



**Australian Government**

**Department of Agriculture  
and Water Resources**

ABARES



**REGIONAL  
OUTLOOK**

# Big picture issues affecting northern agriculture

**Alistair Davidson**

**Australian Bureau of Agricultural  
and Resource Economics and Sciences**

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Research by the  
Australian Bureau of Agricultural and Resource Economics and Sciences

# Australian Bureau of Agricultural & Resource Economics and Sciences (ABARES)



## Statistics



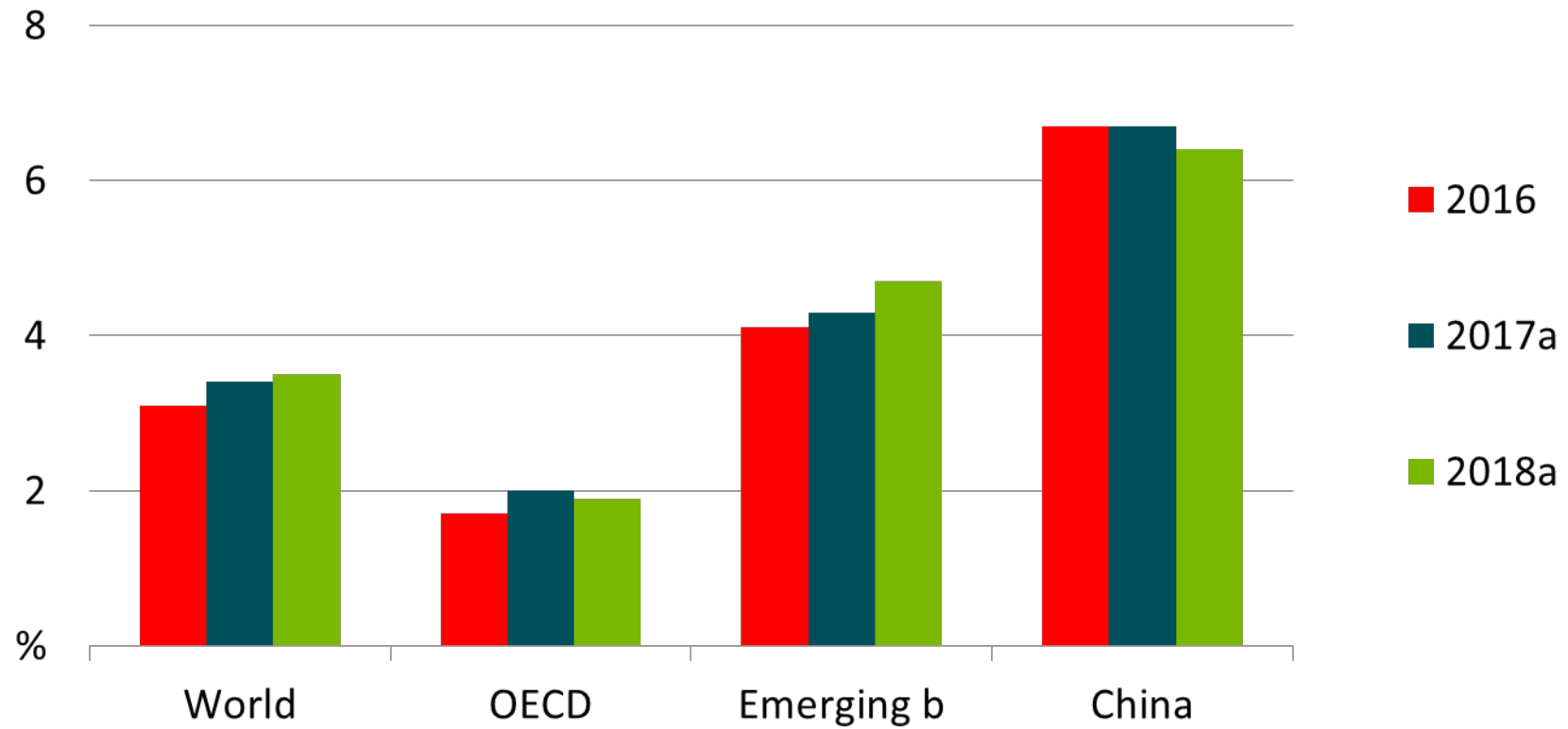
## Forecasting



## Analysis

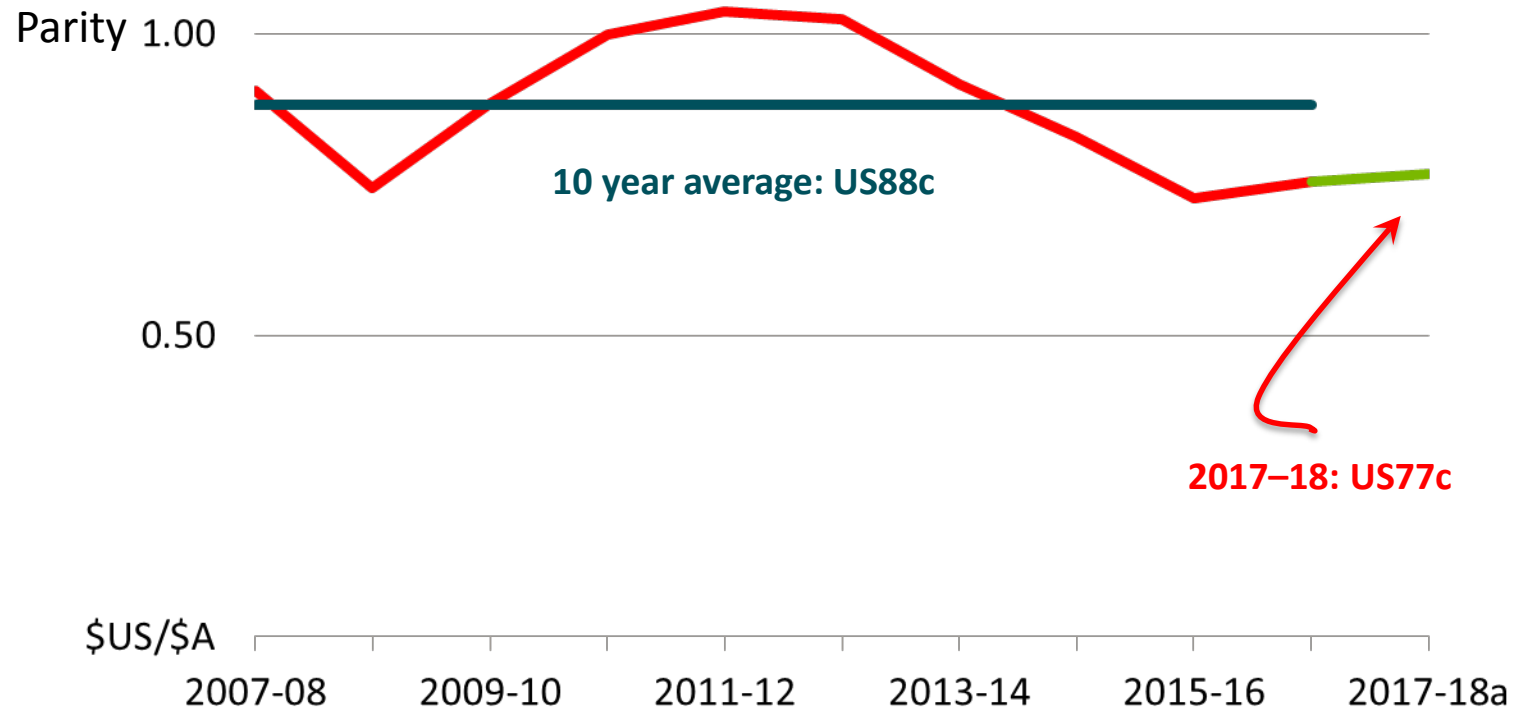


# World economic growth



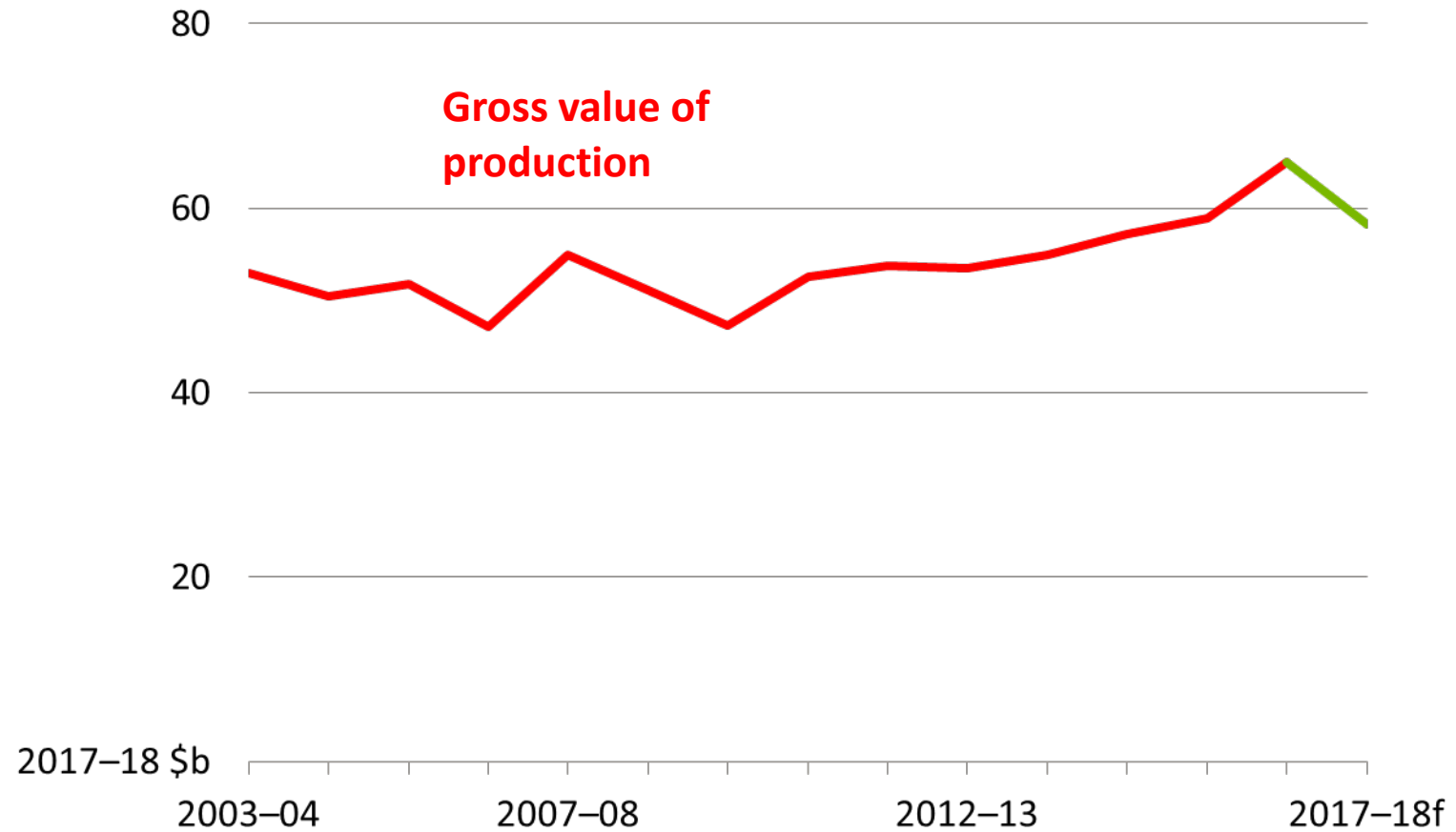
a ABARES assumption. b includes China.

