



Department of  
Agriculture and Food



# What the World Wants from Australian Wheat

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**BRI Australia**



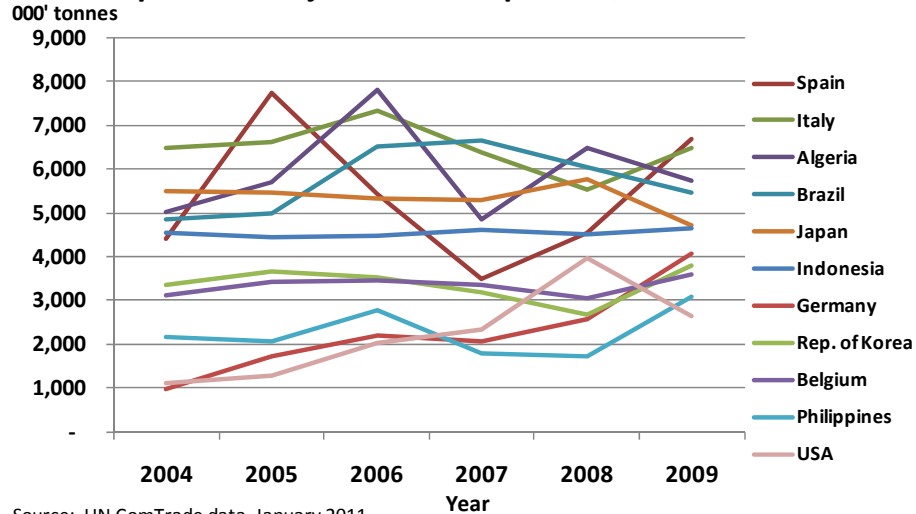
# Outline

- Scale of the World Wheat Industry
- Competition is tough—Black Sea Ports
  - Price is important
- Wheat markets are risky—why?
  - The nature of supply and demand
  - Risk management is essential
- Our biggest customer—Indonesia
  - This market wants our wheat—'look after it'
- Baked goods sector most important
  - Baking type wheat is wanted
- Quality versus yield—consistency
  - Product differentiation and market servicing costs
  - Consistency a major issue
- Internationalisation
  - Economies of scale and scope and the competitive fringe



# World Wheat Importers

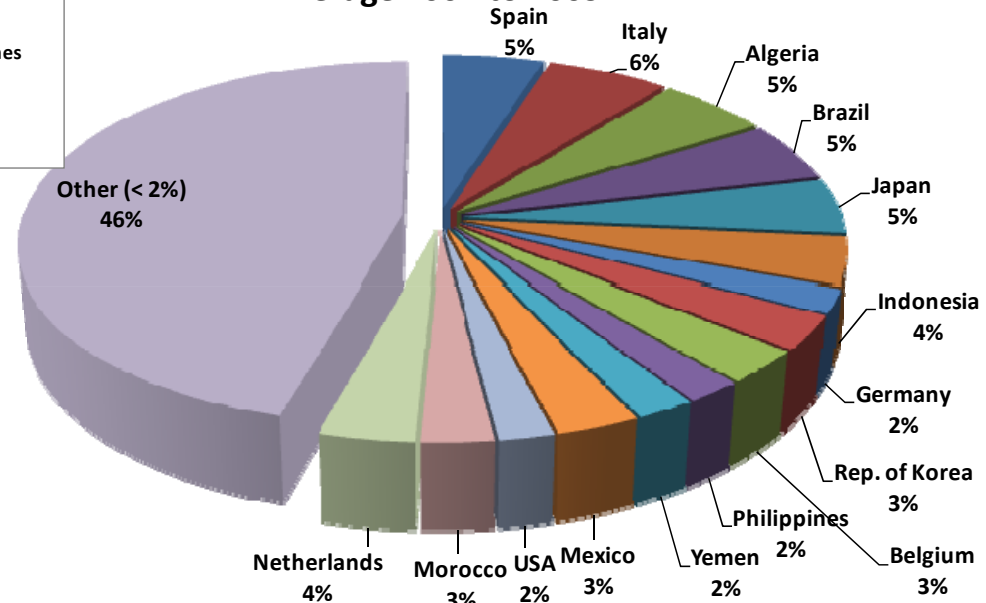
Imports of Major Wheat Importers, 2004 to 2009



Source: UN ComTrade data, January 2011

Who needs wheat?  
Many countries.

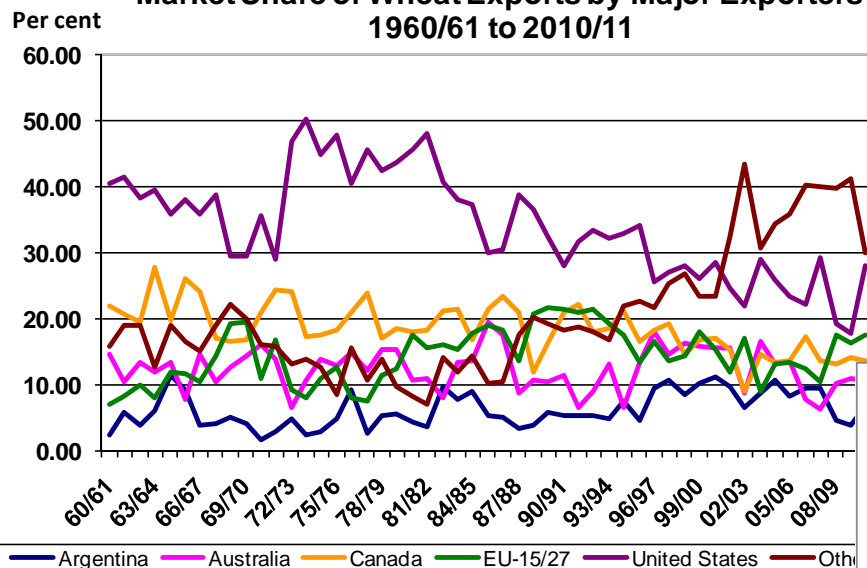
Import Shares of Major Wheat Importers,  
Average 2004 to 2009



Source: UN ComTrade data, January 2011.

# World Wheat Exporters

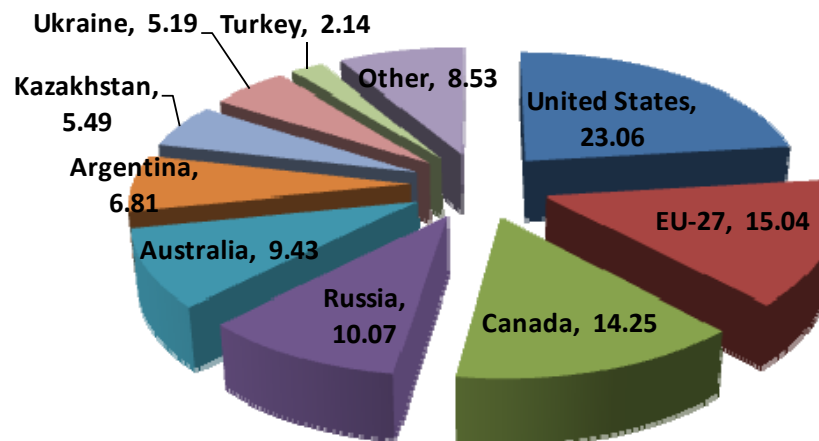
**Market Share of Wheat Exports by Major Exporters  
1960/61 to 2010/11**



Source: Derived from USDA, PSD Online, January 2011.

Who exports wheat?  
Only a few countries.

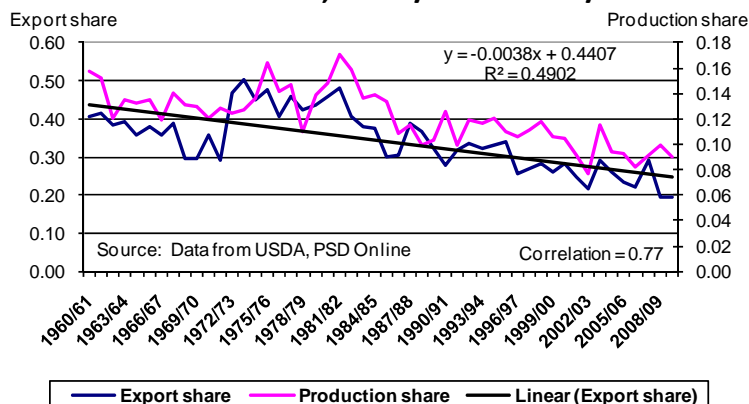
**Market Share of World Wheat Exports,  
2005/06 to 2010/11 (%)**



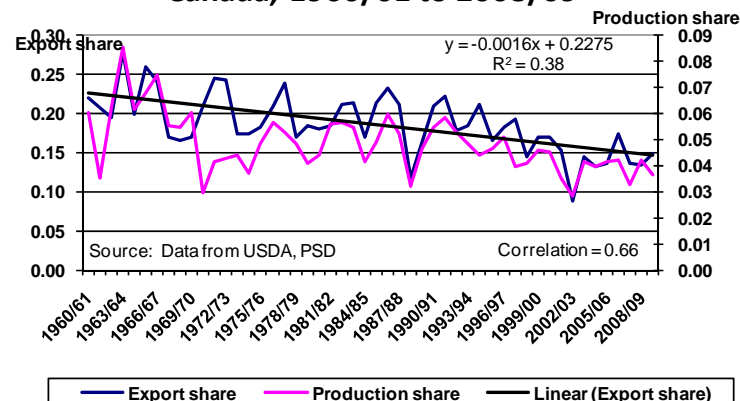
Source: USDA, PSD Online, January 2011

# Export and Production Shares

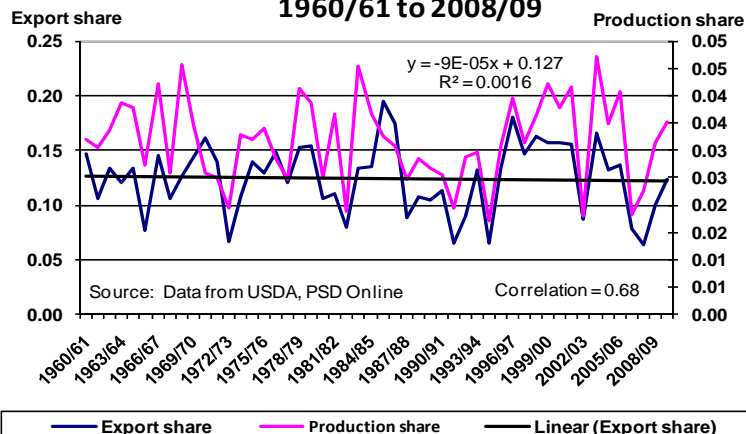
**Wheat Export and Production Shares, United States, 1960/61 to 2008/09**



