



NUI MAYNOOTH

Ollscoil na hÉireann Má Nuad

Innovation Performance of Irish Dairy Exports

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Rural Economy and Development Programme

REDP

Presentation Outline

- **Background to research**
- **Profile of product exports**
- **Methodology**
- **Results**
- **Concluding remarks**

Background to research

■ **Overarching aim of research**

- Provide insight into the underlying conditions necessary for innovation across dairy value chain

■ **Innovation systems perspective**

- Innovation considered systemic in nature
- Involves actions of multiple actors across value chain
- Can be purposive and directed towards a value chain problem

Background to research (2)

■ Opportunities

- Increased global demand
- Abolition of quota 2015

■ Focus on innovation

- Deliver on opportunities
- Minimise dangers of competition

■ Practice of innovation

- May not be enough to increase or sustain market position if rate of innovation is lower than competitors

Background to research (3)

■ Research question

- How fast are Irish dairy value chain products innovating relative to competitors?

■ Objective

- To measure the upgrading performance of three value chain products

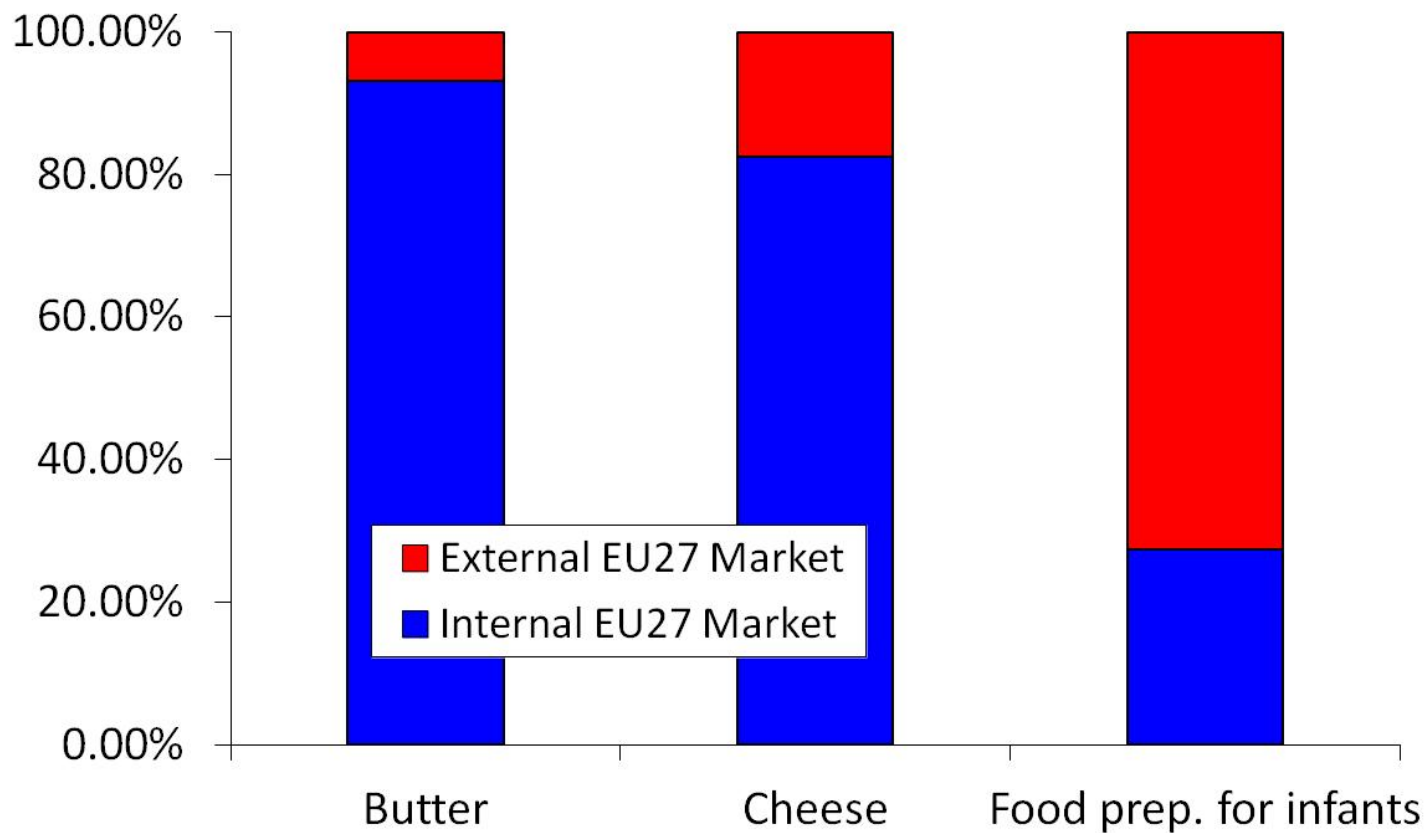
■ To provide

- Rationale for choosing value chain
- Focus analysis and triangulate future information received