## Australian dollar has fallen and is assumed to stay relatively low



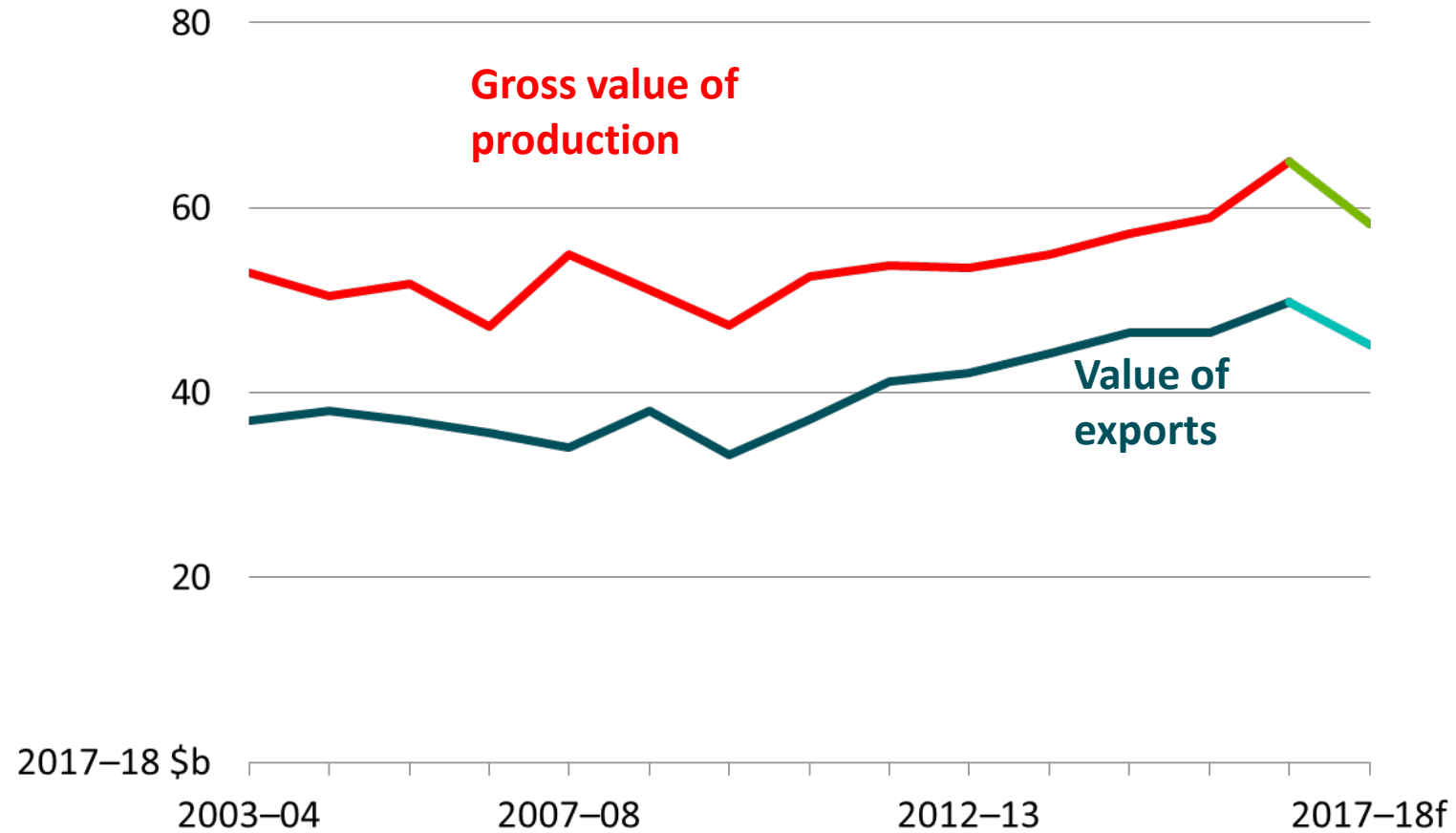
a ABARES assumption.

## Value of agricultural production and exports



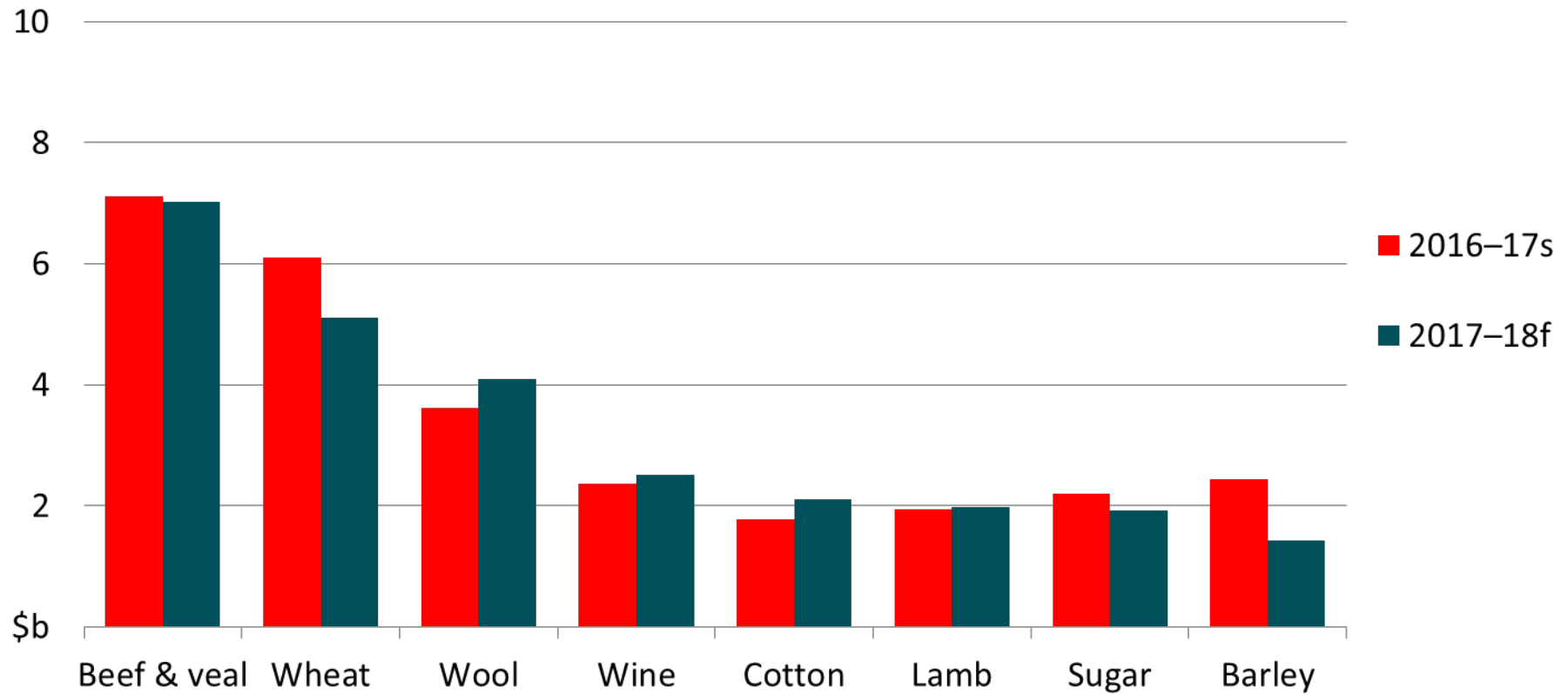
f ABARES forecast.

## Value of agricultural production and exports



f ABARES forecast.