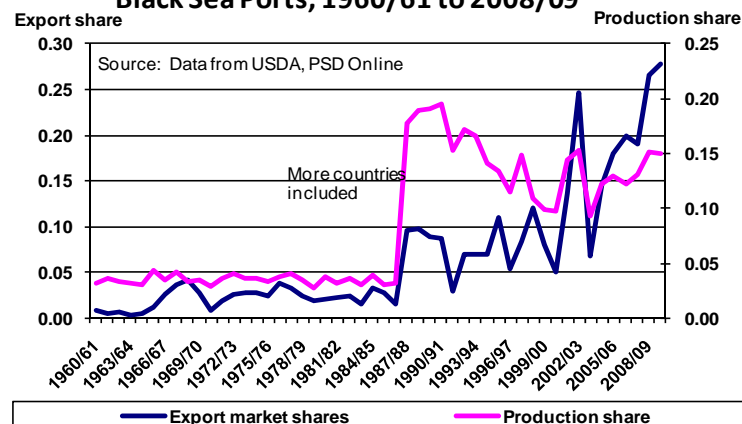
**Wheat Export and Production Shares, Canada, 1960/61 to 2008/09**



**Wheat Export and Production Shares, Australia, 1960/61 to 2008/09**



**Wheat Export and Production Shares, Black Sea Ports, 1960/61 to 2008/09**



Note: These slides were developed for the Grain Foods CRC.

Black Sea Ports include: Russia, Ukraine, Kazakhstan, Romania, Bulgaria, Croatia, Hungary and Turkey

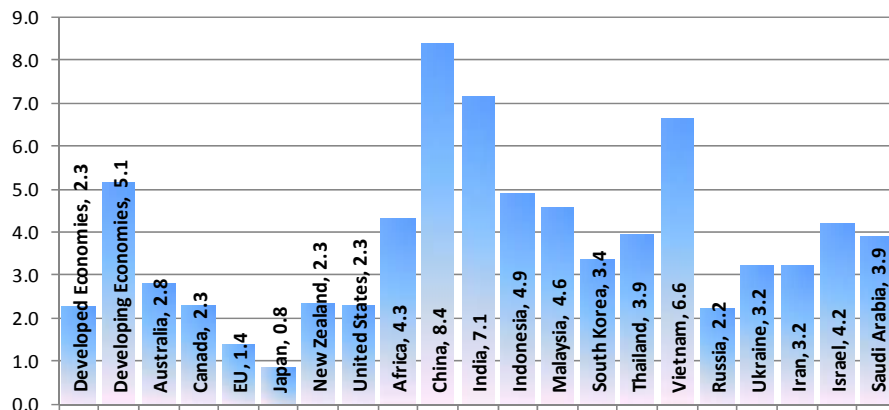
# Market Drivers

## • World Wheat Market

### – Long-term major drivers

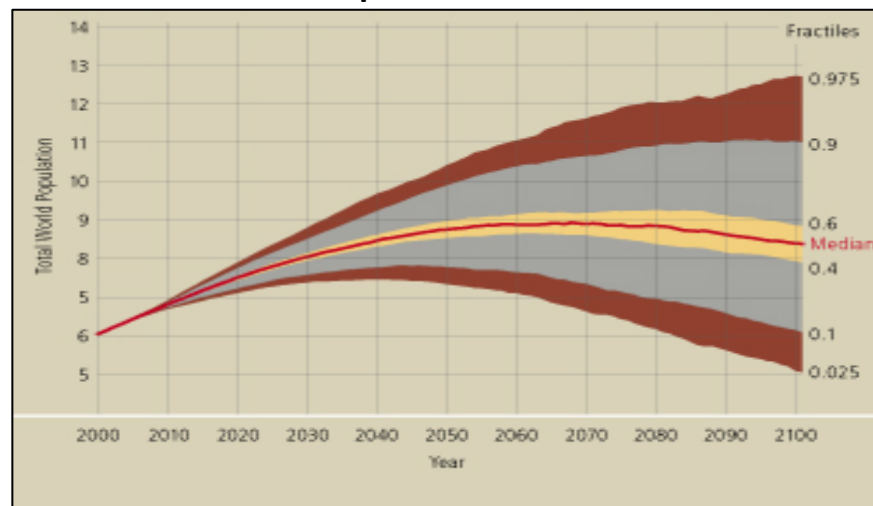
- Population (by 2050 double food production for 9 billion)
- Income
- Yield
- Water/drought
- Competitive crops and products
- Technology and management
- Other factors ????

**Predicted Average Annual Real GDP Growth  
2009 to 2019**



FAPRI (2010), 2010 US and World Outlook. <http://www.fapri.iastate.edu/outlook/2010/>

