Competitiveness and Productivity: An Update

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Overview

- Brief summary of the updated position
- Why the renewed focus on competitiveness
  - (and productivity)
- Cereals
- Beef
- Dairy
- Summary and conclusions

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Summary of Research Update

- **DAFM funding through the Research Stimulus Fund**
- **Focus on Competitiveness and Productivity**
- **'Something for everyone in the audience'**
  - International costs for <u>cereal</u> crops
  - Trends and sources of productivity growth in the <u>beef</u> sector
  - Trends in productivity growth in the <u>dairy</u> sector

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Why the focus on competitiveness?

- **Why is it important to be competitive?**
  - **CAP Reform, WTO Reform**
    - Decoupled payments
    - Quota abolition
    - Brexit
    - Ability to compete at or near world prices
  - **Volatility**
    - Ability to withstand cost price pressure
- **Competitiveness is about survival & not just about being the best**

- *DAFM funded Research Stimulus Fund*

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International Competitiveness of the Irish Cereals Sector

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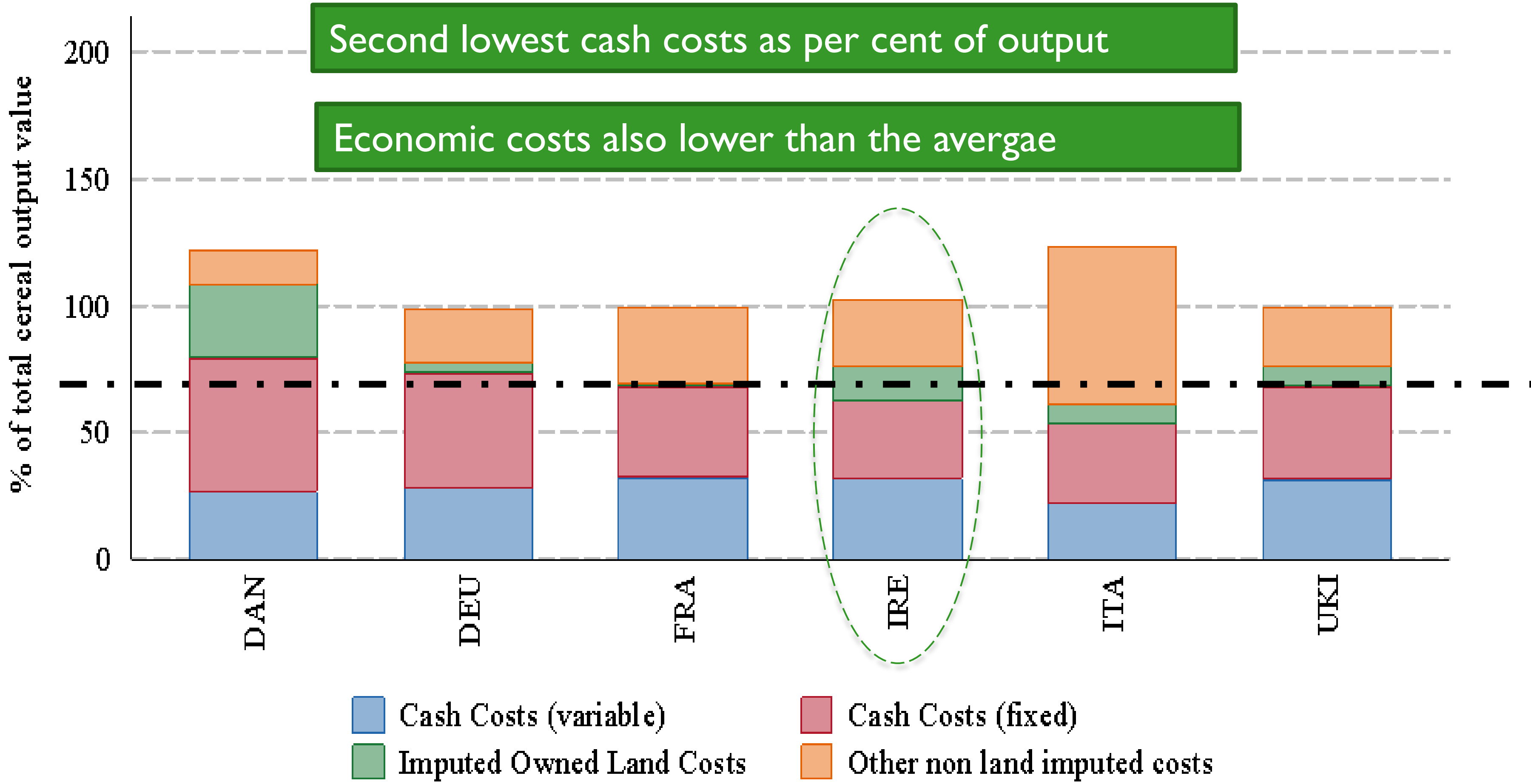
Costs as % of total output
- Selected EU specialist cereal farms

