

A submission

on the

Senate Inquiry into Operational Issues in Export Grains Networks

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Sychney: 1 Rivett Road, Riverside Corgonate Park, North Ryde NSW 2113 Australia | PO Box 7, North Ryde NSW 1670 Australia | Tel: +61 2 9888 9600 | Fax: +61 2 9888 5821 Camberran: Patersons Building, Level 2, 53 Biockall Street, Barton ACT 2000 Australia | PO Box 3786, Manuka ACT 2683 Australia | Tel: +61 2 6173 6400 | Fax: +61 2 6173 6490 Freecall: 1800 620 519 www.graingrowery.com.au

ADDRESSING THE TERMS OF REFERENCE

Operational issues arising in the export grain storage, transport, handling and shipping network, with particular reference to:

(a) Any risks of natural, virtual or other monopolies discouraging or impeding competition in the export grain storage, transport, handling and shipping network, and any implications for open and fair access to essential grains infrastructure.

The grains industry involves a set of technologies that are subject to relationships which lead to significant benefits being obtained from large-scale operations. The implication is that it is beneficial to have large businesses but the consequence is their control of the infrastructure and pricing in ways that may impede the entry of other businesses, and as a result of their market power, an ability to extract monopoly or oligopoly rents.

As stated by MacAulay (2011) "Economies of scale and scope are very strong economic forces within the grains industry. This means that the operating cost curves continue to decline over very large volumes and also across different types of grain. There are many technical reasons for such economies. The implication is that it is economically efficient to have very large firms in grain markets as they can take advantage of the cost savings of large scale operation. With deregulation of the wheat industry Australia has rapidly moved from a monopoly to an oligopoly (Figure 20). However, in small countries, such as Australia, this has the effect of creating oligopolistic industries (a small number of dominant firms). As in Australia, and elsewhere, there is often a very important fringe of smaller competitive firms that can take advantage of product differentiation and targeted service provision. Hansen and Simmons (1995) in examining the case of the Australian wool industry point out that with small competitive firms having high exit and entry rates they provide an active trading 'fringe' that prevents under-pricing by the large firms largely through product differentiation and low overhead costs. At the same time the large firms keep any inefficient small firms out of the industry. Thus these firms are of vital importance to growers as they ensure that the powerful firms cannot use their full market power and retain all the benefits of such power. Thus growers have a real interest in ensuring that such firms are successful."

The grains industry is heavily reliant on networks which involve road, rail, port and shipping systems. An inevitable consequence of networks is the development of spatial monopolies or oligopolies. In addition, the grains industry is one in which economies of scale and scope are widespread so that large-scale operations have considerable advantages over smaller scale. However, there are still benefits to specialisation and product differentiation which large-scale businesses find difficulty in providing.

In order to ensure that there is a strong and developing competitive fringe in the grains industry it is vitally important that there be no significant regulatory or competitive impediments to this growth. Such impediments may include high costs or restrictive access policies to networks and in particular to the ports. Ownership of all of the grain handling port infrastructure by four bulk grain handling companies is a significant risk to creation of physical barriers such as access to the facilities or through pricing regimes which make it too costly for the competitive fringe to compete. However, up to the present, the active role taken by the Australian Competition and Consumer Commission (ACCC) in

ensuring there are voluntary port access agreements in place has been effective in assisting with access.

In order to remove the significant potential conflicts of interest by the owners of the ports, one possible solution is for the bulk handling companies, that also own the infrastructure, to outsource the management of the access systems to this infrastructure by contracting to third parties who are independent. This would remove the claims of conflict as competitors would be transparently paying the same fees as the bulk handling companies. This may include the management of auction systems and other mechanisms. Much of the heat would be taken out of the debate about unfair pricing.

It is worth noting that much of Australia's port infrastructure for grain handling has been built by government support and then sold, often on favourable terms. Because of this, there is an expectation that there will be reasonably competitive access to the facilities by others wishing to use the facilities.

(b) The degree of transparency in storage and handling of grain and the appropriateness of any consequent marketing advantages.

Transparency of information is also a vital element in ensuring competition in an industry. Transparency facilitates the competitive fringe and also in reduces volatility and wasteful decision making (Sosland 2011).