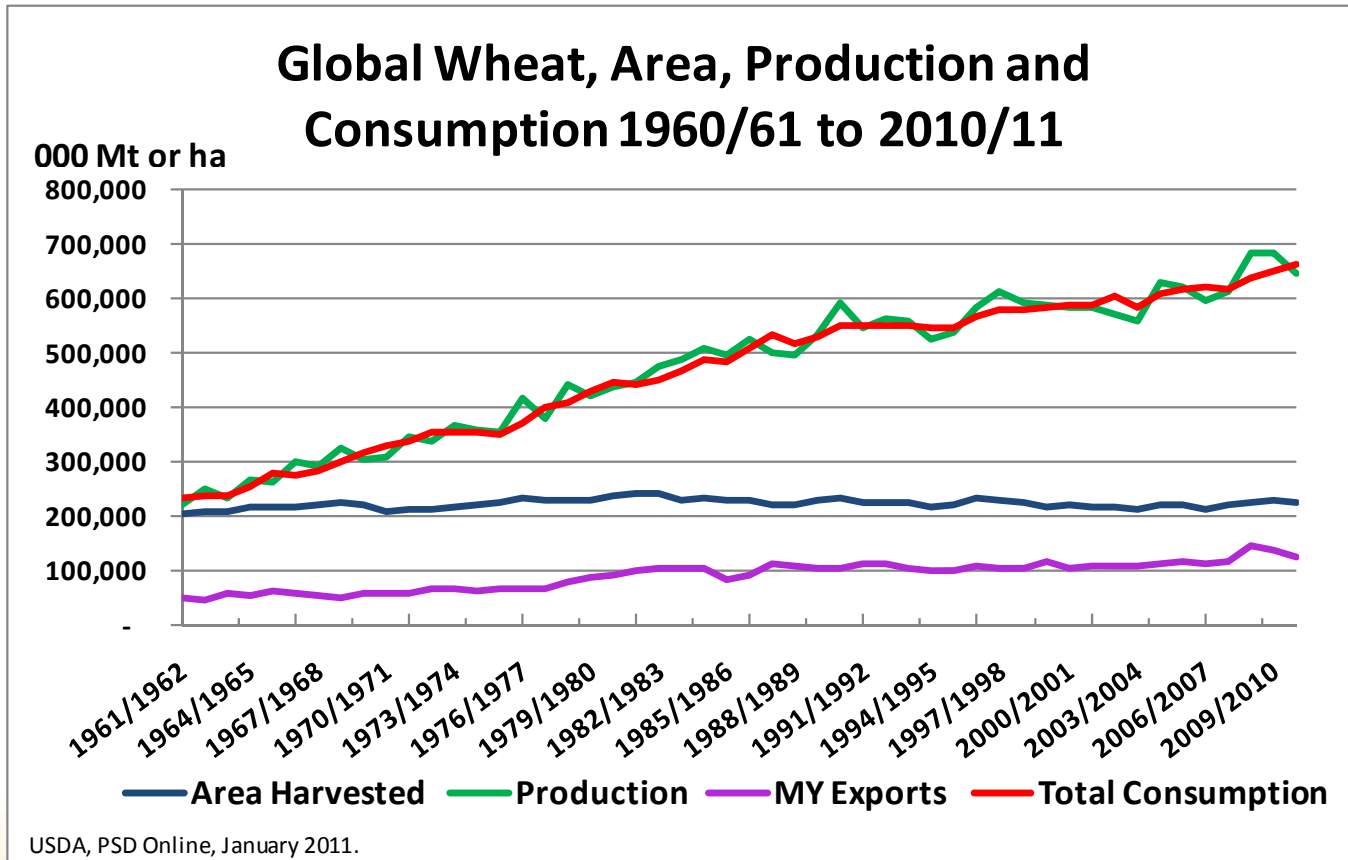
**World Population to 2100**



Source: IIASA (2007), <http://www.iiasa.ac.at/Research/POP/proj07/>



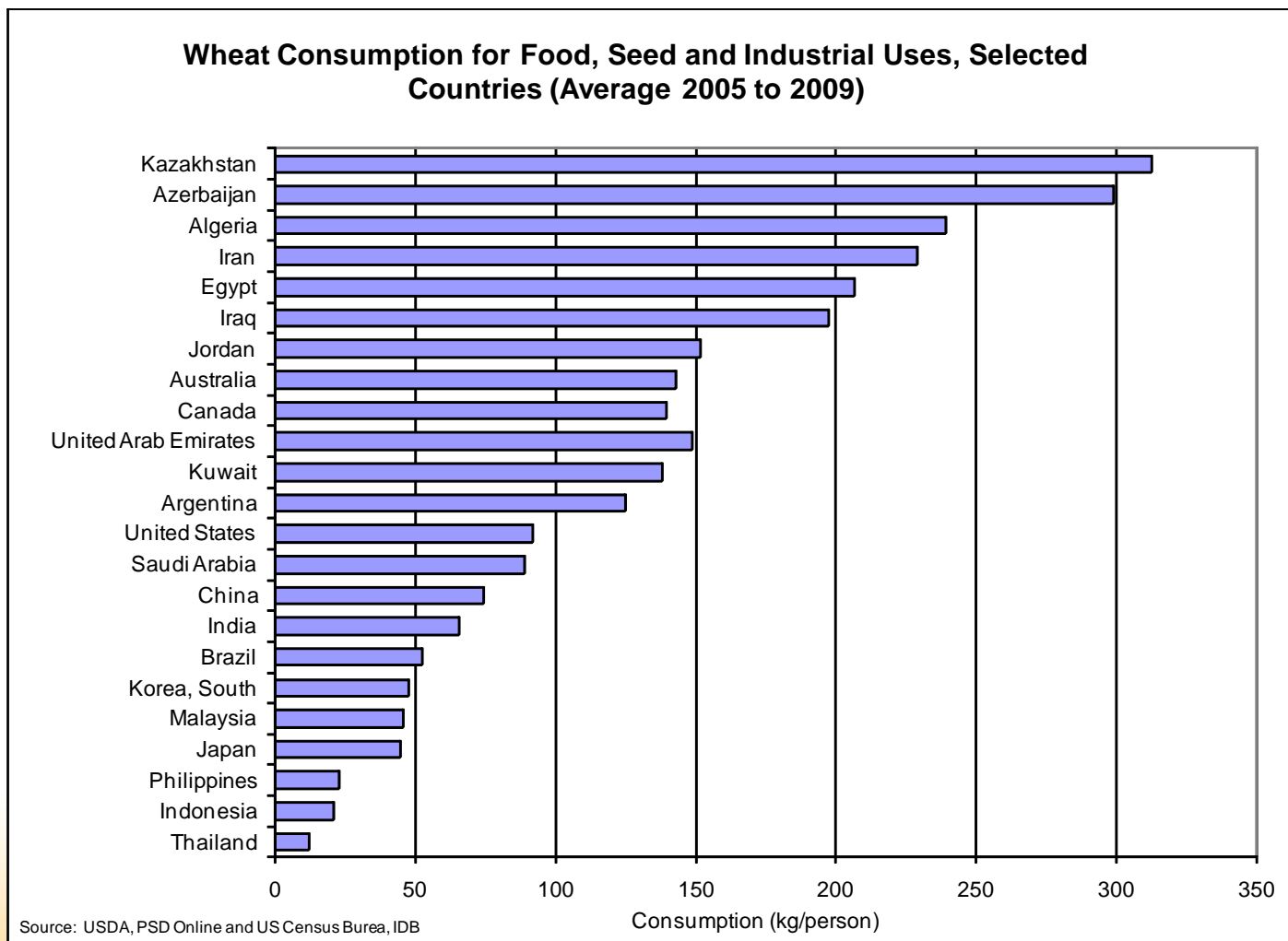
# Global Wheat Markets



Population growth a major driver. Area stable, yield driven.



# Wheat Consumption and Use



# Market Drivers

- What do you think determines the market price for wheat (milling wheat)? (Rank your answers)
  - Exchange rate
  - Weather
  - Income
  - Futures traders
  - Supply and demand
  - Energy prices
  - Population growth
  - Other .....



# Changing World Markets

9 April 2009

## 1. World beginning stocks at 30 year low

- Stocks-to-use at historic low.
- Export origin supplies 43% below 10-year average.

## 2. Global plantings much higher on strong prices

## 3. Weather mostly favourable, global yields forecast up 6%

- Drought decreased harvests in North Africa, Middle East and Argentina

- Quality concerns in Black Sea and Australia

## 4. Record production prospect: forecast up 12% (72 MMT) from last year

- Some lower protein origins up: Ukraine (75%), Canadian Eastern SRW (300%), U.S. SRW (70%)

## 5. Imports also expected to increase: 8% (9 MMT) to record 122 MMT

- Stock rebuilding, increased consumption

## 6. Prospects for increased production seen increasing export competition

- Ukraine up 9 MMT, Australia up 6 MMT, EU-27 up 5 MMT
- U.S. exports forecast to fall 21% (7 MMT), Kazakhstan -3 MMT, Argentina -4 MMT

## 7. Ocean freight rates fall sharply from record high

- Baltic Panamax Index down more than 90%

## 8. U.S. wheat prices still high relative to other origins

## 9. Global consumption to set new record: forecast up 6% (35 MMT)

- Increased feed use expected in the U.S. and Europe

## 10. Global ending stocks expected to rebound 25% (31 MMT)

11 February 2011

## 1. 2010/11 Production down, but third largest wheat crop on record at 645 MMT

- Drought and hot temperatures cause Russian production to fall 33%, to 41.5 MMT

- Canadian production falls due to adverse weather, down 14% to 23.2 MMT

- Argentine production at 14.0 MMT, up from 11.0 MMT last year

## 2. Consumption sets record for third consecutive year, up 2% from 2009/10

## 3. World wheat trade projected at 125 MMT, the third largest amount on record

## 4. 2010 Plantings down sharply in U.S. due to poor weather and low prices

- U.S. plantings estimated at 53.6 million acres, lowest since 1969/70

- SRW plantings fall nearly 30% due to an extremely wet fall

## 5. Prices surge due to Russian export ban, quality concerns

- Russia bans wheat exports through 2010/11, exports fall from 18.6 MMT in 2009/10 to 4.0 MMT in 2010/11

- Ukraine implements export quota through March 31, 2011

- Persistent rainfall causes major concerns about quality in Australian crop

## 6. World ending stocks fall 10% to 178 MMT, exporter supply falls 22% to 62 MMT

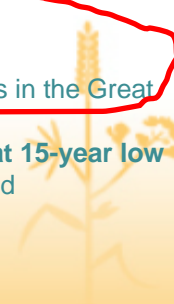
## 7. 2011 U.S. winter wheat plantings up by 10%

- 2011 winter wheat conditions remain poor due to dryness in the Great Plains

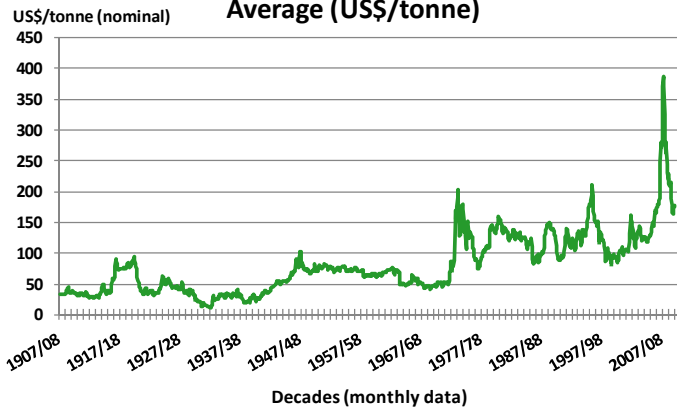
## 8. Competition for acres intensifies; U.S. corn stocks at 15-year low

