THE UNIVERSITY OF MELBOURNE

Melbourne Veterinary School

1.6 General Industry Structure

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VETS30030 / VETS90123

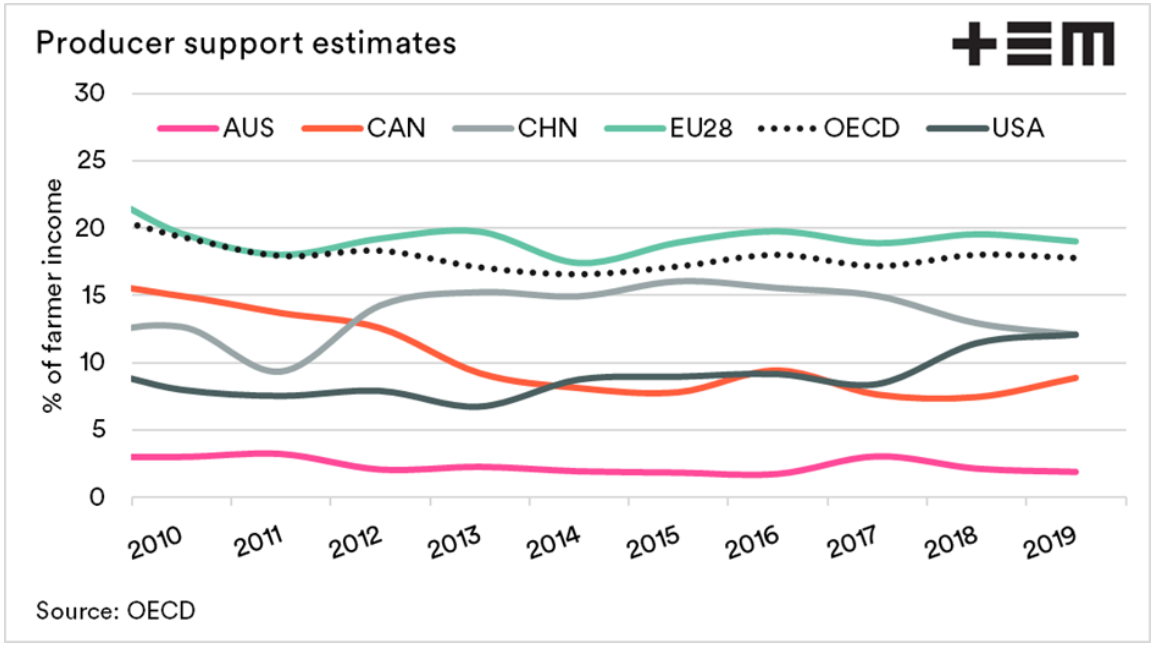
General industry structure

- Larger industries tend to have more organised structures e.g. beef cattle industry versus alpaca industry
- Less representation of smaller industries at political level and broadly across agricultural sector
- Australian agricultural research does set aside funds for emerging industries to work to enhance longer term production/profit

Organisations involved in inputs/outputs

- Livestock agents (stock and station agents)
- Abattoirs
- Veterinarians
- Fertiliser companies
- Genetics companies
- Feed companies
- Transport companies
- Infrastructure supplies (building, water, power etc)
- Animal health and identification
- Retailers
- Wholesalers
- Range of information providers eg. Departments of Primary Industry, RDCs (such as MLA, DA, AWI), Universities etc
- Other

Research in agriculture and veterinary science



- Research and extension of research to farmers in Australia has been vital in maintaining competitiveness of farms
- Little subsidy for farm production
- Must be efficient for farms to be financially viable