In August 2011 an Industry Roundtable was convened by GrainGrowers to examine an independent review into the provision of wheat market information based on a report by GHD. The project was managed by GrainGrowers and funded by the Department of Agriculture, Fisheries and Forestry (DAFF). The Roundtable reviewed what was possible in relation to ensuring the continuation of the provision of wheat market information (stocks, wheat export sales and domestic use data) for Australia due to the ending of government support for such reporting. The outcome was the establishment of an industry Steering Committee that has worked with the Australian Bureau of Statistics to collect data. The surveys have been funded by the Grains Research and Development Corporation (GRDC) and GrainGrowers from 1 October 2011 to 30 September 2012 on a short term basis. GrainGrowers and the GRDC will continue to investigate the longer-term funding for the collection and publication of this information. Should funding not become available it is likely that such information will not be available to the industry in the future.

Information on the location and volume of grain in bulk storage is also seen by some as valuable information. From a producer perspective data on the volumes at receival sites would clearly assist with the delivery of grain and the choice of site to deliver to when sites begin to fill to capacity. However, such information is likely to be known on an informal basis but this means some have the information and others do not.

(c) Equitable access to the lowest cost route to market, including transport options

The competition between road and rail, road and rail pricing and the regulatory systems involved are all important elements of the supply chain for grains. The costs involved need to be as low as possible but consistent with the maintenance of infrastructure and the adoption of modern technologies. The access to these sets of infrastructure need to be open and the monitoring of the access of organisations in terms of the Trade Practices Act needs to be carried out effectively. Rail infrastructure, in particular, is in need of

investment so that in some areas access does not fail completely as a result of maintenance failure.

Access is a general issue for many types of infrastructure and includes not only road, rail and ports but also electricity, gas pipelines, telephone networks, internet, water, airports, etc. Many of these infrastructure facilities exhibit characteristics of natural monopolies where access can be inhibited in various ways. The access legislation Part IIIA in the Trade Practices Act is designed to provide some limited rights of access. The basic processes are through (Productivity Commission 2010, p. 13):

- a. declaration of a facility by the relevant Minister, under strict criteria, so as to provide access to access seekers;
- b. use of existing state access regimes; and
- c. using a voluntary undertaking by the service provider that the ACCC has approved.

The competitive fringe companies have the opportunity to seek the continuation of the current port access undertakings required by the Wheat Export Marketing Act 2008 as voluntary undertakings but this is likely to be difficult and expensive as well as time consuming. The requirement for such ACCC voluntary undertakings on the part of the bulk handling companies is due to expire on 30 September 2014. If the requirement for port access undertakings is no longer available then GrainGrowers strongly encourages the port terminal operators and bulk handlers to continue with the voluntary undertakings and agree to make the principles binding within the context of the ACCC approval. This will do much to maintain the efficiency and innovativeness of the bulk handling companies in the longer term and also enhance the quality and competitiveness of the grains industry internationally.

(d) Competition issues arising from the redelivery of grain

In this context, redelivery of grain is taken to mean the transfer of grain that has already been placed in storage to a receival site. For various reasons the handling companies charge an additional fee for such deliveries. These fees appear to vary across the country and are likely to be a reflection of both some additional costs involved in out of season recieval, the efficiency of the company handling the receival and the perceived market power on the part of the receiver and an assessment of any increased risk of insect or other contamination. Such fees are typically small and may be subject to negotiation but will act as a discouragement for delivery from other storage sites.

GrainGrowers has a general concern in relation to these particular fees in that they form an overall part of the costs of delivering grain through the supply chain. These fees need to be as low as possible so Australian grain exports remain competitive on world markets and producers' returns are as high as they can be given that producers are generally in a weak bargaining position. To ensure this, it is vital that there be effective competition throughout the chain.

(e) The absence of uniform receipt, testing and classification standards and practices and any implications for growers and/or for Australia's reputation as a quality supplier

Accuracy in testing procedures and equipment and the skilled use of this equipment is essential for the proper transmission of value up and down the value chain. Thus, GrainGrowers would support much more rigorous training of those involved in the measurement and testing of grain, particularly at receivel sites. Much stronger monitoring

of receival sites nationally, development of accreditation systems and a strong training requirement are all urgently needed in order to ensure Australia's reputation as a quality supplier.

The issues of reputation involve both domestic and international trade and many of these are considered in detail in Quail (2011). In particular, there needs to be an improvement in overall wheat quality standards and consistency, a better provision of information to support purchasing decisions of all buyers of Australian wheat, better 'shaping' of the crop to meet buyer needs both domestically and internationally, greater consistency in container trade and better linkages between grain producers and end users of Australian grain through enhanced information flow.