- Environmental Protection Agency increases ethanol blend

- Global corn demand reaches record 837 MMT



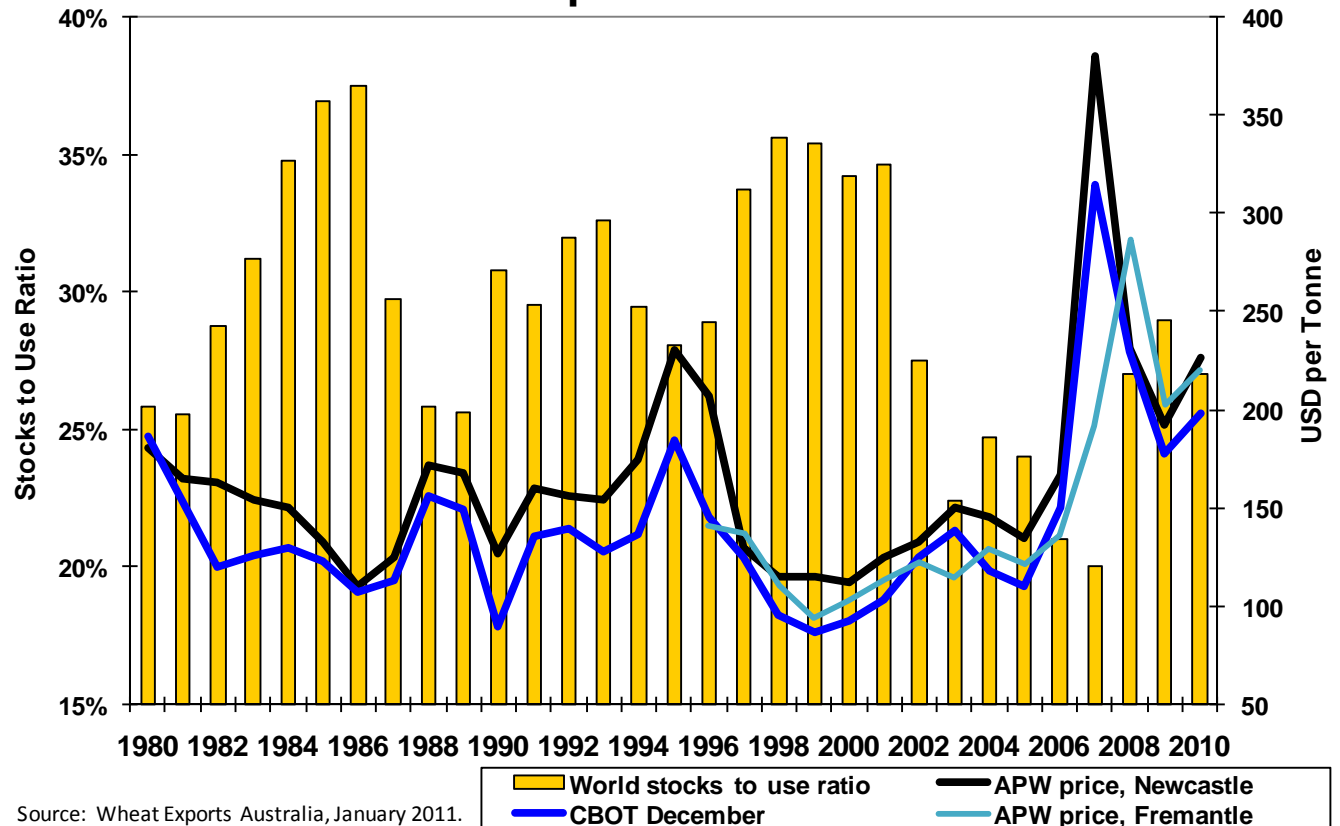
## United States, All Wheat Price, Monthly Average (US\$/tonne)



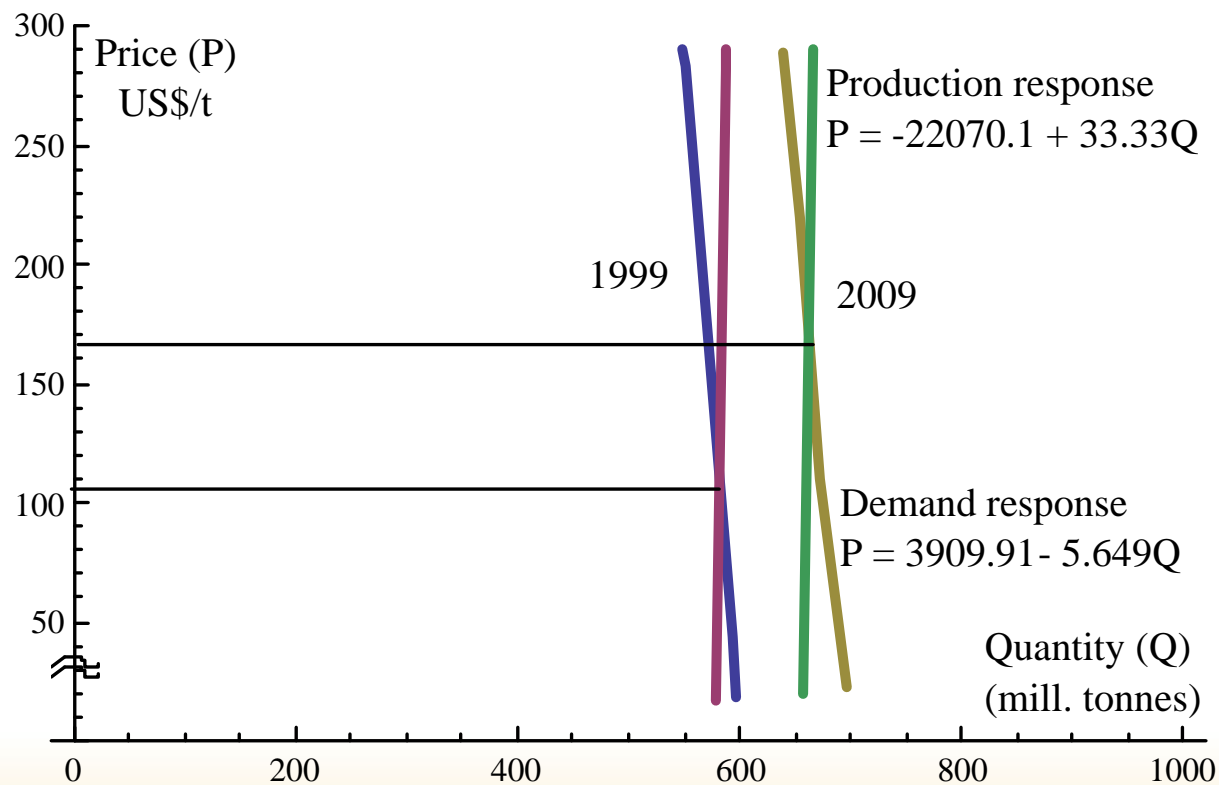
# Stocks to Use Ratio

Stocks to use ratio—  
the global  
thermometer.

## World Stocks to Use Ratio for Wheat Compared to Prices



# World Supply and Demand

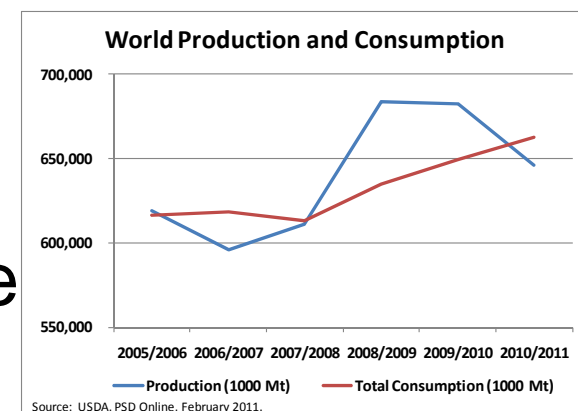


Inelastic supply, inelastic demand gives highly variable prices.



# Supply and Demand Responses

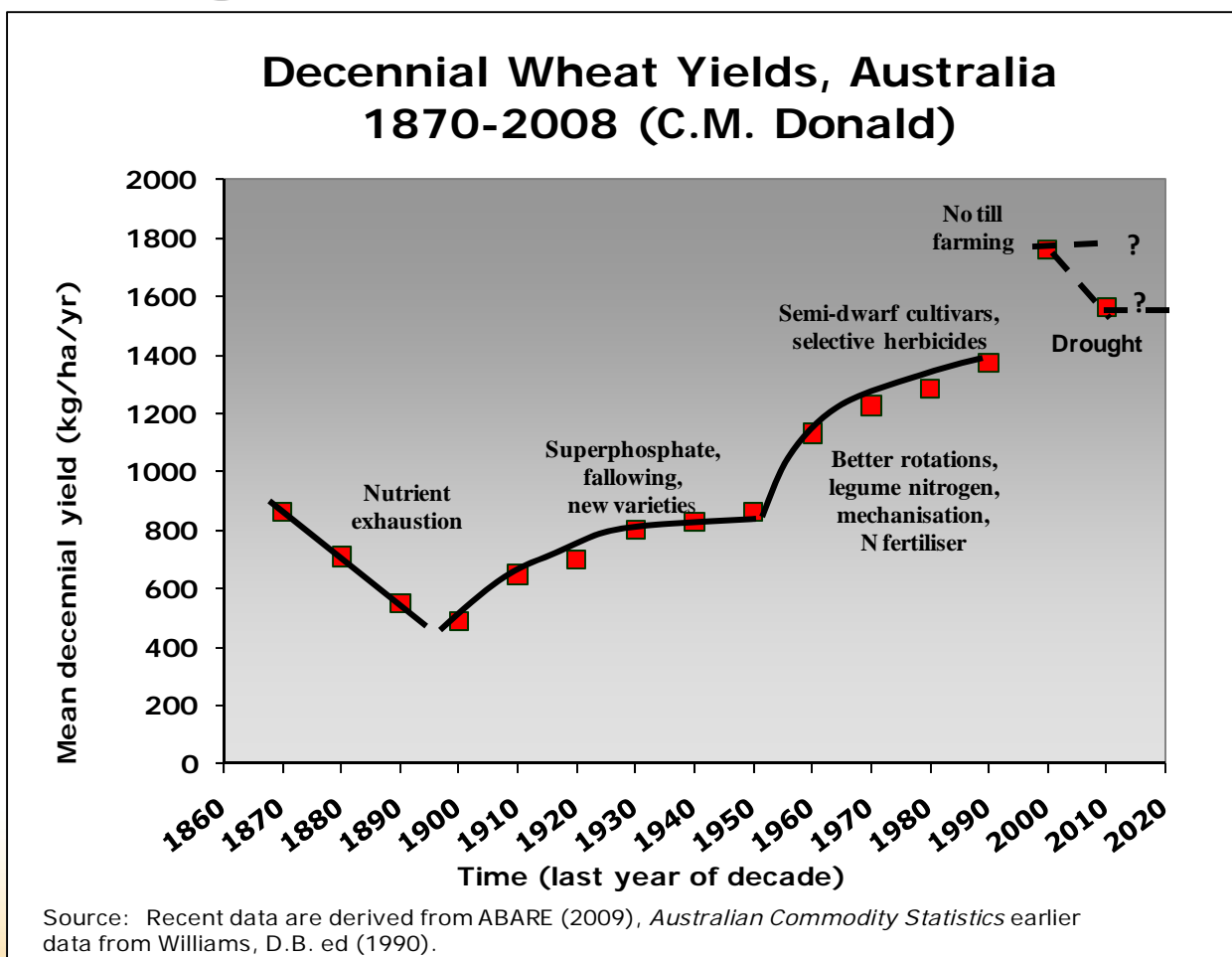
- Implications
  - Rapid price changes
  - Small supply changes give large relative price changes
  - Demand shifters as important as supply shifters
    - Domestic use shifts
    - Weather induced supply responses
  - Long-term and short term shifters
  - Different shifters in different countries