Profile of Product Exports

- **Strongest performing dairy exports**
 - Food preparations for infant use
 - Cheese
 - Butter
- **Combined value accounts for 78% total dairy exports**
- **Great Britain is largest market – receives 34% exports**

Markets



Distribution of trade

Derived: Export data, COMEXT, Eurostat database, 2011

Global Competitors

■ Food preparations for infant use

- Netherlands, Singapore, France
- Ireland is 2nd largest global exporter

■ Cheese

- Germany, France, Netherlands
- Ireland is 8th largest global exporter

■ Butter

- New Zealand, Netherlands, Belgium
- Ireland is 4th largest global exporter

Methodology : Overview

■ **Comparative upgrading performance framework**

- Developed by Kaplinsky and Readman (2005)
- Import trade data

■ **Combine measures**

- Unit price (calculated as TYMA)
- Market share

■ **Unlike previous research**

- Changes over time of trade flows
- Highest level of disaggregation available (homogeneity assumption (1))

Methodology: Application

■ **Butter and Cheese**

□ Eurostat COMEXT

- Eight digit CN trade data
- 2000 – 2010
- Distribution of total product value across quadrants

■ **Food preparations for infant use**

□ UN COMTRADE

- Six digit HS trade data
- 2000-2009
- 1 product – look at relative performance in markets

Methodology: Metrics

■ Unit price (relative to industry average)

- Higher prices may reflect
 - Successful product innovation
 - or
 - Inefficiencies in production ⇒ declining process innovation
- Measure for cost competitiveness required

■ Market share

- Non cost competitive = falling market share
- Costs as measure reflect process efficiency rather than input costs (assumption (2))

	Market share decreases	Market share increases
Unit price increases relative to industry average	<p>Quadrant 1</p> <p>Failed product upgrading</p>	<p>Quadrant 2</p> <p>Successful product upgrading</p>
Unit price decreases relative to industry average	<p>Quadrant 3</p> <p>Product and process downgrading</p>	<p>Quadrant 4</p> <p>Process competitiveness</p>

Results: Butter

	Market share decreases	Market share increases
Unit price increases relative to industry average	<i>Failed product upgrading</i> 1%	<i>Product upgrading</i> 10%
Unit price decreases relative to industry average	<i>Product process downgrading</i> 72%	<i>Process competitiveness</i> 17%

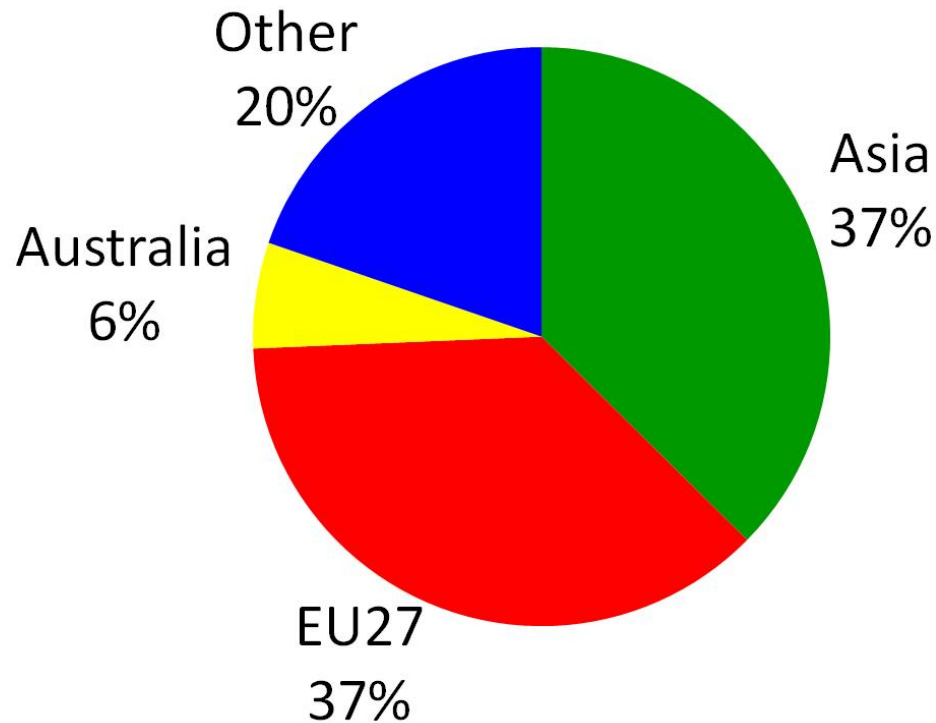
- 10 product types
- 72% of value populates Quadrant 3
- Inability to sustain innovative capability in products
 - ↓ market share despite lower product prices