(f) Equitable and efficient access to the shipping stem

Access to shipping is just as important as access to the rail and road networks and a pivotal point of the access to ports is the shipping stem. GrainGrowers strongly supports transparent and contestable access to the shipping stem. It is important for ensuring that a competitive fringe can function and play the important role of maintaining an innovative, efficient and competitive industry. Thus, the mechanisms for doing so are a key element in determining the long-term efficiency of the grains supply chain. An effective auction system for slots is clearly a more efficient means of allocating slots on the shipping stem as it allows for re-trading of slots and proper valuation of peak times. It is much preferred to the first-come first served system in that it necessarily provides for transparency, removes the possibility of overbooking and largely removes the favoured position of the port owner. However, it may take time to have the detailed design and implementation of such systems worked out before they are fully accepted.

(g) Any other related matters.

GrainGrowers is a national not-for-profit organisation working on behalf of all Australian grain producers to promote the development of a sustainable, viable and efficient Australian grain industry. GrainGrowers is Australia's only national, independent, financially sustainable, member-based, technically resourced, grain producer organisation. Thus, GrainGrowers has a vital interest in the grains supply chain. GrainGrowers' constitution states that the company will promote the development of Australian agricultural resources by:

- representing the national interests of grain producers in Australia;
- developing and implementing policies aimed at cultivating a strong, innovative, profitable, globally competitive and environmentally sustainable grain industry. These policies will be constructive, balanced and well researched;
- making representations to, and working with, governments consistently with its role of representing the Australian grain community;
- working with all sectors of the Australian grain industry where matters of common interest are concerned; and
- exercising good corporate governance in representing the interests of the Australian grain community.

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WHAT THE WORLD WANTS FROM AUSTRALIAN WHEAT

Gordon MacAulay, Principal Economist, Grain Growers Limited Emeritus Professor of Agricultural Economics, University of Sydney

Key words

wheat, export, demand, supply, production, quality

Take home message

The focus of this paper is on the wheat industry.

- Traditional exporters, the United States, Canada, Australia and Argentina, export about 65 million metric tonnes (MMT) per year.
- Of this, Australia exports about 12 MMT/yr.
- Black Sea port countries export about 34 MMT/ year.
- Population is a long-term driver for wheat demand.
- World area planted is about 200 million hectares and yield growth is the key to meeting demand.
- The risky world market is driven by inelastic (near vertical) demand and supply relationships.
- Shares of total world exports and shares of total world wheat production over the period 1960/61 to 2009/10 have declined for both Canada and the United States while Australia's shares have remained steady. Can this be continued into the future? The Black Sea port countries have dramatically increased their shares.
- There are many importing countries with most importing less than five per cent of total exports.
- Different end-products require different wheat qualities and different qualities provide the foundation for price discrimination.

The global market - some insights

The world market has four major traditional exporters (United States, Canada, Australia and Argentina), plus the European Union and the Black Sea port countries (Figure 1). In total they export about 130 MMT/year (five-year average). Thus, there is a small number of major exporters.

World wheat production is about 600 MMT/year of which the traditional exporters, the EU and the Black Sea port countries produce 350 MMT and India and China produce about 188 MMT/year. The area planted to wheat across the world is about 200 million hectares and has been constant over a long period (Figure 2). Thus, yield growth has been essential to increased world production.

The world's wheat markets are inherently unstable (Figures 3 and 4). The demand and supply relationships are inelastic so that small changes in production or consumption can lead to very large relative changes in prices. This is an inbuilt characteristic of the behaviour of wheat consumers and wheat producers. Thus, Australian growers face a degree of instability that must be managed.



Figure 1. Shares of world wheat exports



Figure 2. Global wheat production, consumption and area planted





Figure 4. World stock to use ratio and prices

The Black Sea ports

Over a long period of time the shares of production and the shares of world trade of Canada and the United States have declined (Figure 5). Recently the Black Sea Port countries have dramatically increased their share as a result of reduction in the livestock sector and its use of feed grain and increases in yields. Australia has escaped this long-term decline but has been subject to about a 10-year cyclical pattern of variation in the

share of both world production and world trade. Can Australia continue to maintain its share of about 12-13 per cent of exports?