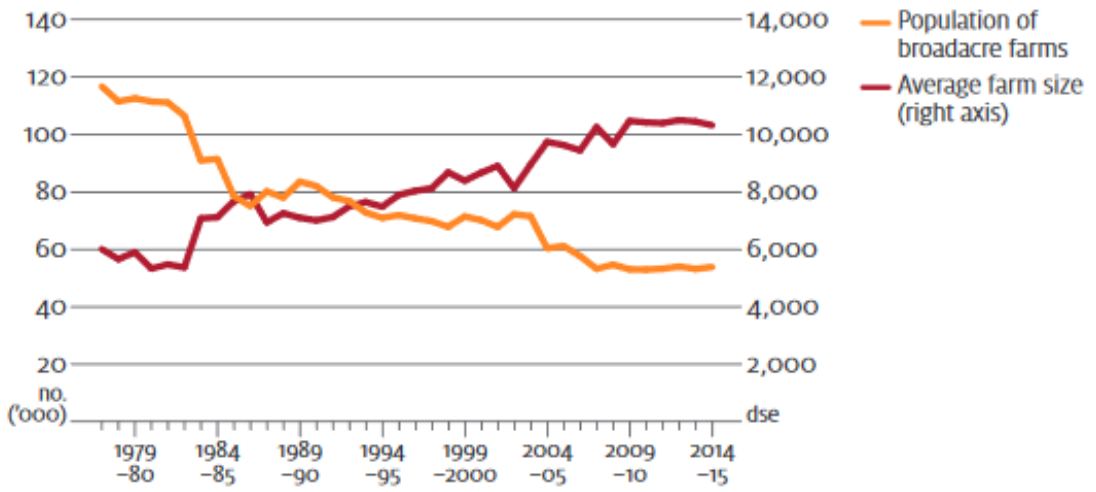
Graph from Thomas Elder Markets, Original data source
https://stats.oecd.org/viewhtml.aspx?datasetcode=MON2019_REFERENCE_TABLE&lang=en

Inputs/outputs

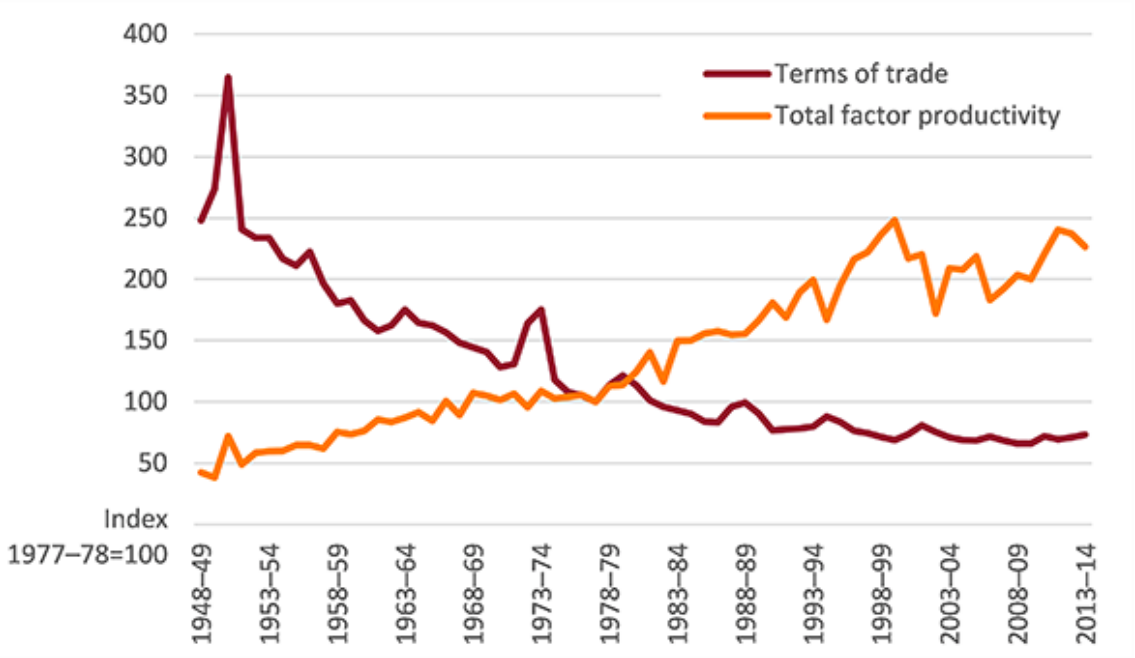
- Farm managers tend to have minimal control over input prices and often output income
- Need to maximise use of inputs and farm management to be efficient in output production (and ideally have ways to maximise output price)
- Significant improvements in productivity over time, but not always matched by profitability
- New research vital to maintain production/profit, over last 50 years Australian farmers producing up to 3 times more off same area.