Positive sign for average size cereal farmer in a comparative sense

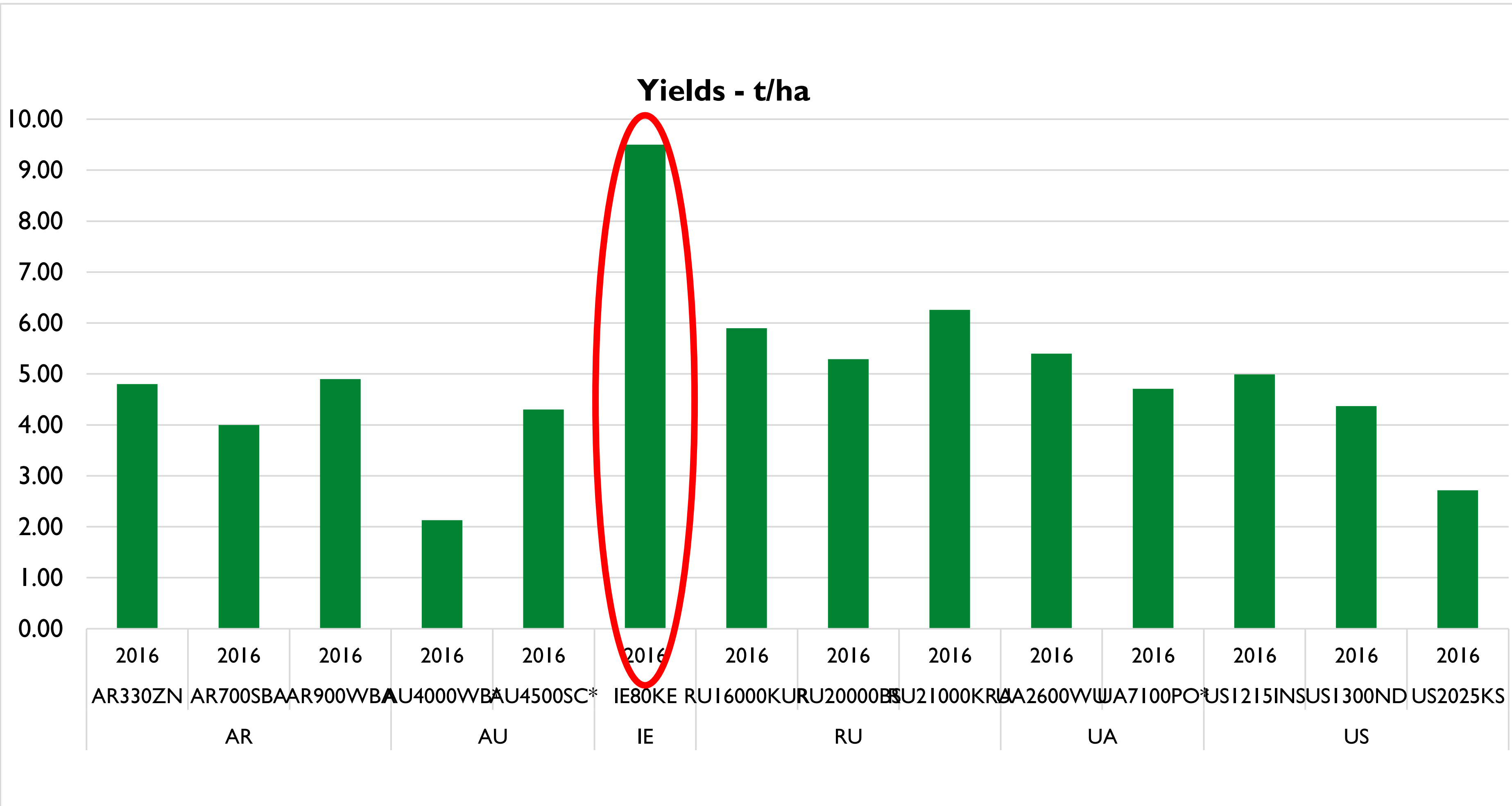
Second lowest cash costs as per cent of output

