



Smart Specialisation in Australia: Pathways to Growth

Paper presented to the CHANGING PATTERNS OF TERRITORY
POLICY: SMART SPECIALISATION AND INNOVATION IN EUROPE
28-30 Sept, Seville

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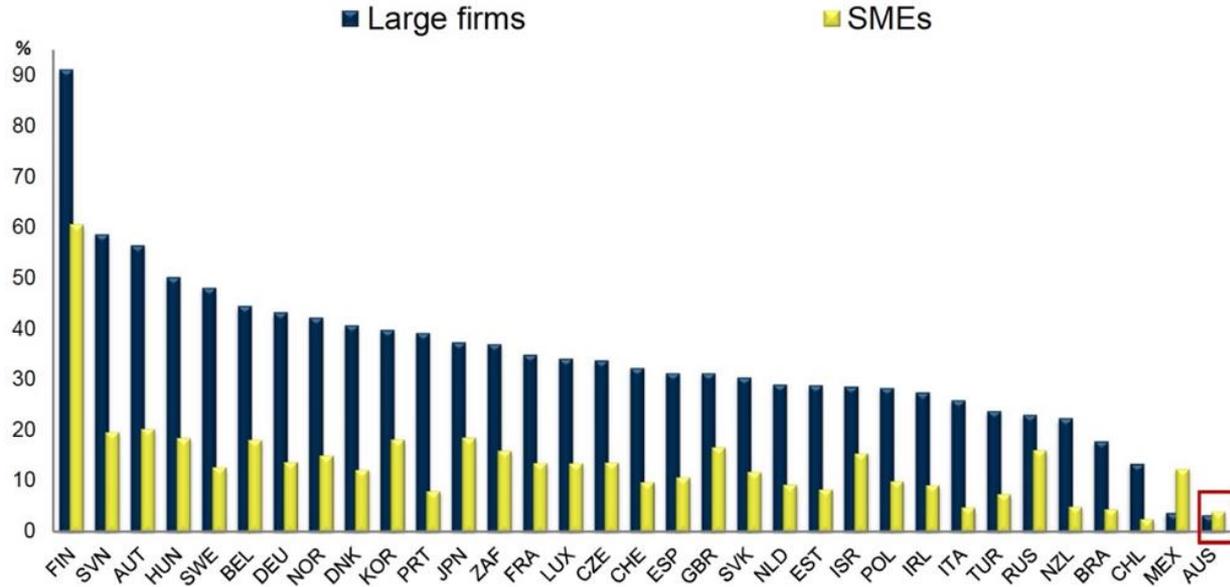
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University of
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Percentage of large firms and SMEs collaborating with



SOURCE: OECD
, based on
Eurostat
(CIS-2010)
and national
data sources,
June 2013

Collaborative Research Centres

- Australia does not have a strong history of engagement between general industry and research institution
- CRC program aims to foster innovation, and bring SMEs into the innovation space

Two relevant CRCs for this presentation:

- Excellerate CRC (focussed on the seafood industry)
- Australian Seafood CRC

- The Cooperative Research Centres Programme (CRC) is led by industry to develop important new technologies, products and services. The Programme works to help solve major economic, environmental and social challenges facing Australia.
- The Programme aims to:
 - improve the competitiveness, productivity and sustainability of Australian industries, especially where Australia has a competitive strength
 - deliver outcomes in line with government priorities, which are:
 - growth sectors
 - science and research.
 - encourage and enable small and medium enterprise (SME) participation in collaborative research
 - foster high quality research to help solve industry specific problems through collaborative research partnerships between:
 - industry entities and
 - research organisations.