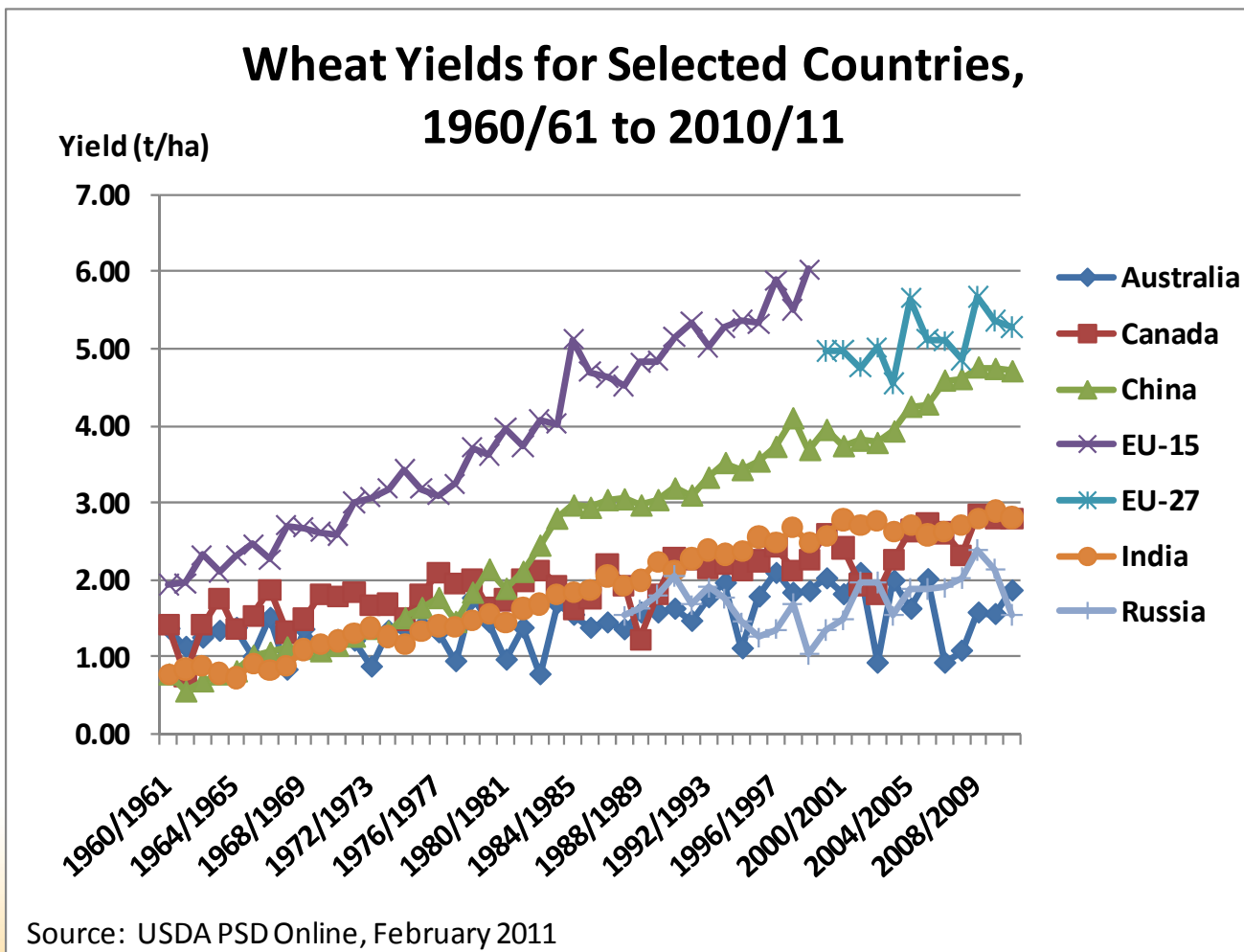
Source: USDA, PSD Online



# Long-Term Wheat Yields

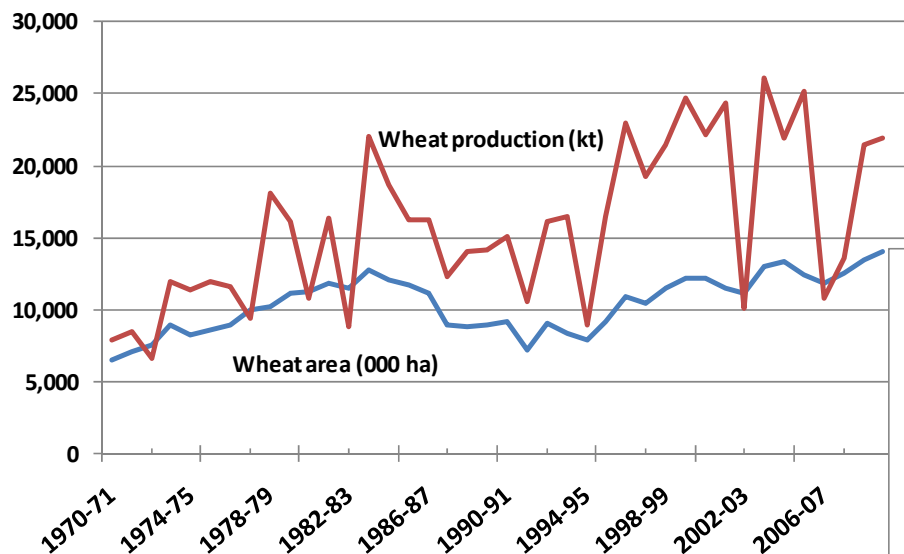


# World Wheat Yields



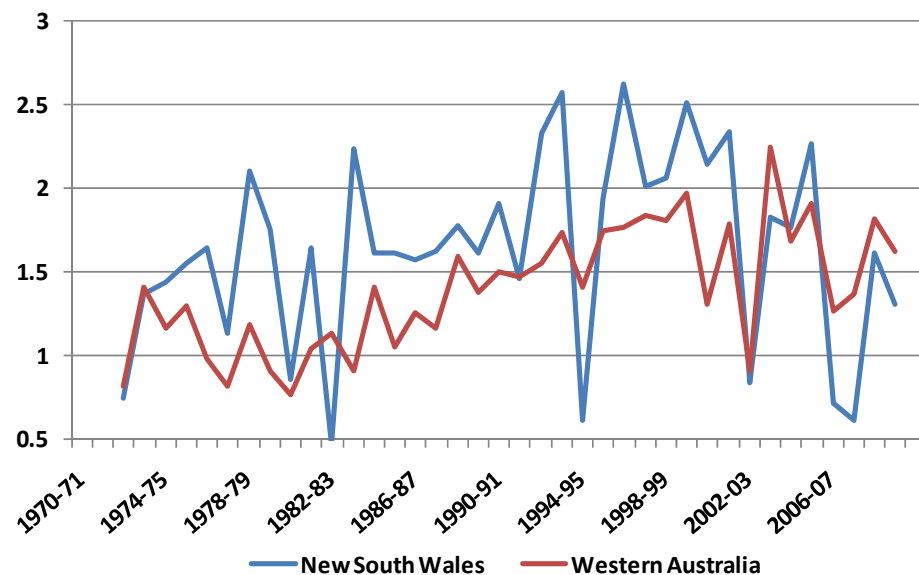
# Australian Wheat Production

**Australian Wheat Production and Area  
Planted, 1970-71 to 2009-10**



Source: ABARE (2011), *Australian Commodity Statistics*, January 2011.

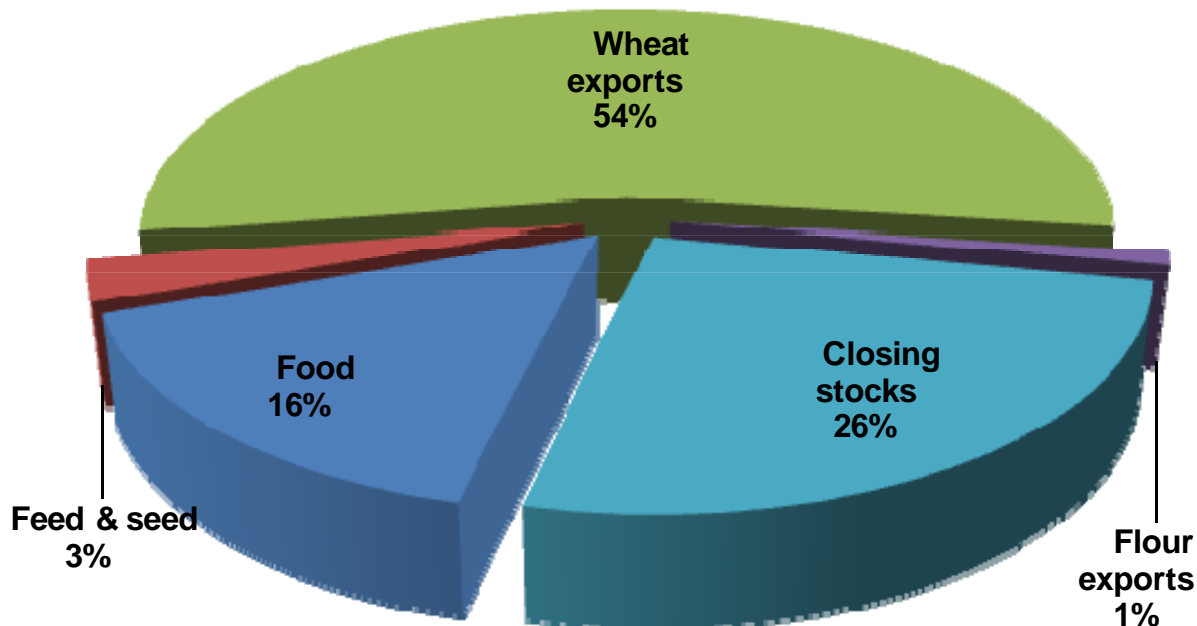
**Average Wheat Yields in New South Wales  
and Western Australia 1972-73 to 2009-10**



Source: ABARE (2011), *Australian Commodity Statistics*, January 2011.