# Major Australian agricultural exports



**s** ABARES estimate  
**f** ABARES forecast.

## Long term trends shaping Australian agriculture



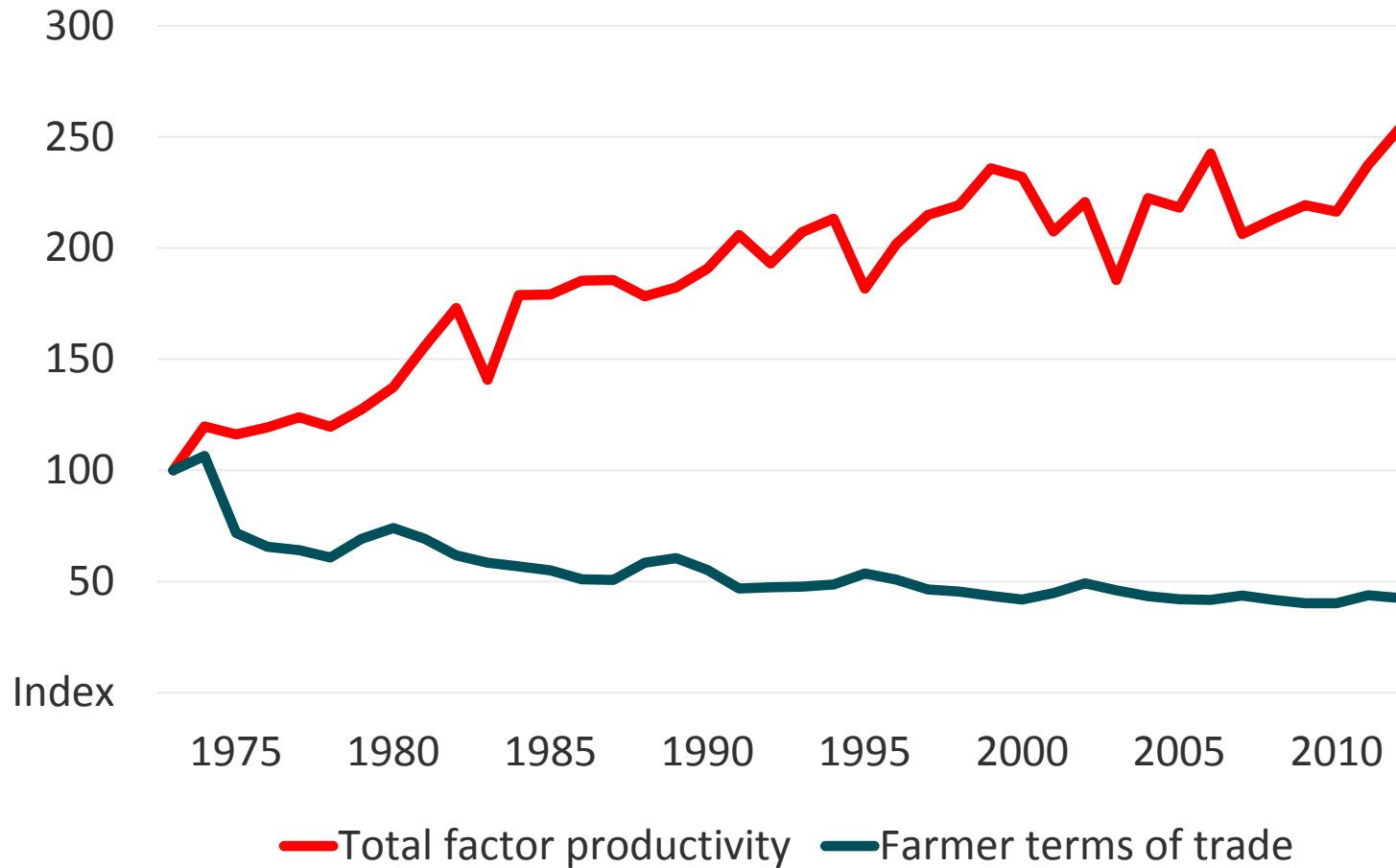
- Markets for farm inputs and outputs
- Technology development and uptake
- Structural change
- Society's expectations of farmers
- Climate change