Economic costs also lower than the avergae



Source: FADN and Authors own analysis

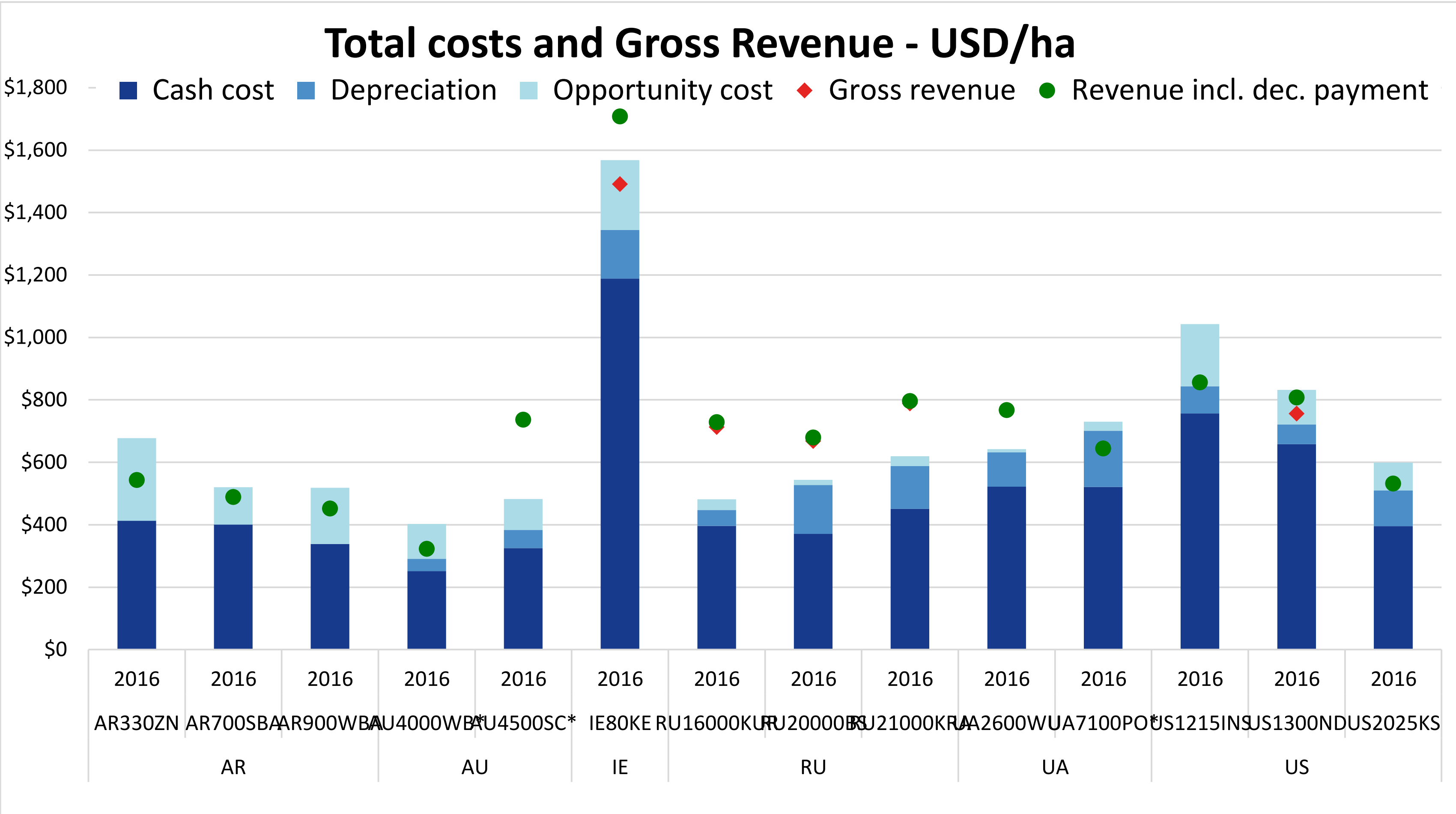
International wheat yields(2016)