# Who Wants Our Wheat?

**Uses of Australian Wheat, Five-Year Average  
2005-06 to 2009-10**

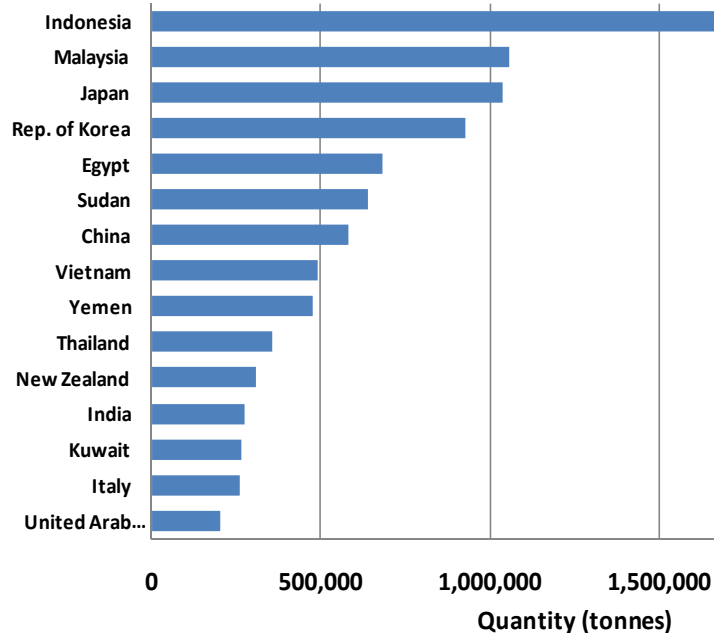


Source: ABARE (2010), *Australian Commodity Statistics*, January 2011. Crop year 1 October to 30 September.



# Australian Wheat Importers

Major Importers of Australian Wheat, Average (2004-2009)



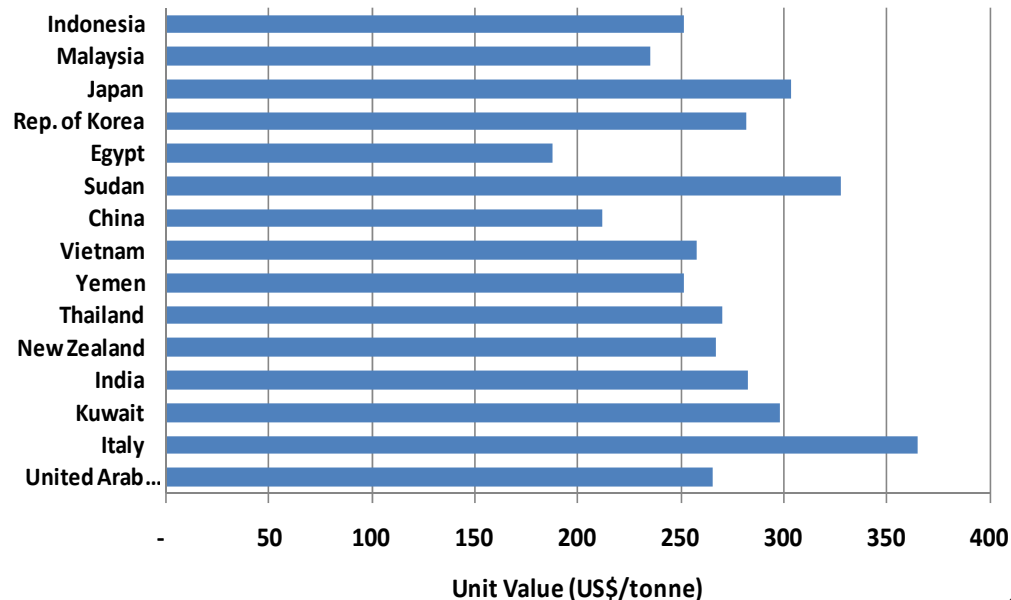
## High unit value markets:

Italy—durum wheat

Sudan—moderate volume, high value

Japan—quality and price

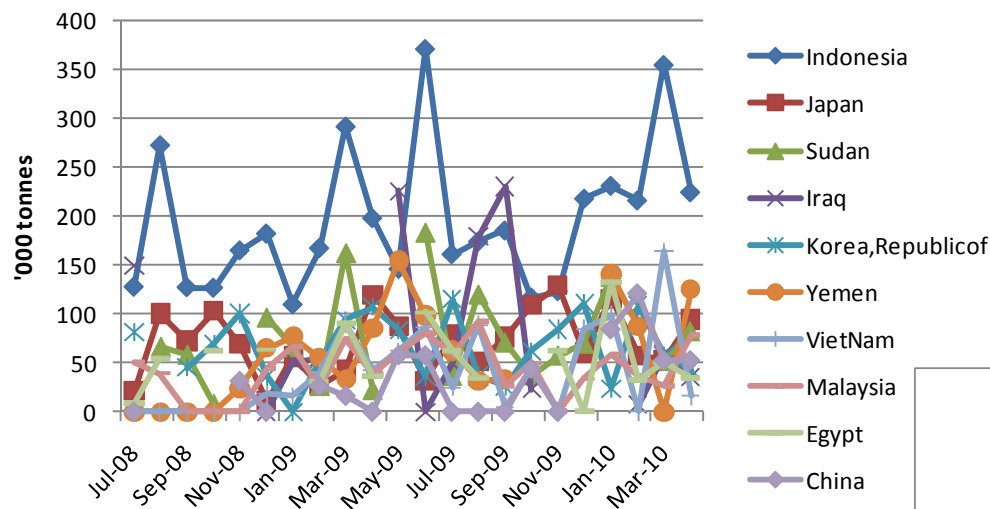
Unit Import Values for Australian Wheat, Average (2004-2009)