## Maintaining competitiveness is key

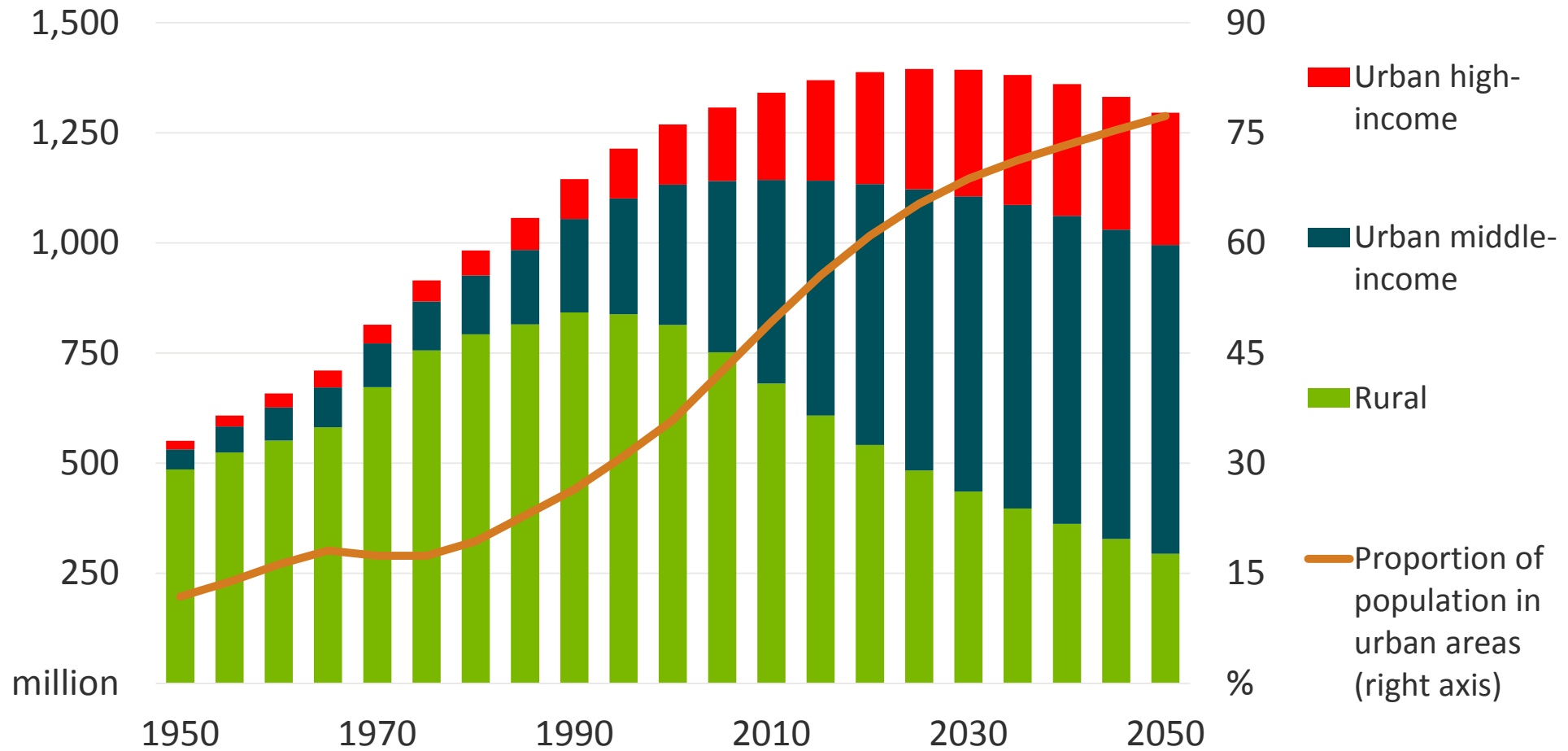


Total factor productivity and farmer terms of trade 1975 to 2012



# Markets for farm inputs and outputs

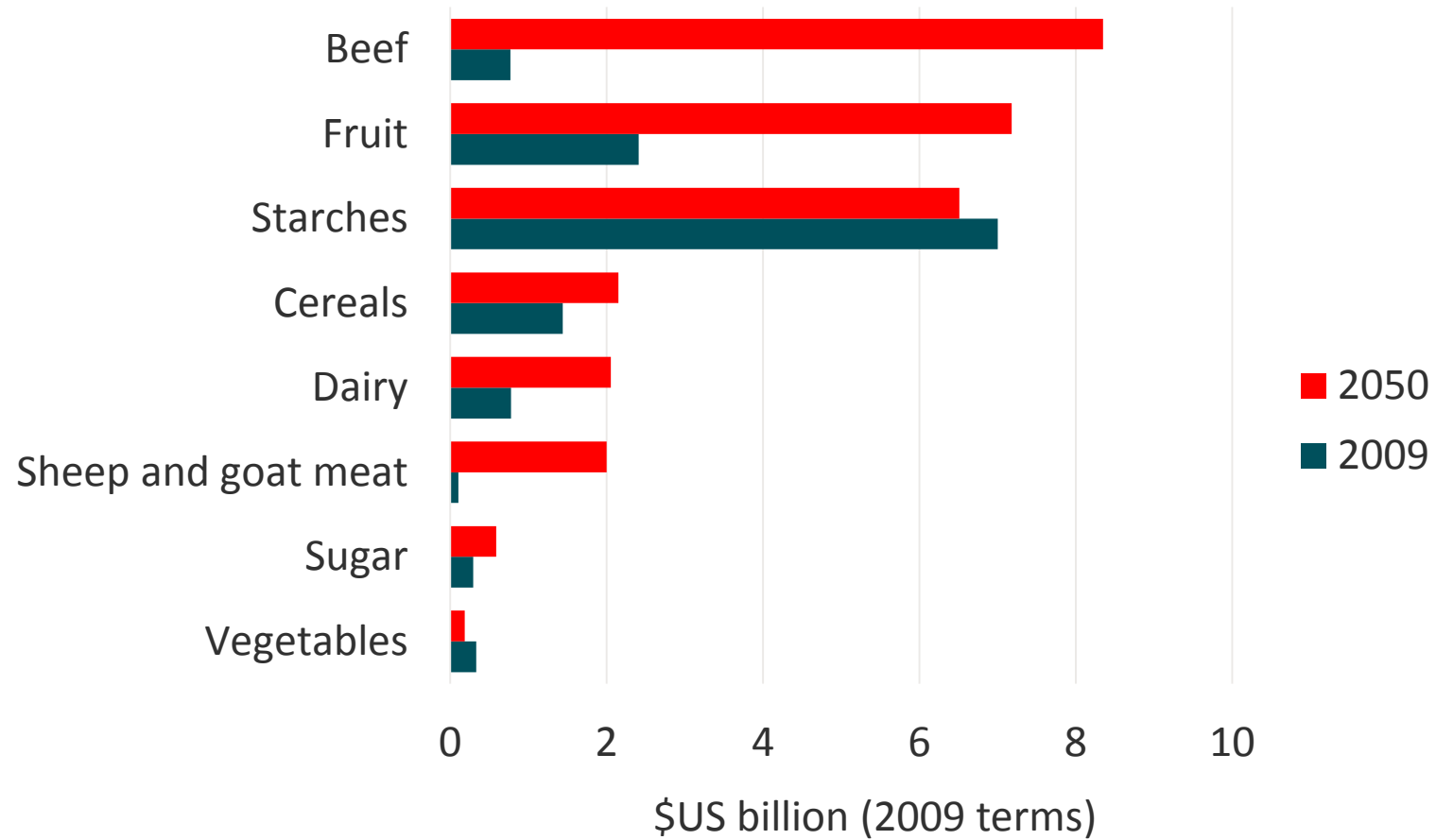
Urban population in China to grow strongly