Source: Agribenchmark, Cash Crop Network, 2016 data

International costs of cereal production

Ireland is a yielding producer but also a high cost producer



Source: Agribenchmark, Cash Crop Network, 2016 data

Productivity growth in the Irish beef sector

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Background

- The beef sector is Ireland's largest agricultural sector
- But faces several important challenges
  - Highly exposed to price volatility for beef and to very competitive international markets.
  - Long term problems with economic viability and low farm incomes of most farms in the sector.
  - Highly dependant on direct income support.

- **Food Harvest 2020 & Food Wise 2025 have placed increased focus on improving competitiveness and quality of production.**

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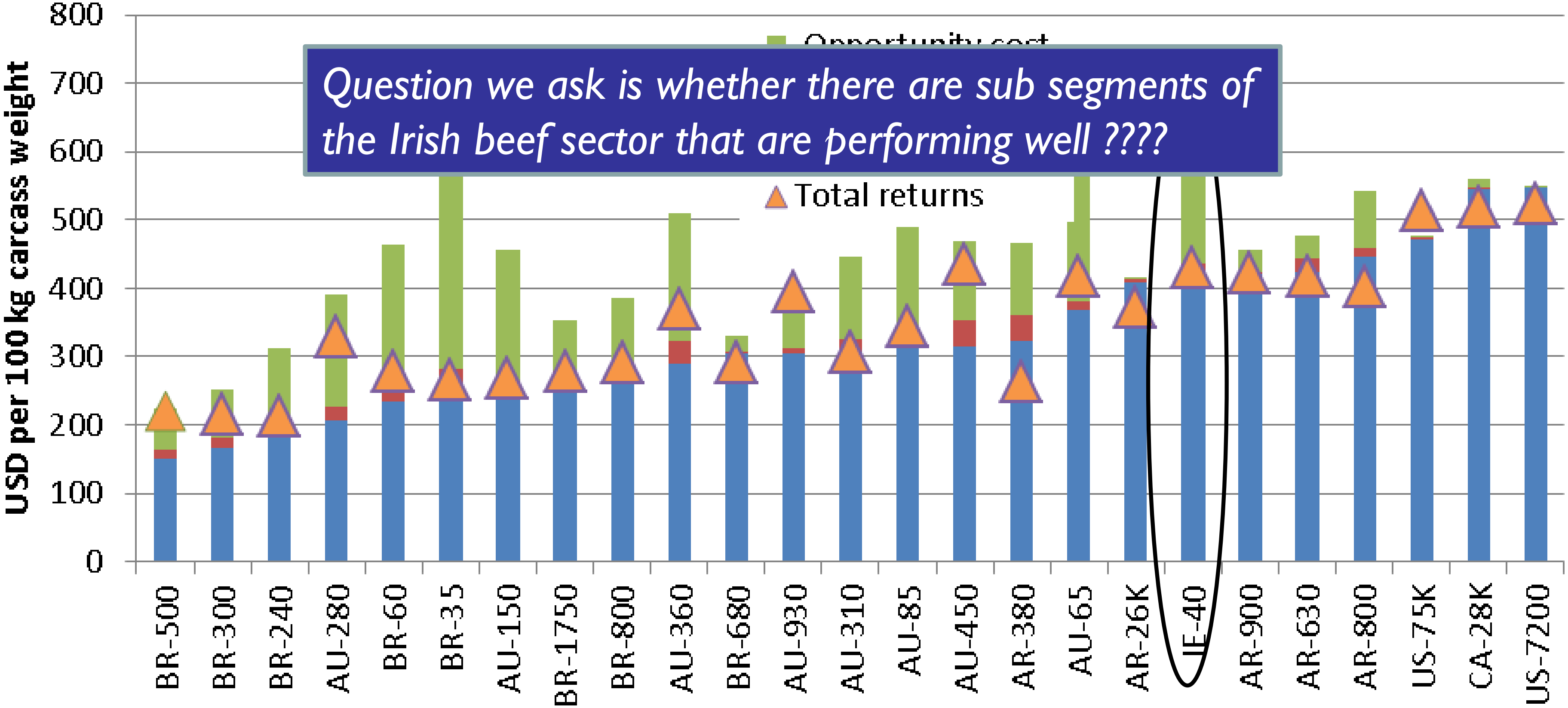
Specialist Beef Finishing Farms v. Non-EU Farms