Smart Specialisation and the Regions – Aquaculture on the Eyre Peninsula

Drought in the 1980s and 1990s, decline of agriculture

Hard times in fisheries

Southern Bluefin Tuna (SBT) quota cut from 15,500t
to 5,250t in 1989

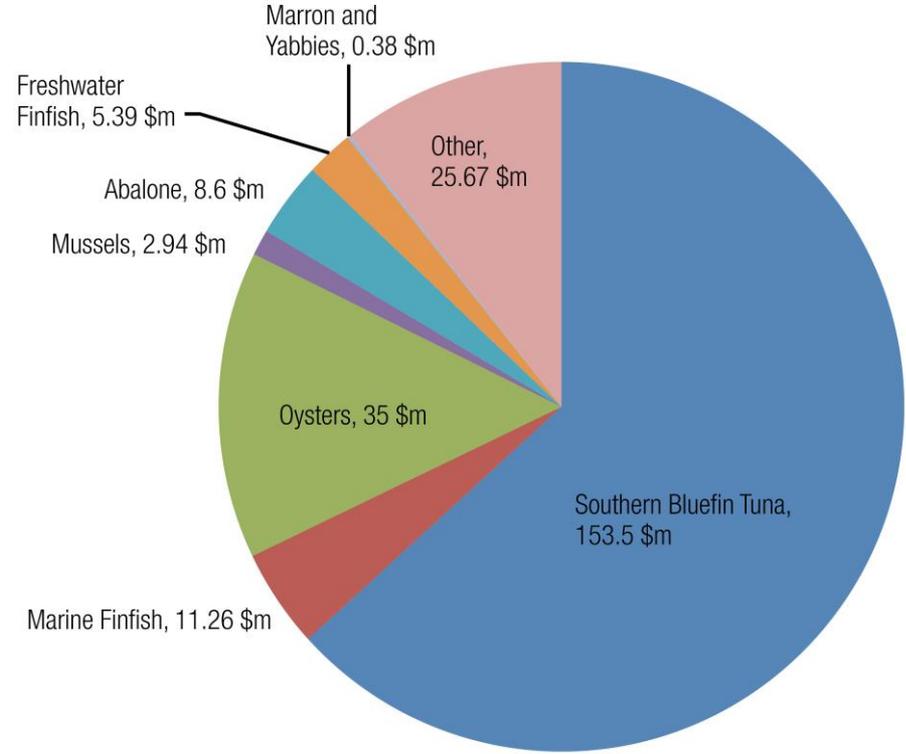
Early 1990s, experimentation in capture and fattening of SBT

Product moved from \$1/kg to \$70/kg or more

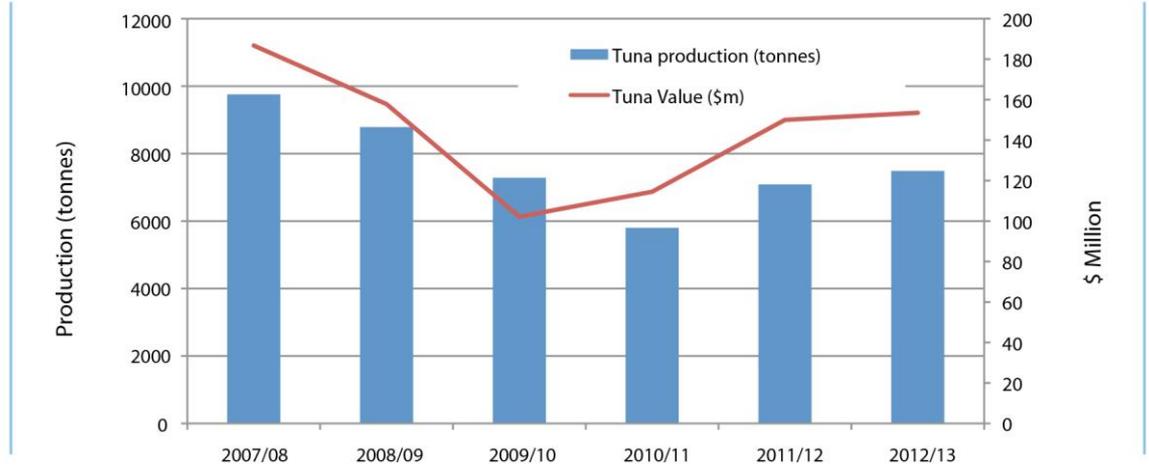
Significant innovation in capture, feedstock, kill technologies, harvesting,
freezing and freight