## Markets for farm inputs and outputs

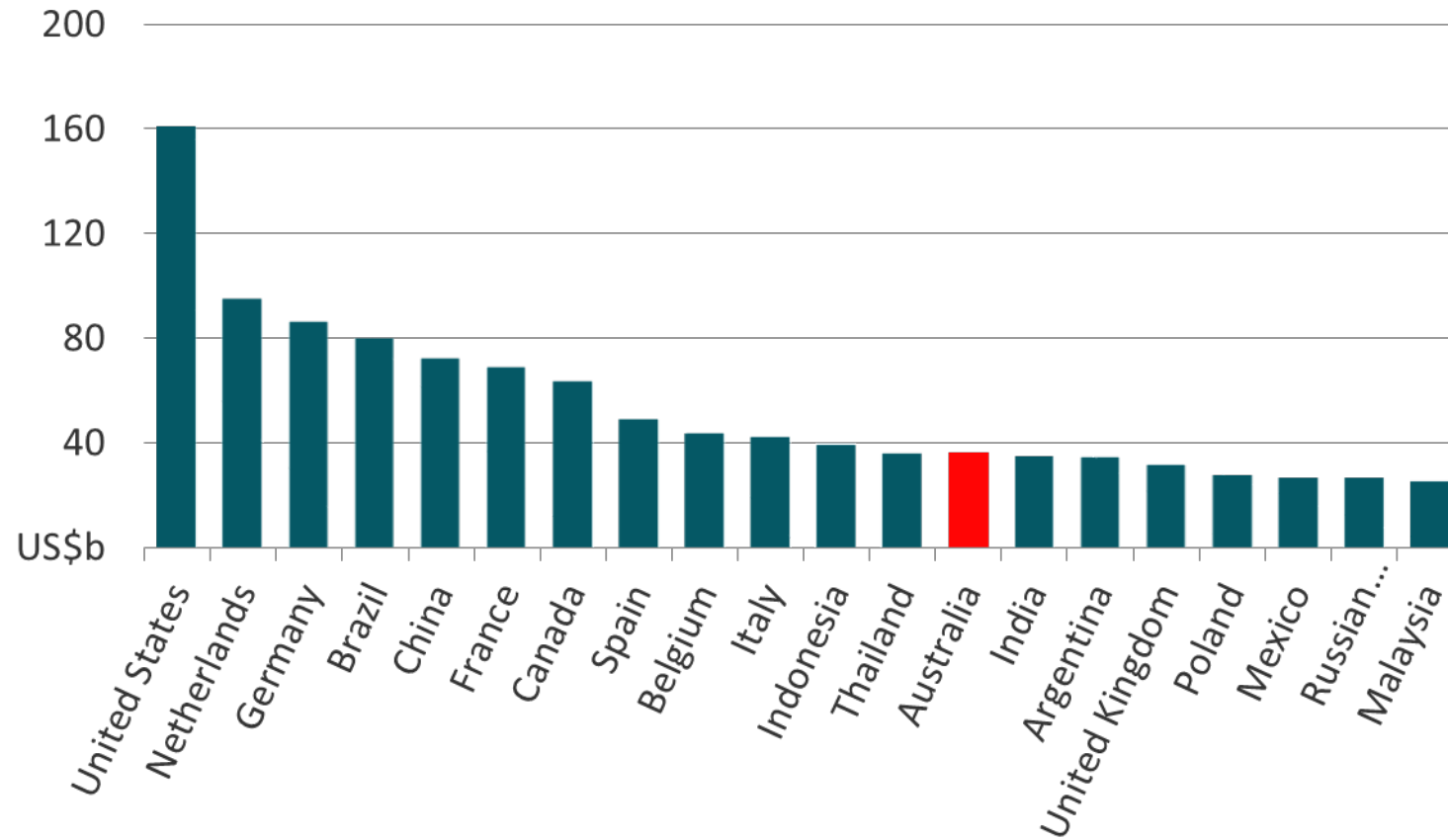


China food imports – 2009 and 2050



## Markets for farm inputs and outputs

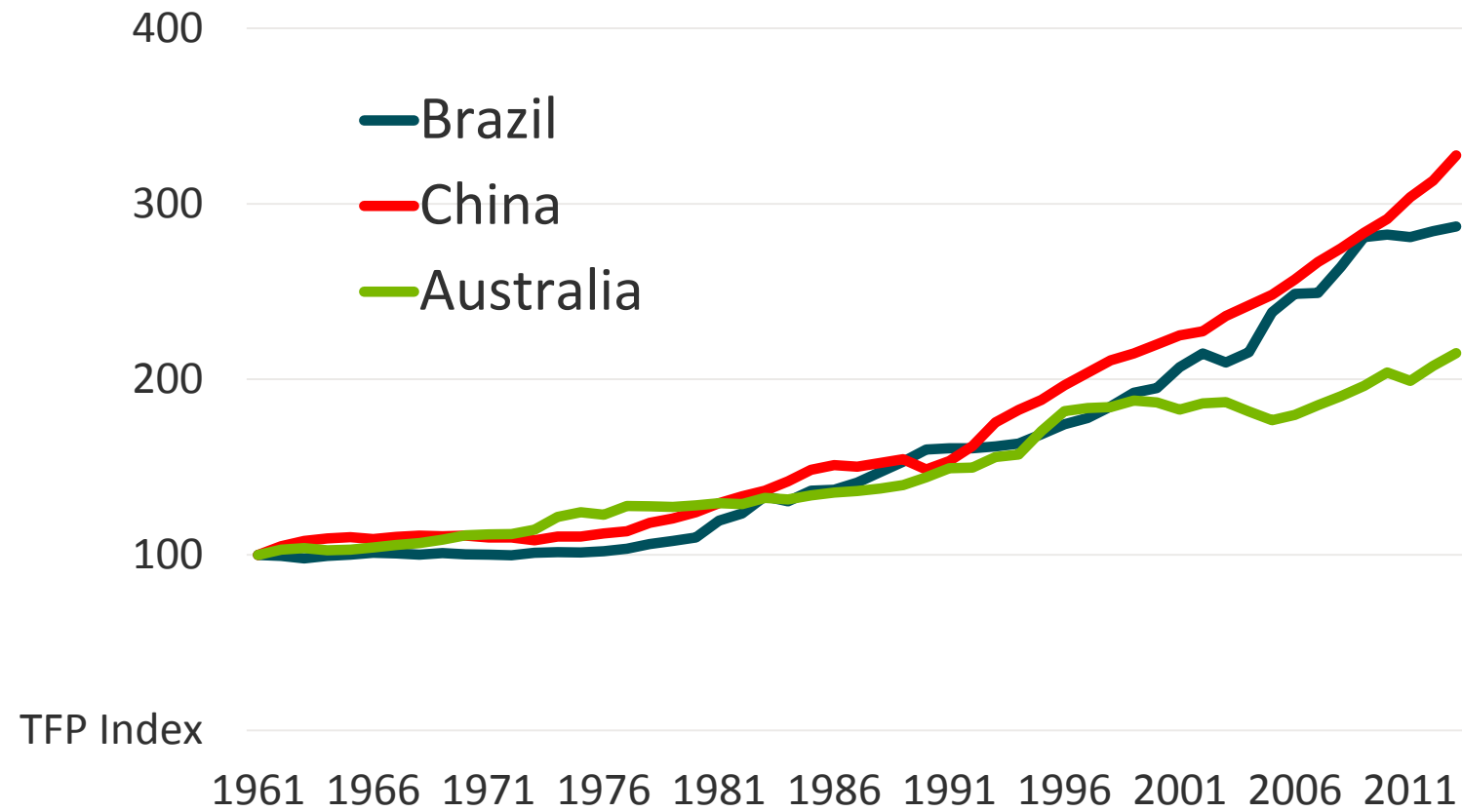
Value of agricultural exports, 2014



# Technology development and uptake



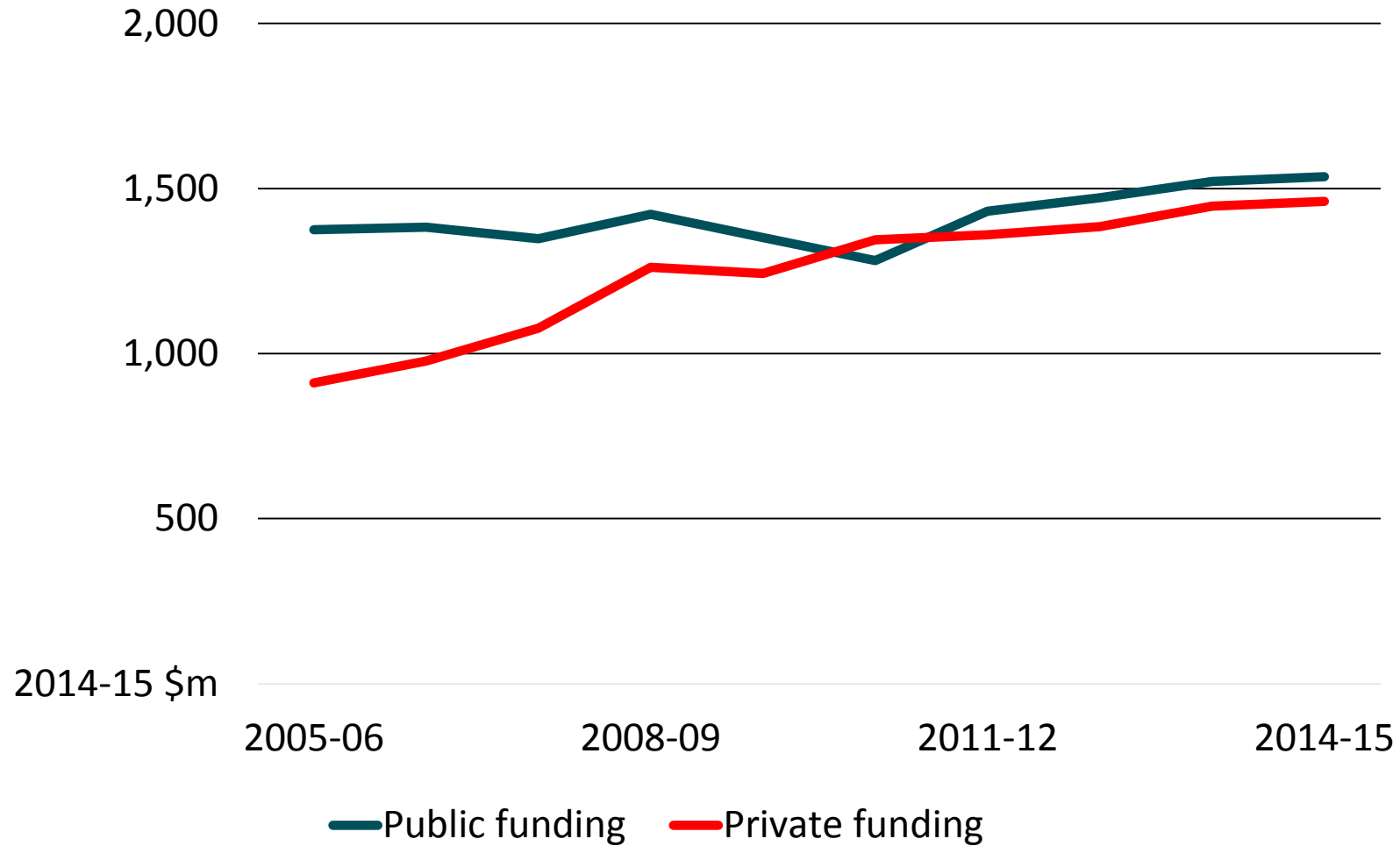