Results: Cheese

	Market share decreases	Market share increases
Unit price increases	<i>Failed product upgrading</i> 1%	<i>Product upgrading</i> 18%
Unit price decreases	<i>Product process downgrading</i> 1%	<i>Process competitiveness</i> 80%

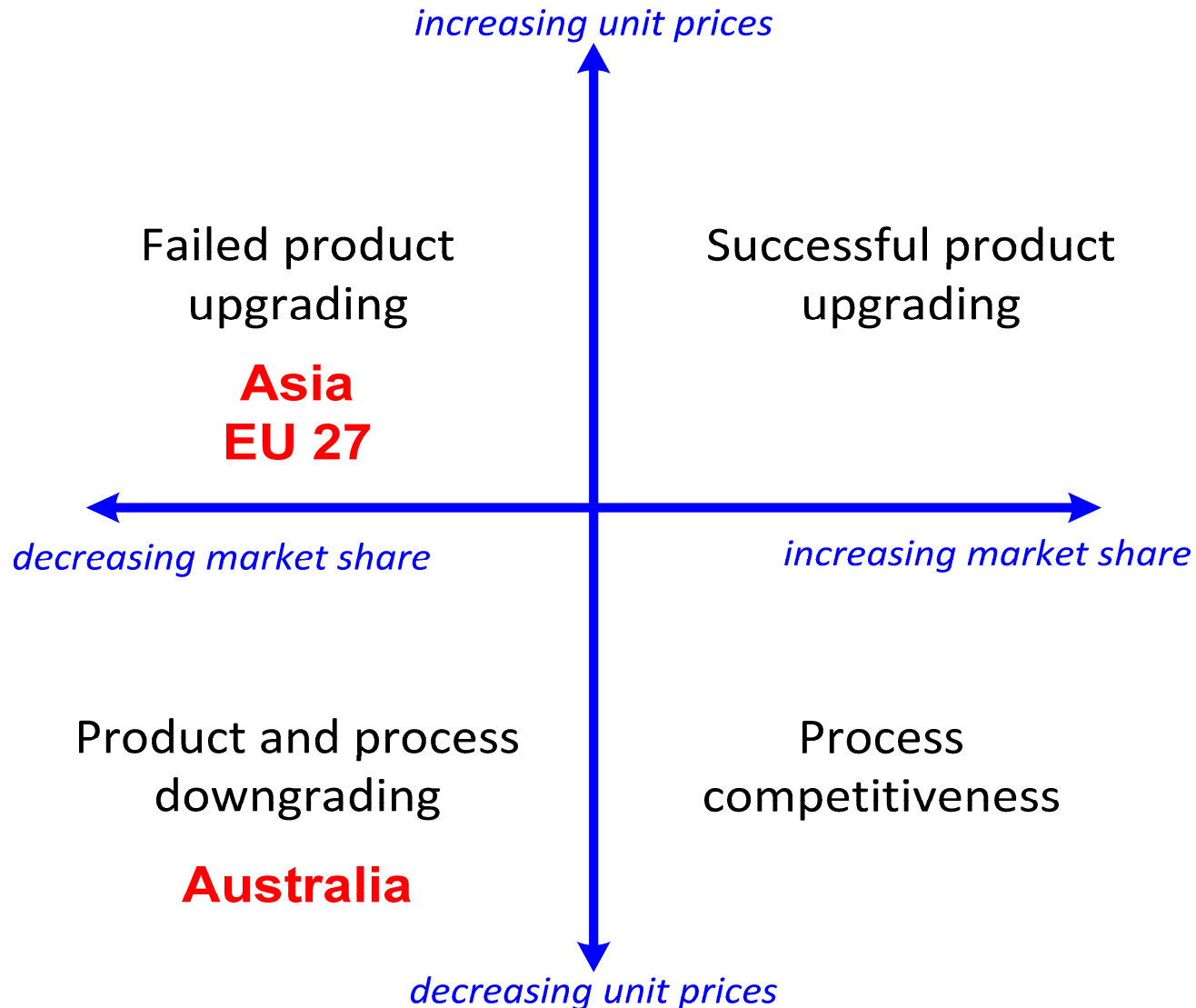
- 1% or more share of EU import market
- 80% value located in quadrant 4
- **Unsure if**
 - process innovation,
 - ↓ input costs
 - ↓ producer incomes

Results: Food Preps for Infants



World imports from Ireland
 Derived : Import data, Comtrade 2011

Results: Food Preps for Infants



Concluding remarks

- **Relatively good and bad performers**
- **Most valuable export experienced failed product upgrading in two of its largest markets – Asia and EU**
- **Valuable cheese export, cheddar, experienced process competitiveness**



- **This talk has identified innovation profiles for three value chain products**

- **Next phase**
 - Identify issues around these profiles
 - Use innovation as basis of empirical analysis
 - Operationalise innovation systems framework as intervention tool



Thank you for your time

Any questions?

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