler Beef: Grange)
- Teagasc and Dawn Meats Newford Herd (Suckler Beef: Athenry)
- Teagasc-IFJ BETTER Beef Programme (Suckler and Other Systems) (25 commercial farms)
- Teagasc Maternal Index Herd (Suckler Beef: Grange)
- Teagasc Dairy Calf to Beef Programme (Johnstown Castle)
- Teagasc Dairy Calf to Beef Programme (Grange)
- Teagasc 'Green Acres' Dairy Calf to Beef Programme (14 commercial farms)

Recent & New Initiatives in Teagasc Beef Research

- Dairy Calf to Beef Programme Grange
- Anthelmintic resistance in beef cattle
- Effect of floor type and space on performance and welfare of finishers
- Effect of disbudding and castration procedures on the performance and welfare of calves
- Identifying the factors required to address the decline in the reproductive efficiency of beef cows
- Survey of the factors associated with disease and immunocompetence in artificially reared dairy and suckled beef calves
- Effects of suckler cows with different levels of milk production
- Molecular-based biomarkers for Feed Efficiency (FE) in beef cattle
- Impact of grass-based systems on human health and nutrition
- Production and quality attributes of grass-based vs concentrate beef

Net Margin is maximised on beef farms where.....

- Focus is on optimising performance per livestock unit farmed through improved grassland management, genetics, reproductive performance and animal health.
- Operating at a high stocking rate- influenced by land type, labour availability and current/future infrastructure.
- Overhead costs match the level of output produced on the farm.
- Direct payments are maximised per hectare.
- Investment in infrastructure allows for the efficient use time and labour for both part-time and full-time farmers
- The latest innovations from research and advise are incorporated into the farms' operations

Thank you