## Agricultural productivity index comparison



# Technology development and uptake



Value of Australian rural R&D funding



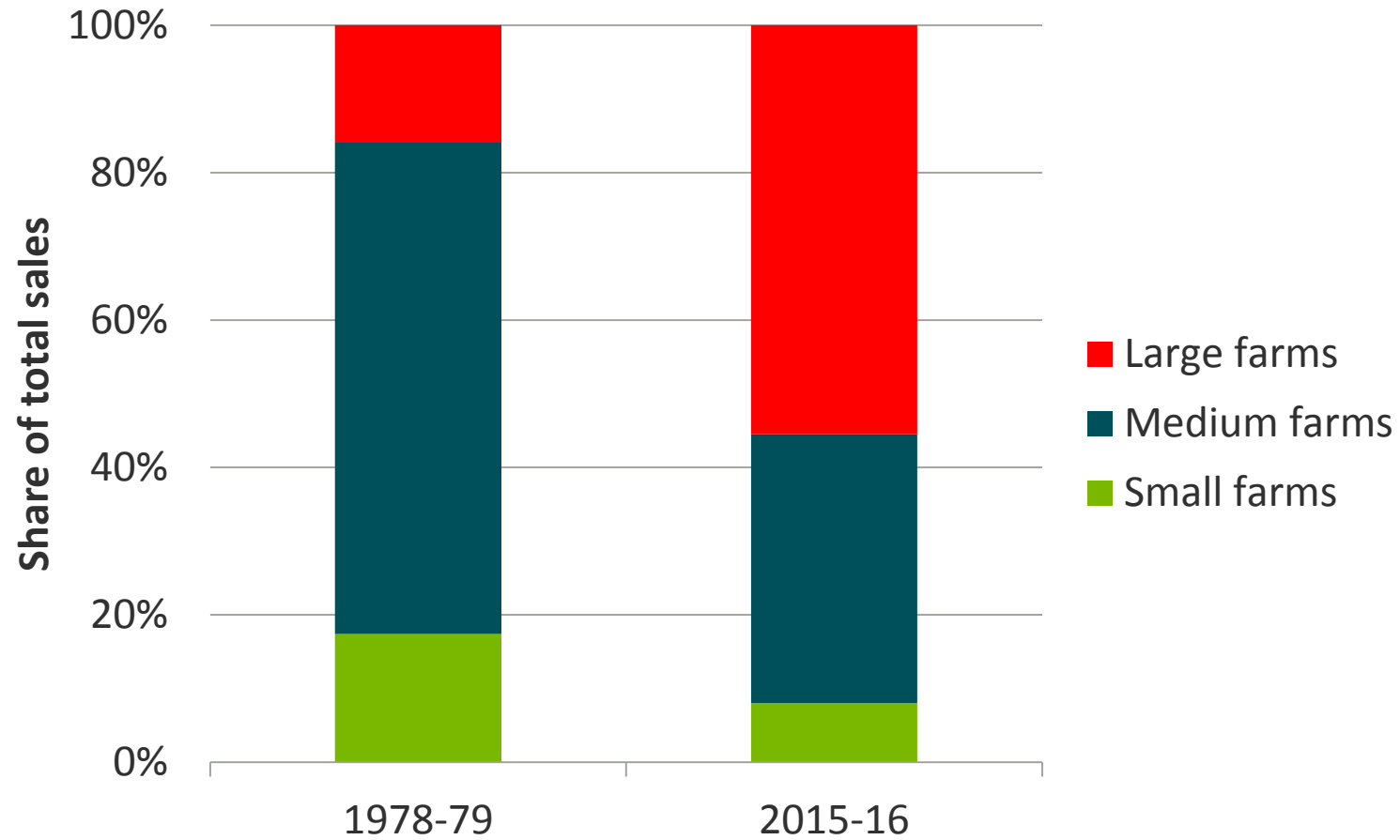
2014-15 \$m

Includes agriculture, forestry and fisheries, related inputs and downstream processing