Worrying sign for average size specialist beef finisher

Cash costs higher than average non EU farm

Total economic costs much higher than the average



Question we ask is whether there are sub segments of the Irish beef sector that are performing well ????

Source: AgriBenchmark data (2015)

Background

- Explore Total Factor Productivity (TFP) trends and sources:
  - Volume measure of aggregate output/volume measure of aggregate inputs.
  - CAP 2013 reform selected TFP as an impact indicator for monitoring the CAP
- But heterogeneous farm types, production systems and practices:
  - Type and ages of animals, intensity, feeding system, uptake of new technologies, regions, soil types, etc.
  - Evidence of farms operating under different technologies found in the literature.

Research Findings (Classes)

Identification of different classes of beef farms

Farm gross output, subsidy intensity, farm size, stocking rate, soil type, rearing or finishing specialisation, farmer's age and off farm work engagement.

- **Class 1 Largest and young:**
  - largest farms, highest labour and capital inputs use, youngest farmers
- **Class 2: Small and off farm workers:**
  - smallest farms, high off-farm work engagement
- **Class 3: Old and good soil:**
  - oldest farmers, lowest capital input use, most favourable soil type
- **Class 4: Intensive:**
  - highest stocking rate, high labour input use, high output per hectare
- **Class 5: Extensive but relatively large:**
  - lowest output per ha., lowest labour input and stocking rates; BUT 2nd largest
- **Class 6: Poor soil:**
  - located in the most disfavoured types of soils, low output per hectare and stocking rates
- **Class 7:High output, high capital:**
  - highest output per hectare, highest capital input use

Research Findings (Productivity)

Identification of productivity growth amongst classes

- Class 1 Large and young:
  - largest farms, highest labour and capital inputs use, youngest farmers
- Class 2: Small and off farm workers:
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Research Findings (Productivity)