World-wide competition for market share is fierce as the Black Sea port countries take an increasing share of world trade and price accordingly. Much comes from the great plains of Russia, such as along the Volga River, from Kazakhstan and the Ukraine. In these areas, grain production has been replacing livestock production and the infrastructure to handle grain has been improved dramatically and the USDA is forecasting that by 2019 Russia could replace the United States as the world's largest wheat exporter (Liefert et al 2010). Until recently, grain losses and wastage were also substantial.



Figure 5. Selected country wheat exports and production shares

Supply and demand

Over a very long period of time world wheat prices have frequently 'spiked' (Figure 3). The global 'thermometer' or measure of this phenomenon is the stocks to use ratio (Figure 4). When the ratio gets down to about 25 per cent, prices rise rapidly. However, they nearly always fall as rapidly as they rise. The simple economics of this is that the behaviour of wheat consumers and producers is such that a small change in the quantity produced or demanded gives a large change in price (Figure 6). A major reason for this is that bread and other wheat based foods are only a small part of consumers' budgets. A second important reason is that farmers tend to base their production decisions on last year's price and can adjust the area planted easily. Put these together and you have a market with highly variable prices. Risk management strategies are thus vital for success in wheat production.



Importers

There are many importers of wheat with none importing more than about five percent of world wheat trade or five to six million metric tonnes (Figure 7). Spain, Italy, Algeria, Brazil and Japan are the largest. At times India and China have imported large quantities. A total of 118 countries have imported over 2,000 tonnes on average over the five years 2004 to 2009. Australia exports more than 2,000 tones to 48 different countries. To maintain market share this will require constant effort in market development. One of the promising areas for development is Saudi Arabia as it cuts back its production of water intensive crops and has substantially increased imports of wheat since 2008/09.



Figure 7. Import shares of major wheat importers

Wheat consumption per person

The largest per capita consumers of wheat are in Kazakhstan and Azerbaijan (Figure 8). They consume for food and industrial uses almost a kilogram per day. The areas of

potential growth in consumption and where demand growth is likely as incomes grow are countries like India, China, South Korea, Malaysia, Indonesia, Thailand and Vietnam and Philippines where the levels of consumption are relatively low and there are good prospects for income growth and the substitution of wheat for rice.



Figure 8. Wheat per capita consumption for selected countries

Australian wheat production

Australian wheat production is highly variable varying from 10 to 25 million metric tonnes in one year (Figure 9). Drought is clearly a major cause of this variability. Relative to some other countries yields in Australia have grown slowly, particularly in recent periods while area planted has increased slowly since 1988/89 from about 9,000 hectares to 13,000 in 2008/09. Average yields at both points in time were about 1.6 tonnes per hectare.



Figure 9. Australian wheat production and area planted

Australian wheat use

About 50 per cent of Australia's wheat is exported and the remainder is held or used domestically (Figure 10). Of the exports, 40 per cent is APW and 15 per cent AH grade (Figure 11). Domestic use is feed and seed at about three per cent and food use about 16 per cent. The remainder of 26 per cent is held in stocks at the end of the season. Feed wheat is largely used in Eastern Australia with about one third each in Queensland, New South Wales and Victoria (Figure 12).



Figure 10. Uses of Australian wheat



Figure 11. Australian bulk wheat exports by grade



The pattern of demand for Australia's wheat exports vary in some interesting ways.

The pattern of demand for Australia's wheat exports vary in some interesting ways. Australia has maintained its export share over a long period but has been subject to approximately a 10-year cycle in export share and in the share of world production (Figure 13). This cycle has little to do with drought but is likely to be related to sheep and cattle numbers and the longer-term substitution between sheep, cattle and grain. Other major exporters do not seem to have such cycles.

Another substitution is that as Australian exports to Asia increase exports to the Middle East have tended to decrease and vice versa, at least since 1996/97 (Figure 14). This has much to do with the nature of the demands in each of the regions and needs much more careful study.







Figure 14. Share of Australia's wheat and flour exports by region

Australia's importers

Indonesia is Australia's largest wheat importer by more than a factor of two but Italy, Sudan and Japan have the highest unit values among our export destinations (Italy imports mainly durum) (Figures 15 and 16). Indonesia is intermediate in value but in total is worth about \$US0.7 billion in 2009. Much of this wheat will be milled into flour for noodles and bread with only very small quantities of flour exported to other countries (about 18,000 tonnes in 2009). Meeting the needs of Indonesia is crucial to the future of the Australian wheat industry.