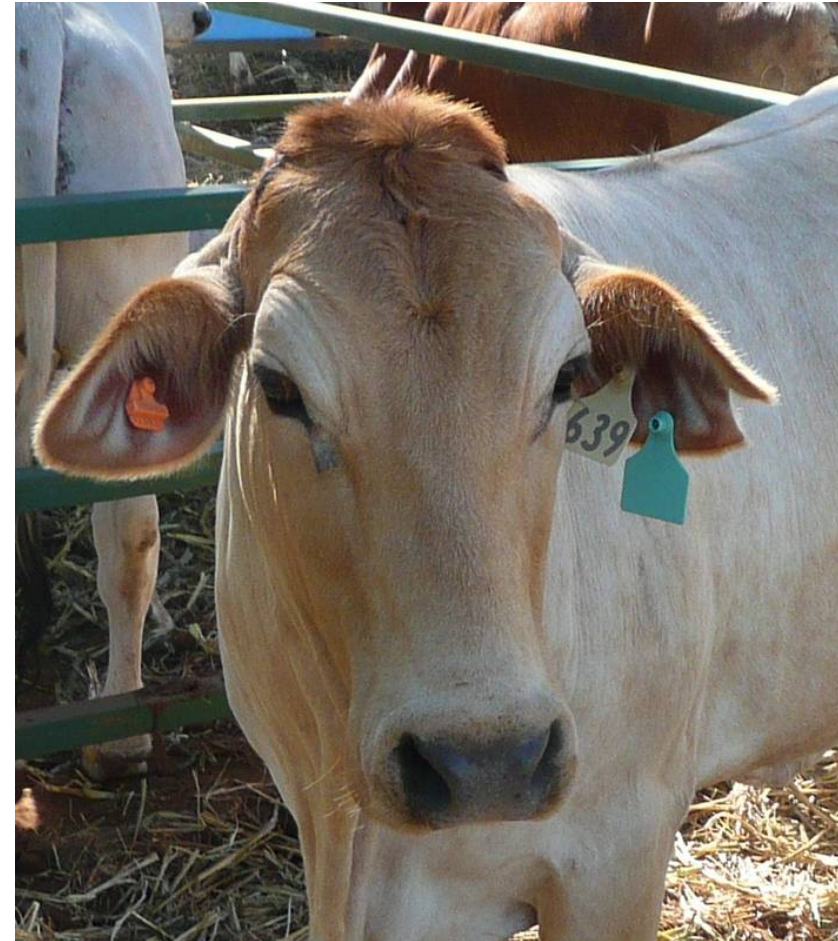
## Structural change



Output share by farm size 1979 and 2016



## Society's expectations of farmers

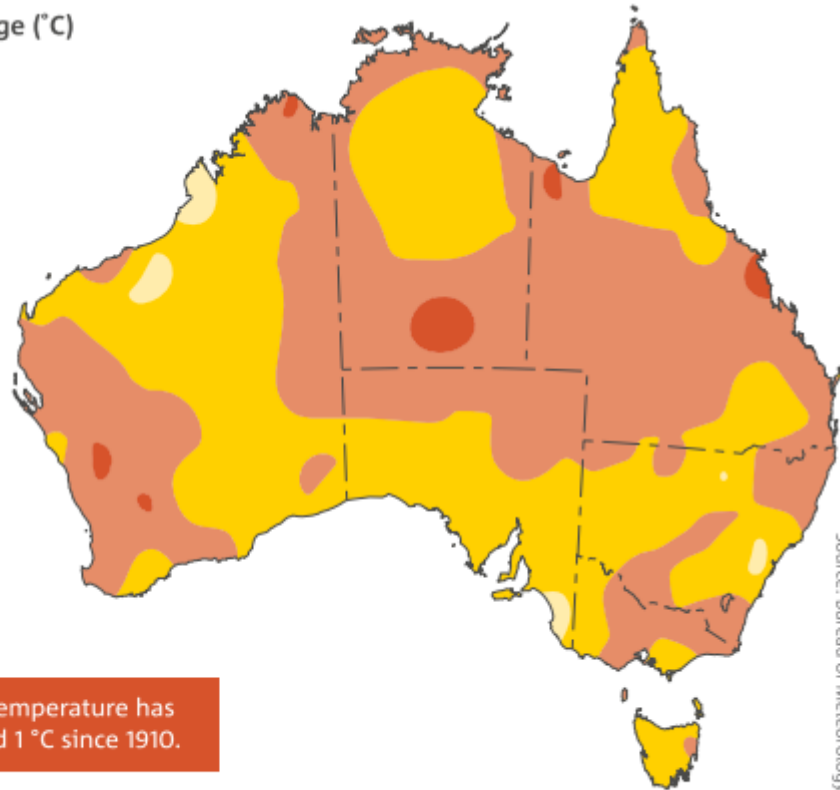




# Adaptation to climate change



Temperature change (°C)



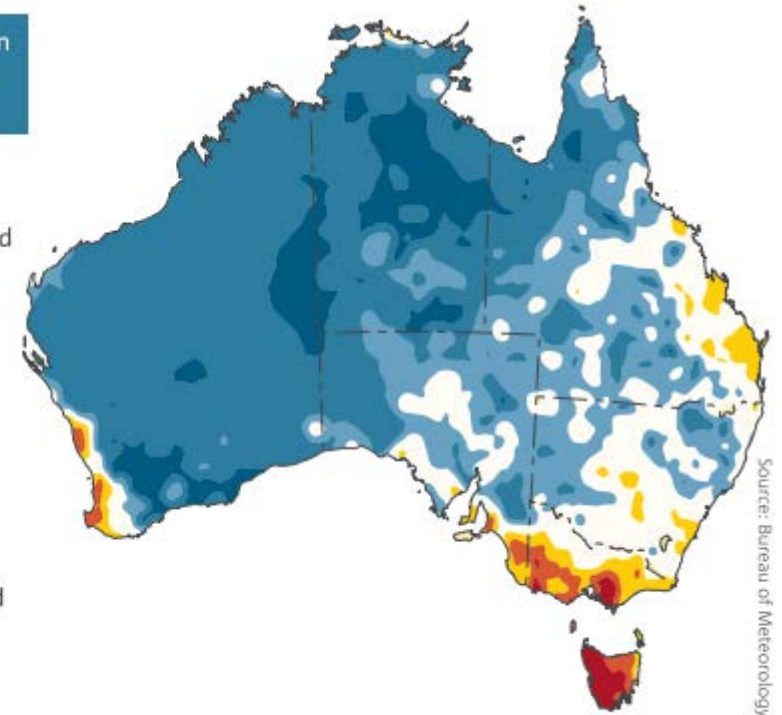
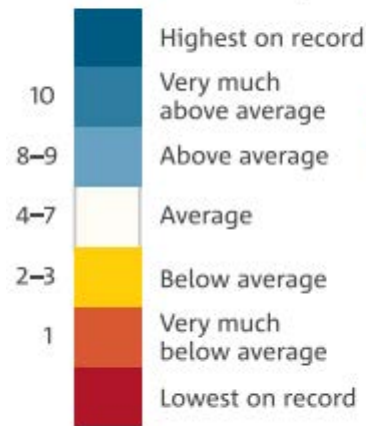
Source: Bureau of Meteorology

Australia's mean temperature has warmed by around 1 °C since 1910.

Annual mean temperature changes across Australia since 1910.

Rainfall during the northern wet season has been very much above average.

Rainfall decile ranges



Source: Bureau of Meteorology

Northern wet season (October–April) rainfall deciles for 1995–2016.

A decile map shows where rainfall is above average, average or below average for the recent period, in comparison with the entire rainfall record from 1900.



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