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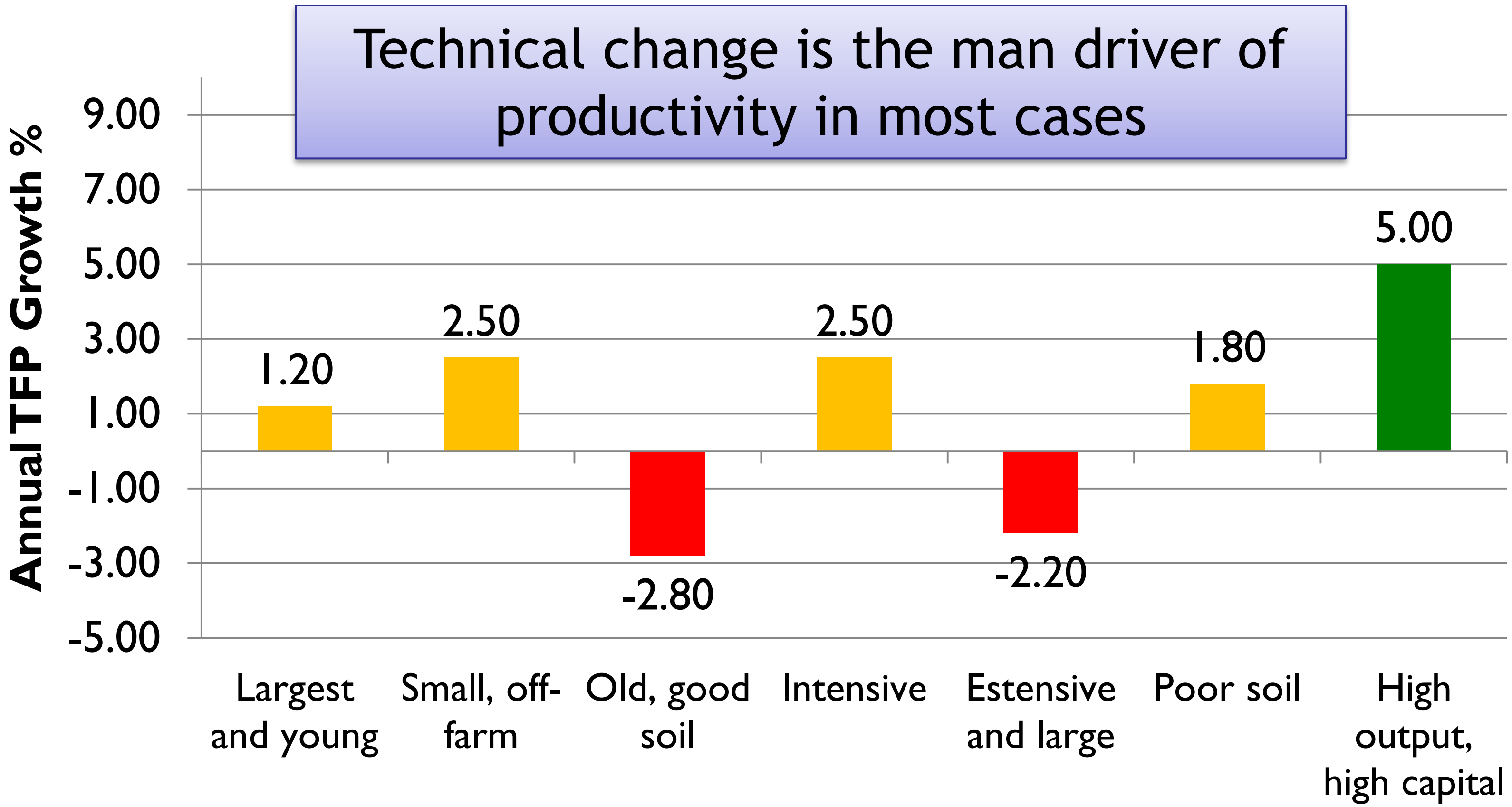