Aquaculture value of production 2012/13

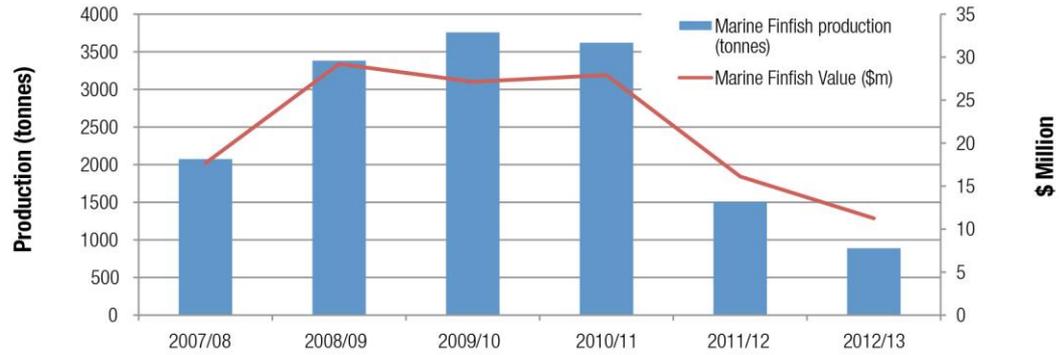


Southern Bluefin Tuna





Marine Finfish



Smart Specialisation and the Regions – Aquaculture on the Eyre Peninsula

- SBT transformed from a \$25m industry to a \$300m export industry
 - Considerable value add
 - Employment up 8 fold
 - More R&D (Lincoln Marine Science Institute)
 - Clean Seas have closed the loop on the breeding cycle
- Innovation in SBT transferred throughout the region
 - Pilchards/sardines
 - Mussels
 - Tourism
 - Oysters (in part)
 - Abalone

Smart Specialisation and the Regions – Aquaculture on the Eyre Peninsula

- Region now possesses:
 - Specialist finance and marketing expertise
 - Upgraded freight infrastructure
 - ‘Cashed up’ entrepreneurs and an entrepreneurial culture
 - Enhanced supply chain – processing, capture and marketing
 - Specialised labour force
 - Specialist training and inputs (eg ice slurry)

The changing face of manufacturing

- Manufacturing is at the heartland or core of the innovation system in any advanced economy
- In Australia, around 855,000* people are directly employed in the manufacturing sector
- It creates jobs, knowledge and wealth. Every job in manufacturing creates 3-5 jobs in the rest of the economy
- * (ABS – July 2015)

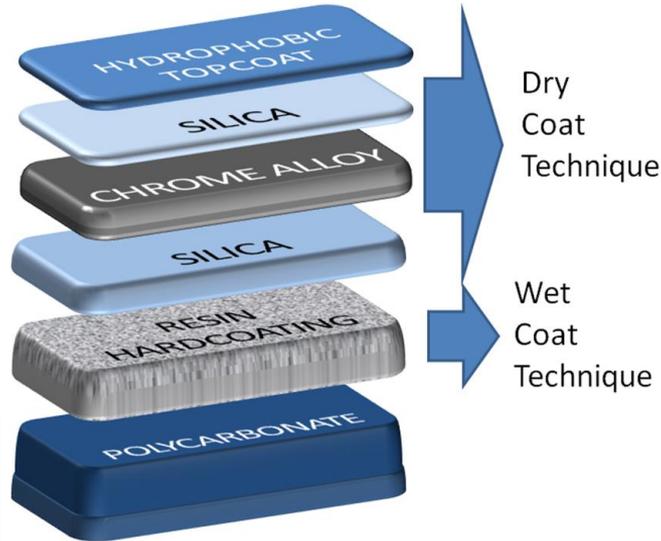
The manufacturing sector employs more scientists and engineers than any other industry sector

Case Study: SMR Automotive

- SMR Automotive is a global company with a manufacturing facility in Adelaide (Lonsdale)
- The company has always had an export focus and around 70% of its Australian sales are generated from exports
- The company continuously looks to diversify its manufacturing expertise, both within and outside of the automotive sector
- The plastic automotive mirror, developed in partnership with UniSA is an example of this. Almost 2 million manufactured and exported to date.

The Plastic Automotive Mirror

Offers a lightweight, first to market product with a simplified assembly process and new design possibilities.



How do we protect plastics?

Answer: By applying thin film coatings to them. These coatings are designed to have specific optical properties

- In the Automotive industry, car components must withstand extreme environmental conditions.
- Temperature : -40C to +80C
- Humidity : 2% to 100%
- Exposure to high salt levels
- Thermal shock
- Abrasion damage (stones, grit etc.)



SMR Plastic Mirror Production Facility



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