Figure 15. Major importers of Australia's wheat



Figure 16. Unit import values for major importers of Australia's wheat

Vietnam is the largest destination for container exports from Australia, although Taiwan, Malaysia and Indonesia all purchased over 20,000 tonnes in October 2010 (Figure 18). Vietnam has many small mills which limits their capacity to handle large volumes of grain.





Figure 18. Australian bag and container wheat exports

To assess the perceptions of Australian wheat, interviews with mainly millers were held in South East Asia, the Middle East, Europe and Australia in late 2010. These are reported in What the World Wants from Australian Wheat: Stakeholders Report 2011 (Grain Growers 2011). Buyers valued the white wheat seed coat of Australian wheat, its low moisture content enabling safer storage and its product colour and noodle texture advantages. Buyer concerns included: Australia's difficulty in supplying markets consistently (the problem of droughts) and the problems this causes for security of supply; increasing levels of screenings and foreign materials; inadequate information on crop production and quality; a lack of clarity on wheat grade specifications and export standards; a decline in the quality of wheat shipped in containers causing reputation problems; a lack of independent monitoring of bulk and container exports; a lack of a single point of contact to address complaints; and much less frequent technical support than that provided by the United States and Canada. A number of proposal for future directions are provided in the report to address some of these issues.

Commodity magnet

As the market for a good grows and matures it has been observed that they tend toward the characteristics of a commodity (Figure 19). That is low in relative price and high in cost to service the market (all direct and indirect costs). Computers are a good example while wheat has long been in the commodity category. Through the use of ideas such as product differentiation (segmenting customers willing to pay for additional services) and reductions in the costs of servicing markets (such as, through better targeting to the needs of customers the services provided to markets and unbundling the product and services) a commodity such as wheat can, in part, be moved away from the commodity magnet position. This all implies better measurement, quality control, packaging to meet the requirements of customers more precisely and better consistency of product.

Internationalisation of the Australian wheat industry

Economies of scale and scope are very strong economic forces within the grains industry. This means that the operating cost curves continue to decline over very large volumes and There are many technical reasons for such also across different types of grain. economies. The implication is that it is economically efficient to have very large firms in grain markets as they can take advantage of the cost savings of large scale operation. With deregulation of the wheat industry Australia has rapidly moved from a monopoly to an oligopoly (Figure 20). However, in small countries, such as Australia, this has the effect of creating oligopolistic industries (a small number of dominant firms). As in Australia, and elsewhere, there is often a very important fringe of smaller competitive firms that can take advantage of product differentiation and targeted service provision. Hansen and Simmons (1995) in examining the case of the Australian wool industry point out that with small competitive firms having high exit and entry rates they provide an active trading 'fringe' that prevents under-pricing by the large firms largely through product differentiation and low overhead costs. At the same time the large firms keep any inefficient small firms out of the industry. Thus these firms are of vital importance to growers as they ensure that the powerful firms cannot use their full market power and retain all the benefits of such power. Thus growers have a real interest in ensuring that such firms are successful.



Figure 19. The commodity 'magnet'



Figure 20. Development of the Australian grain trading and handling sector, 1990 to 2010

Observation	Actions
World wheat markets are complex and	Risk management strategies, including
risky—inelastic supply and demand	storage management, income
	diversification and financial reserve policy
	Plan for the long term and manage the
	short term
Competition for market shares is	Innovative ways of reducing costs.
intense and the new exporters will	Seek to sell a differentiated product, eg.
become much larger keeping pressure	through container-sized, quality specified
on prices	packages
Stocks to use ratio is the industry	Monitoring the direction of change of the
thermometer	world stocks to use ratio gives short-term
	forward looking information on prices
Wheat is a commodity and tends to the	Product differentiate
commodity magnet	Target market services to customer needs
Different countries have very different	Understand the quality requirements for
product consumption patterns requiring	the different markets you are supplying
different qualities	
Different end-products require different	Ensure you know your quality parameters.
wheat qualities and different qualities	Blend to best advantage if possible.
provide the foundation for price	
discrimination and revenue	
improvement.	
Importers value Australia's wheat but	Actions need to be taken to be able to
have a number of concerns relating to	provide wheat of high quality and a
consistency and quality.	consistent supply which can compete in
	world markets.

Concluding Comments

More information

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

Acknowledgement

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