Productivity Growth of the Irish Dairy Sector

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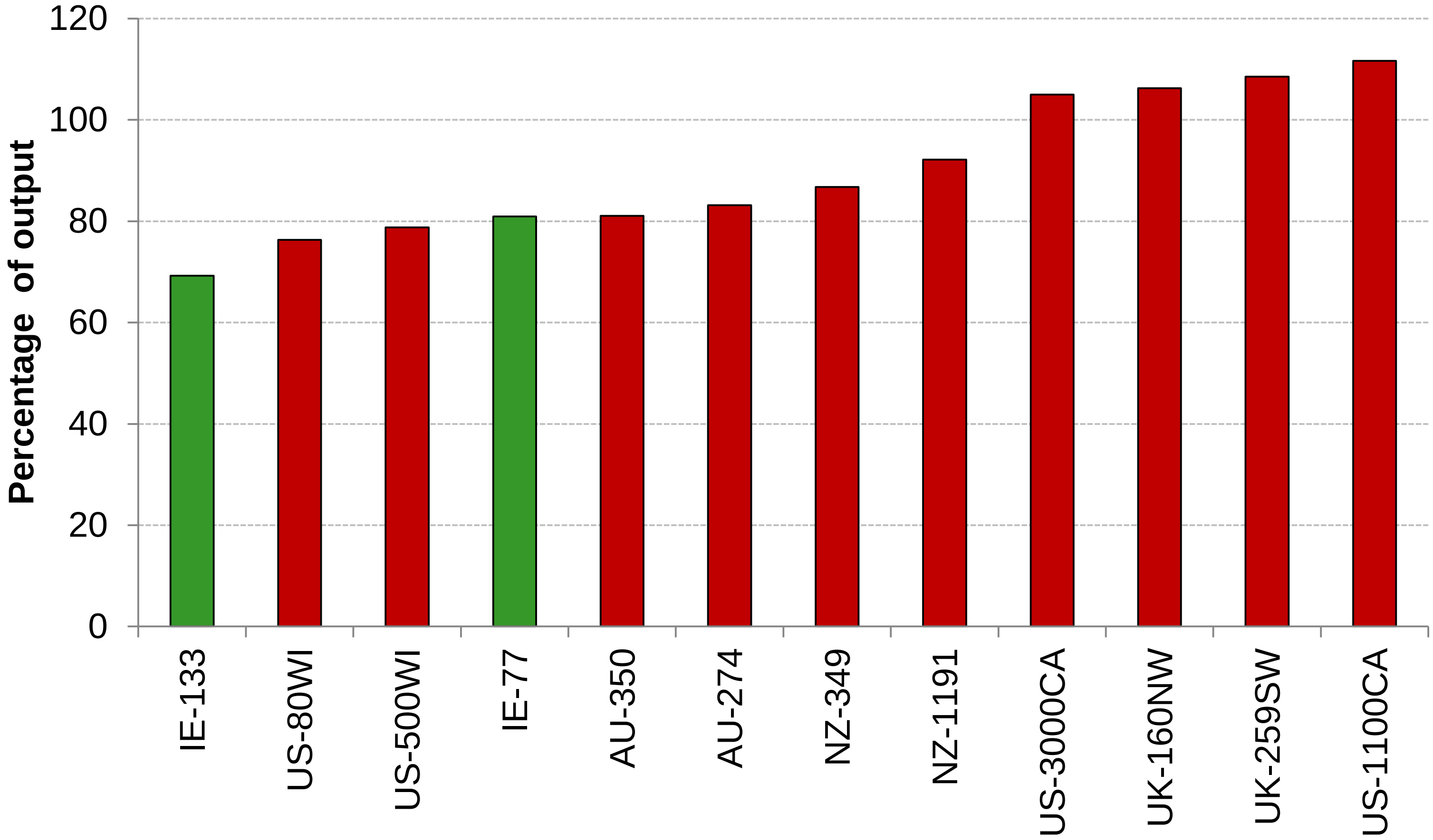
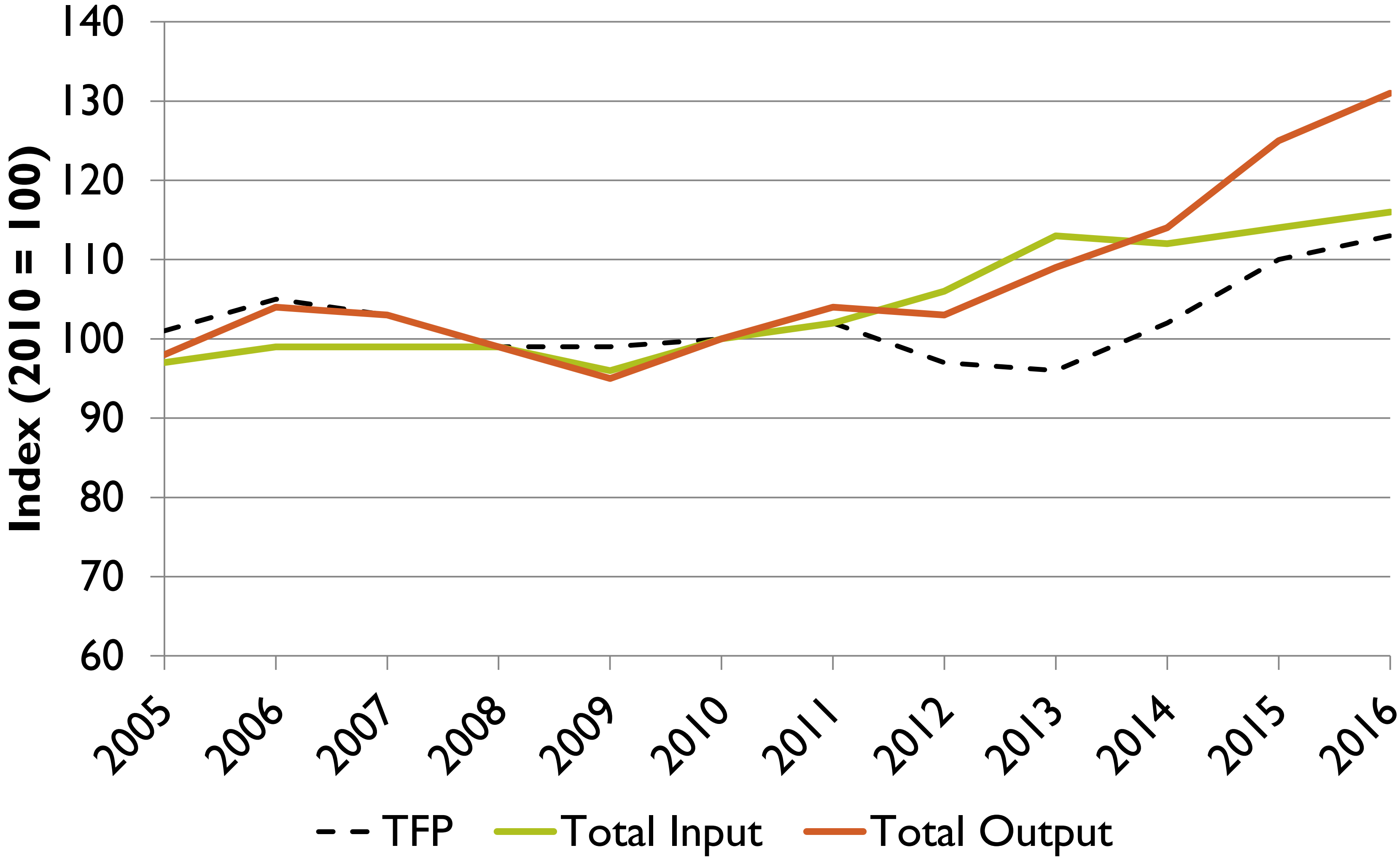
International Cash Costs of Milk Production

Positive sign for the average and larger Irish dairy farm in a non EU context



Source: IFCN, 2015

TFP Total Output Total Input on Irish Dairy farms 2005 -2016 (2010 - 100)



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TFP Total Output & Total Input on Irish Dairy farms 2005-2016 (2010 = 100)

Next to look at international comparisons and sources of growth

	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16
TFP	101	105	103	99	99	100	102	97	96	102	110	113
Total Input	97	99	99	99	96	100	102	106	113	112	114	116
Total Output	98	104	103	99	95	100	104	103	109	114	125	131

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Summary

- Putting the Outlook presentations into context
  - International cost comparisons for cereals
  - Potential positives in the Irish beef farming sector
  - Charting the recent growth in the dairy sector

- Ireland in context
  - High cost producer internationally for cereals
  - One policy does not fit all for beef farms
  - Recent growth in dairying has been at relatively low additional input

- Final note of appreciation to DAFM for funding this research

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