Farm size increasing, less farms

FIGURE 2 Farm population and average farm size, all broadacre industries, Australia, 1977–78 to 2014–15



Note: Average farm size is measured in dry sheep equivalents (dse).
Source: ABARES



Research

- Produced tangible benefits for producers (funded via producers and government co-investment)
- Research and Development Corporations (RDCs) for different industries – operate with producer and government funds
- Assists producers but also overall reduces cost of food (societal good)
- Budgets for RDCs vary but some are 100s of millions
- Much of this research is published compared to commercial research that may not be (commercial-in-confidence)

Industry research and promotion

- Meat and Livestock Australia https://www.mla.com.au
- Dairy Australia https://www.dairyaustralia.com.au
- Australian Wool Innovation https://www.wool.com
- Agrifutures Australia https://www.agrifutures.com.au/ (minor industries – includes deer and camelids as they are small in comparison to the others)
- Smaller industries are serviced by Agrifutures
- Size of budget varies e.g. MLA budget 2018/19 = 270 million AUD, AWI budget 90 million AUD
- Range of veterinary roles within RDCs or in programs funded by RDCs, both in research and extension

Breed Societies – what do they do?

- Breed information and promotion
- Fellowship
- Sharing of ideas
- Development and publication of breed standards
- Organisation and structure eg. assisting at agricultural shows
- Marketing
- Education – particularly youth development
- Risk review for their breed
- Pedigree registration (this may be done via breed society or other group eg. lambplan and breedplan also show relevant pedigrees)
- Some provide a semi-regulatory role

Co-operative Research Centres (CRCs)

- "Our Cooperative Research Centres (CRC) Program supports Australian industries' ability to compete and produce. We do this by helping industry to partner with the research sector to solve industry-identified problems in 2 ways:
- CRC grants – supports medium to long-term industry-led collaborative research, for up to 10 years
- CRC Projects (CRC-P) grants – supports short term, industry-led collaborative research, for up to 3 years
- Aim to solve industry identified problems to improve Australian industry
- Has to include both business and research organisations
- Range of CRCs over past 20 years including multiple sheep CRCs and beef CRCs – multiple outputs that we will use this semester e.g. genetics programs

University based research

Veterinary educators teaching students mostly also do research (either in teaching or in specific veterinary research)

This can include working with CRCs, RDCs or funding from commercial companies e.g. pharmaceutical, ARC, NHMRC or other

These funding sources are acknowledged in any publications

Regulation – Veterinary chemicals

- A range of bodies impact use of veterinary drugs in Australia
- Largest impact is from the APVMA (Australian Pesticides and Veterinary Medicines Authority) – regulation and approval for use of agricultural and veterinary chemicals and products
- Department of Health
- Regulations around drug scheduling and who is allowed to prescribe certain drugs (scheduled drugs)
- For any drug to get to registration it requires significant financial investment and period of time, a lot of data is needed. Some drugs may not be registered for some species purely due to costs required to so (no drugs specifically registered for alpaca for example)

WHP and ESI

- Withholding period (WHP) and export slaughter interval (ESI) are both terms used to determine when an animal treatment may be used
- *"An Export Slaughter Interval (ESI) is the minimum time that should elapse between administration of a veterinary chemical to animals and their slaughter for export. ESIs manage differences between Maximum Residue Limits (MRLs) allowed for chemicals in Australia and the MRLs of its trading partners. ESI advice is particularly important for quality assurance schemes, and especially for producers filling out the National Vendor Declaration (NVD) forms as part of the whole-of-chain management of exported product. ESIs have been agreed to by the sheepmeat industry and the registrant of the veterinary chemical. The Withholding Period (WHP) is the minimum period which must elapse between last administration or application of a veterinary chemical product, including treated feed, and the slaughter, collection, harvesting or use of the animal commodity for human consumption. WHPs are mandatory for domestic slaughter and are on the label of every registered product"* extract from https://apvma.gov.au/sites/default/files/publication/26536-export_slaughter_intervals_of_veterinary_chemicals_for_use_in_sheep_-_30_october_2020.pdfLinks to an external site.
- Not always harmonisation around the world on WHP, can be large differences between WHP and ESI (important to ensure you are aware of these)

Regulation and producer groups

- We will now move onto some text based information to complete regulation and then further information on producer bodies