Source: UN ComTrade data, January 2011

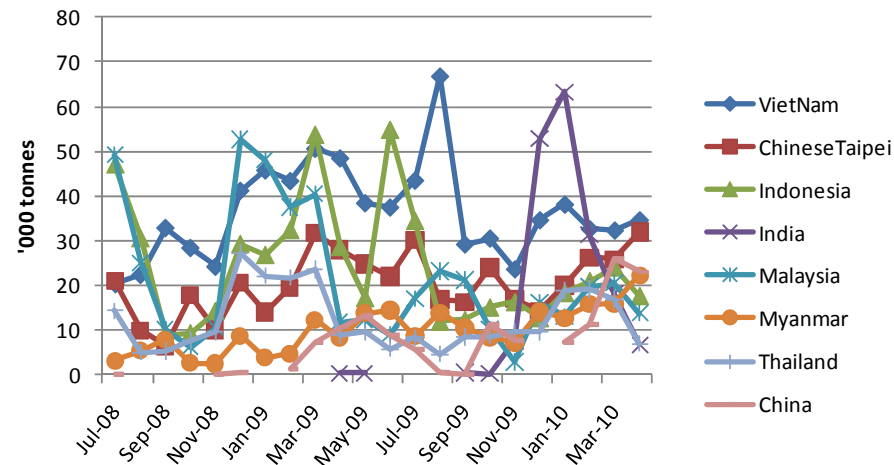
# Australian Exports

**Australian Bulk Wheat Exports,  
July 08 to April 10**

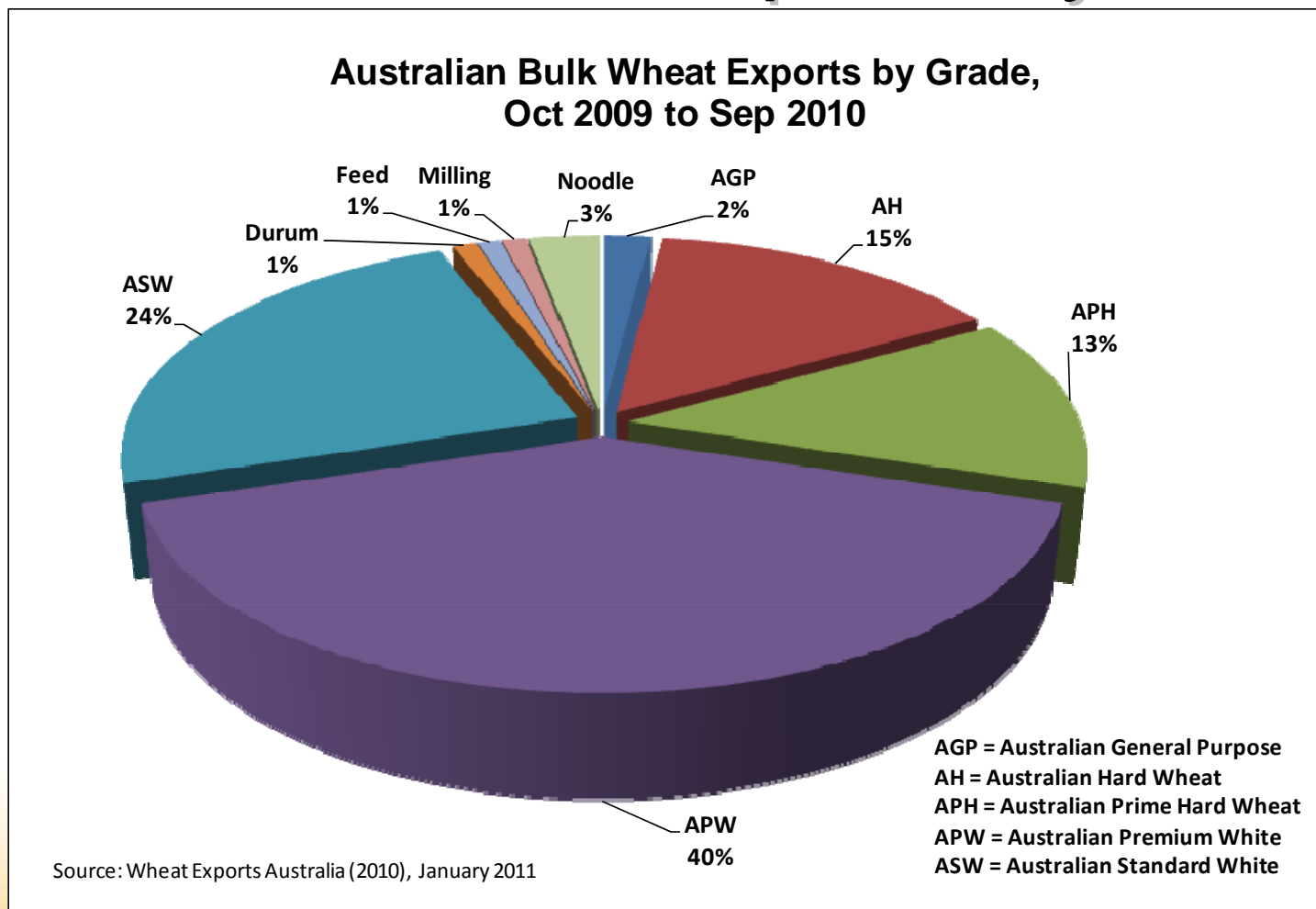


From May 2009:  
Containers exported to 42 countries  
Bulk exported to 34 countries

**Australian Bag and Container Wheat Exports,  
July 08 to April 10**

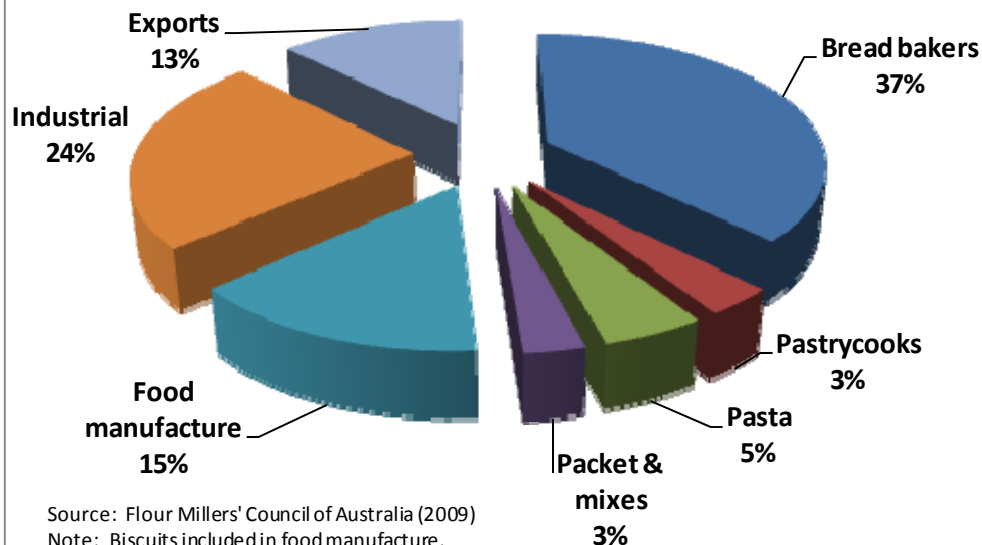


# Australian Bulk Exports by Grade

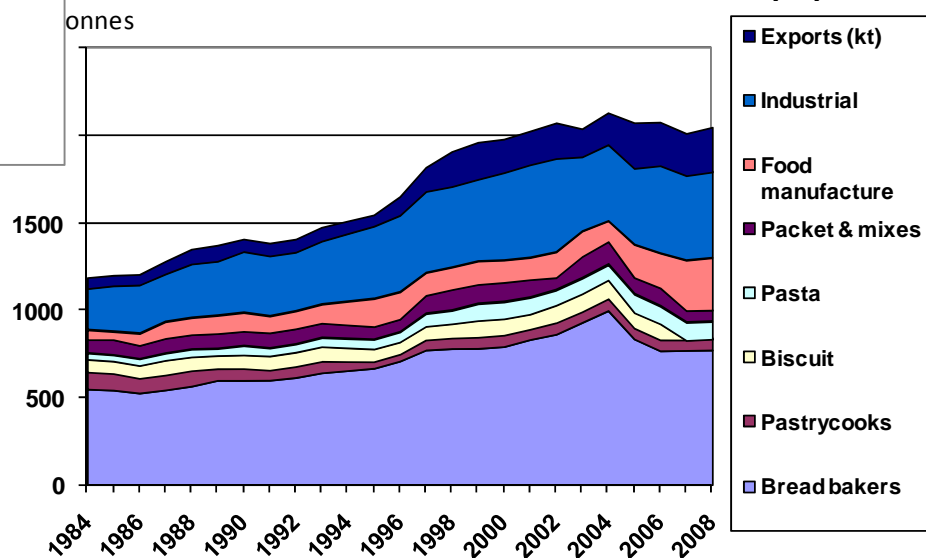


# Flour Use in Australia

**Flour Usage in Australia, 2008**

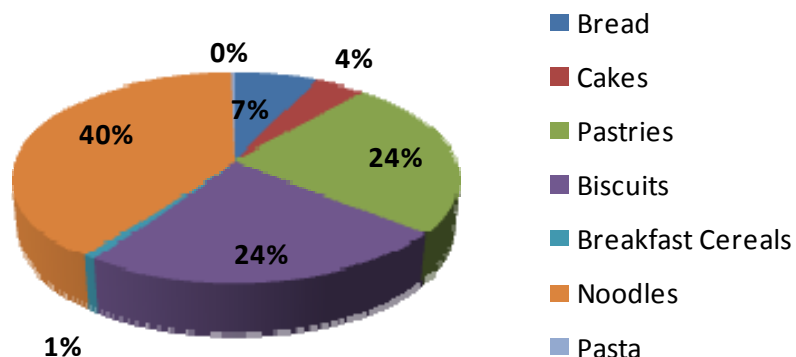


**Flour Use in Australia 1984 to 2008 (kt)**

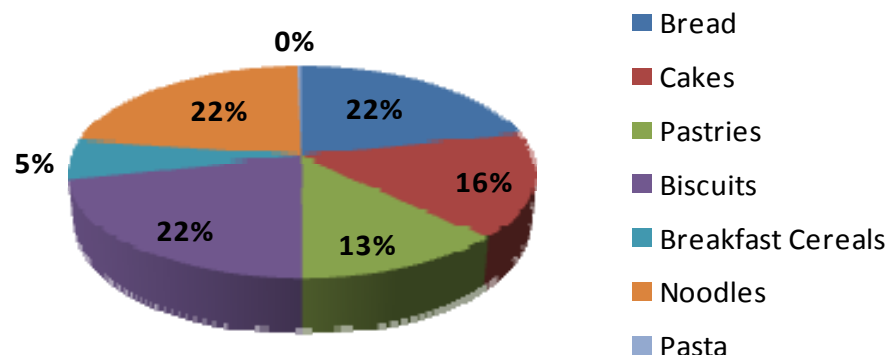


# Retail Value of Sales in Indonesia, Malaysia, Japan and Australia, 2005 to 2009 (average)

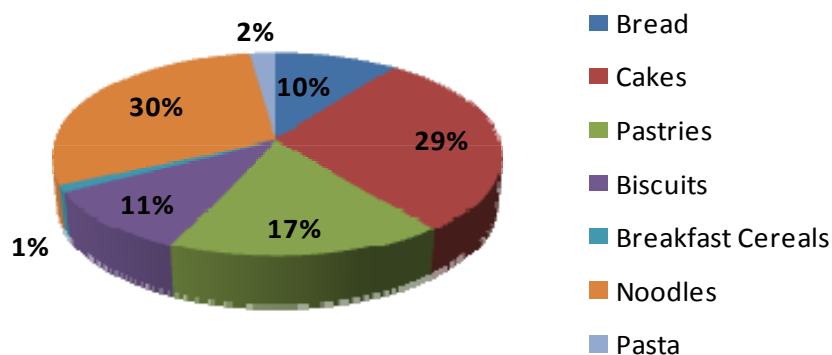
## Indonesia



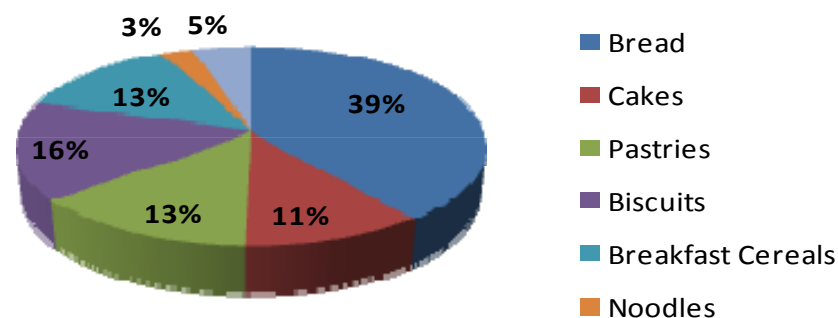
## Malaysia



## Japan

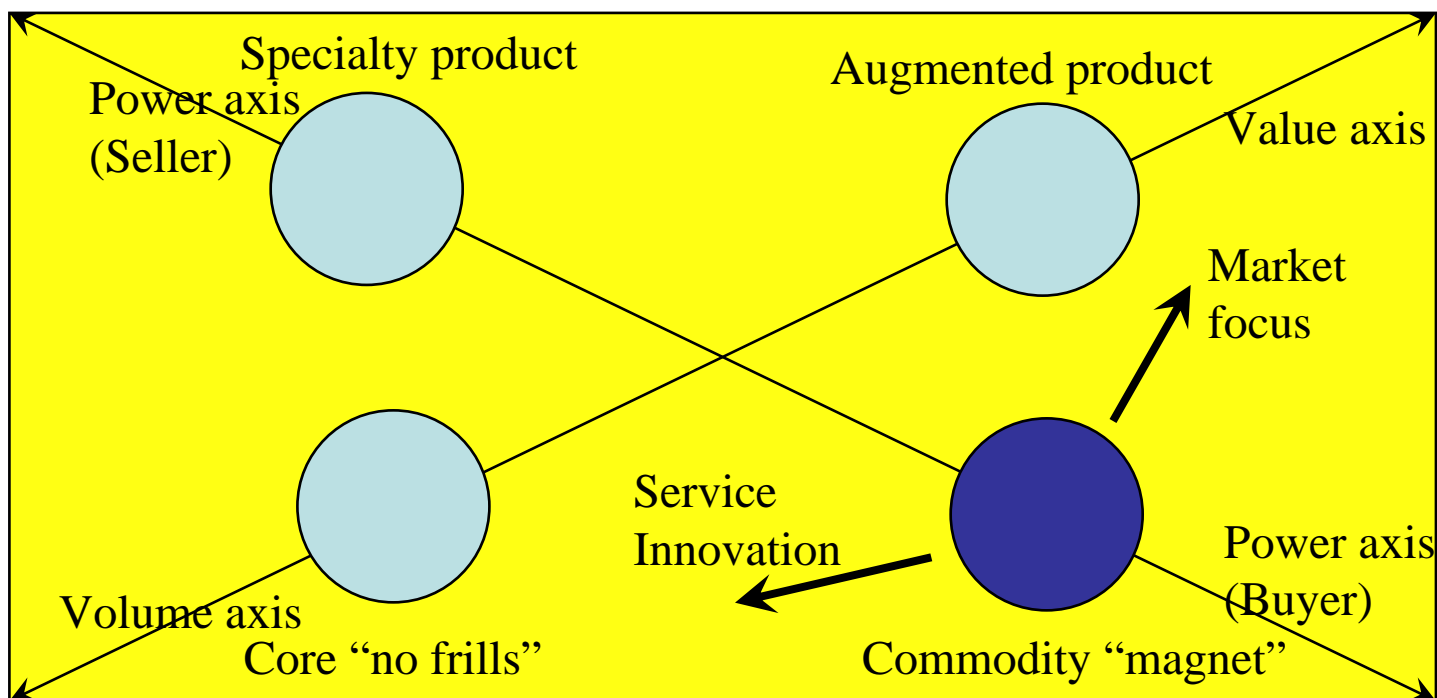


## Australia



Source: Data from Euromonitor

# The Future



Relative  
price

Cost to serve the market

Source: Wilson, W.W. (1995), Decentralization of grain trading: Trends, implications and challenges, Australian Agricultural Economics Society, Perth, February 1995.

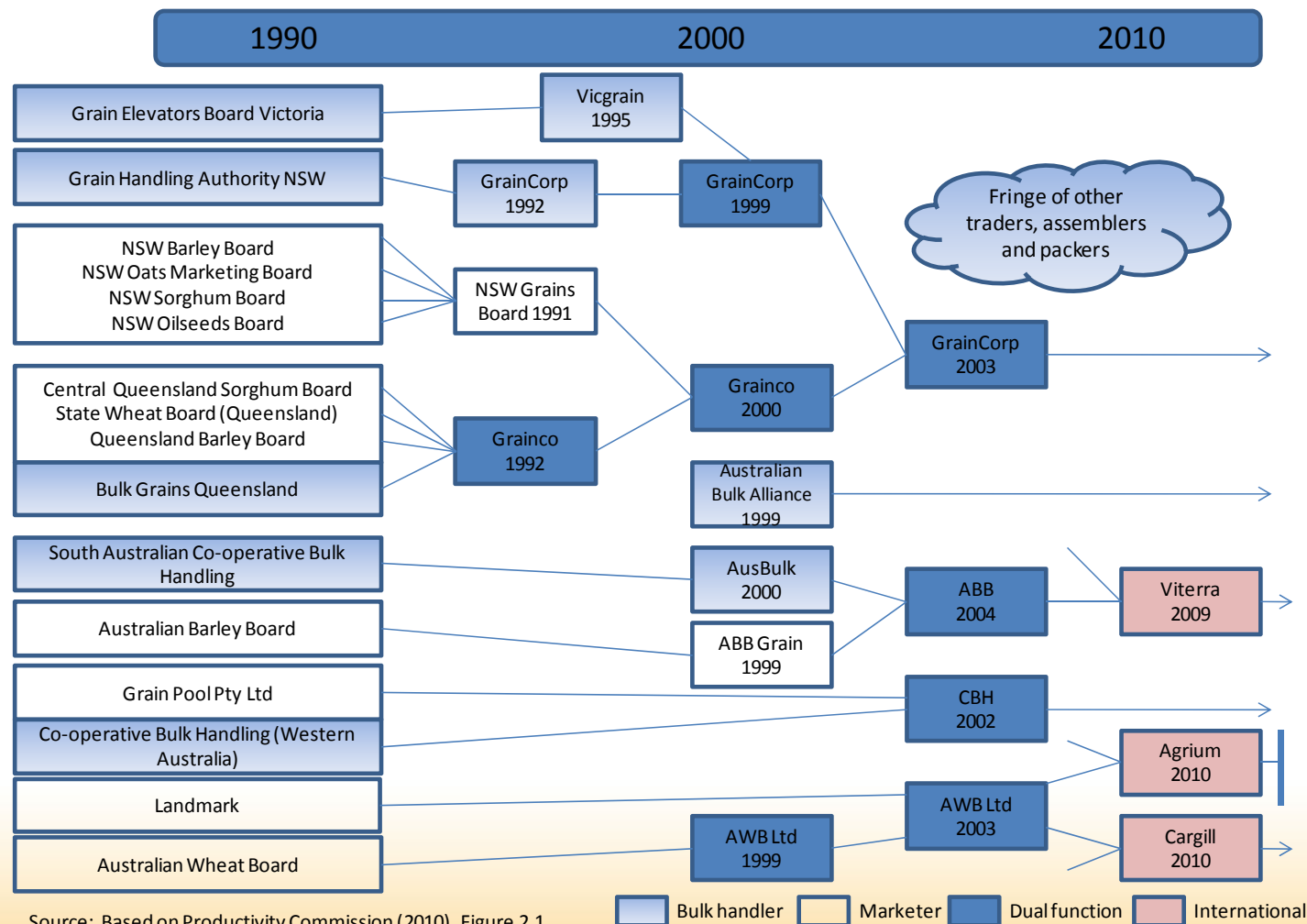


# Market Types

- Market types
  - Specialty—high price, low cost to serve
  - Commodity—low price, high cost to serve
    - Give away services to maintain market share
- Market Dynamics
  - Commodity ‘magnet’ pull
- Market focus—move toward the value axis
  - Seller power through differentiation
    - Segment customers willing to pay for product characteristics
  - Service innovation strategy
    - Products and services unbundled—reduce customer costs



# Internationalisation of Wheat



Source: Based on Productivity Commission (2010), Figure 2.1.



# Internationalisation of Wheat

- From export monopoly to oligopoly (few firms)
  - Economies of scale and scope
  - International scale firms
  - Extraction of oligopoly rents (market power)
- Role of the competitive fringe
  - Frequent entry and exit
  - Innovative and product differentiate
  - Keep pressure on oligopoly rents



# Summary

- World wheat industry is large, complex and risky
- Black Sea Ports are serious competition
- Supply and demand are inelastic—price ‘spikes’
- Indonesia our largest market
- Baking sector is the largest end-use sector
- Quality versus yield—consistency required
- Production differentiation
  - helps both customers and producers



# Implications/Actions

Observation	Actions
Wheat markets are complex and risky	Risk management strategies—storage, income diversification, financial reserves.
Competition for market shares is intense	Innovative ways of reducing costs and increase yields. Seek to product differentiate.
Stocks to use ratio is the industry thermometer	Monitor the direction of change in the stocks to use ratio. Reflects price signals
Wheat is in the 'commodity magnet'	Product differentiate. Target market services to customer needs.
Different countries have different product consumption patterns requiring different qualities	Understand the quality requirements for different markets. Know and measure your grain quality.
Different end-products require different wheat qualities	Blend to best advantage possible. Price discriminate for revenue improvement. Know and measure your grain quality.

**Plan for the long term—manage the short term.**



# Thank You

Work on “What the World Wants from Australian Wheat” is a jointly funded project of the

Grain Growers Association  
and the

Department of Agriculture, Fisheries and Forestry.



**Australian Government**

**Department of Agriculture, Fisheries and Forestry**

More information can be found at <http://www.graingrowers.com.au/> by downloading  
“What the World Wants from Australian Wheat: Update 2010.”





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# Thank You



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