



Australian Government
Productivity Commission

Submission to the
Agricultural Competitiveness
Taskforce

Productivity Commission
Submission

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Key points

- Agricultural competitiveness is about advantage in markets. Australian producers and their supply chains need to continually innovate and improve their efficiency, and be highly attuned to international market developments.
- Governments should focus on providing an environment that facilitates innovation and productivity gains by farm enterprises and allows market forces to allocate land, water and management skills to their highest valued uses.
 - Policies that: distort market signals (such as industry assistance); impede efficient risk management and structural adjustment (such as concessional loans for drought or impediments to farm aggregation); or discourage innovation (such as bans on genetically modified technologies) might help some producers, but at the expense of the competitiveness of the sector overall.
- A strong capacity to adjust is crucial for agricultural competitiveness.
 - The agricultural sector has undergone significant structural change leading to fewer, but larger and more efficient farms. Policies that unnecessarily impede business entry, exit and efficient scale only undermine competitiveness.
- Most risks are most efficiently managed by farm businesses themselves, enhancing their self-reliance and resilience.
- Trading scarce water has increased farm output and productivity. Remaining unnecessary restrictions on water trading should be removed.
- An efficient supply chain is critical.
 - Pro-competitive developments in grain port terminal infrastructure indicate scope to phase out and remove mandatory access arrangements for port terminals.
 - Infrastructure decisions including for transport and irrigation investments should be based on transparent and rigorous assessments. Review and reform of coastal shipping is urgently required.
- Foreign investment can enhance export supply chains, promote innovation, provide capital and increase competition in domestic markets.
- The greatest benefits of trade liberalisation would be realised on a multilateral basis.
 - Bilateral trade agreements might improve market access for some agricultural producers, but others inevitably miss out. Agreements almost always involve complex rules of origin offsetting access benefits and risk costly trade diversion.
- Changes designed to increase the success rate for anti-dumping actions could be a double edged sword for agricultural producers, potentially increasing input costs and encouraging the introduction of similar arrangements by trading partners.

Introduction

This submission addresses a number of the issues and questions raised in the Agricultural Competitiveness Issues Paper (the Issues Paper), drawing on projects undertaken by the Commission of relevance to the agricultural sector, and for framing agricultural policy. The submission is organised around the broad themes of structural change and adjustment, risk management, productivity and competitiveness, and Australian agriculture in the global economy.

What is a competitive agricultural sector?

Competitiveness is essentially about advantage in selling products in markets. This requires Australian farmers to be relatively more efficient producers than their many competitors, and for them to be backed up by efficient supply chains. Producing efficiently, in turn, involves Australian producers being exposed to international competition to spur innovation and productivity gains both to reduce costs and to develop products that consumers are prepared to pay for. It also depends upon the capacity to be flexible and to adapt swiftly to changing market conditions.

An internationally competitive agricultural sector (as for other sectors of the economy) requires policies and institutional frameworks that facilitate innovation, least-cost production, efficient risk management and the allocation (and reallocation) of resources such as land, water and management skills to areas of production and investment with the highest expected net returns. Generally speaking, appropriate incentives will be provided by open, competitive markets and efficient (non-distorted) price signals. This applies equally if not more to service and other inputs to the agricultural sector many of which, unlike agricultural industries, are not exposed to international competition. This submission focusses on how to frame policies that support and foster a competitive, adaptable and resilient farm sector.

1 Ongoing pressures for structural change and adjustment

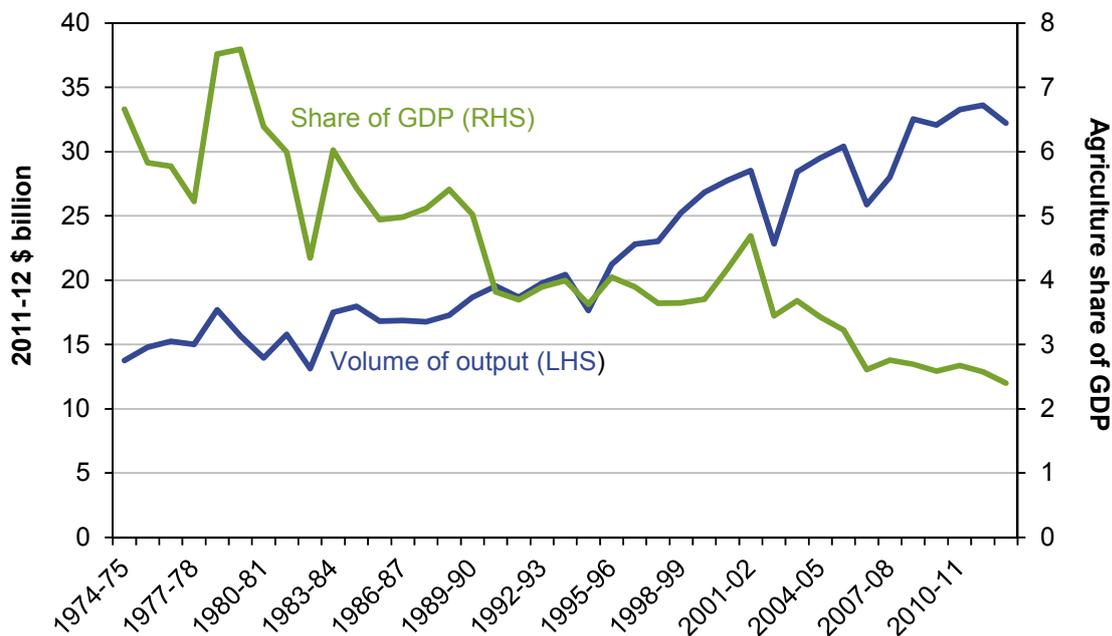
The ability of the agricultural sector to adapt to pressures for structural change and evolving market conditions is particularly relevant to the 1st, 2nd and 4th issues identified in the Issues Paper (Australian Government 2014a).

Structural adjustment has been occurring within the agricultural sector for decades. Farm businesses have adjusted to the removal of production restrictions, inefficient

marketing arrangements, and other forms of government assistance, the deregulation of marketing arrangements, cyclical fluctuations in input and output prices, and perennial risks such as drought, flood and bushfire. Notwithstanding challenges, agricultural output has steadily grown over time (box 1).

Box 1 Agriculture continues to grow, but its share of the economy has decreased

The volume of production in the agricultural sector has expanded over time, increasing at an average annual rate of 2.3 per cent per annum between 1974-75 and 2012-13.



While agricultural output has grown, its share of overall economic activity has declined:

- In 1989-90 agriculture’s share of the economy was 4.6 per cent, falling to 2.4 per cent by 2012-13.
- In 1985-86, employment in agriculture accounted for 5.6 per cent of total employment, falling to 2.4 per cent by 2012-13.
- In the 1970s, on average, agriculture constituted roughly 40 per cent of the value of Australia’s exports. Since 2000, on average, the share of Australia’s exports accounted for by agriculture has been about 15 per cent.

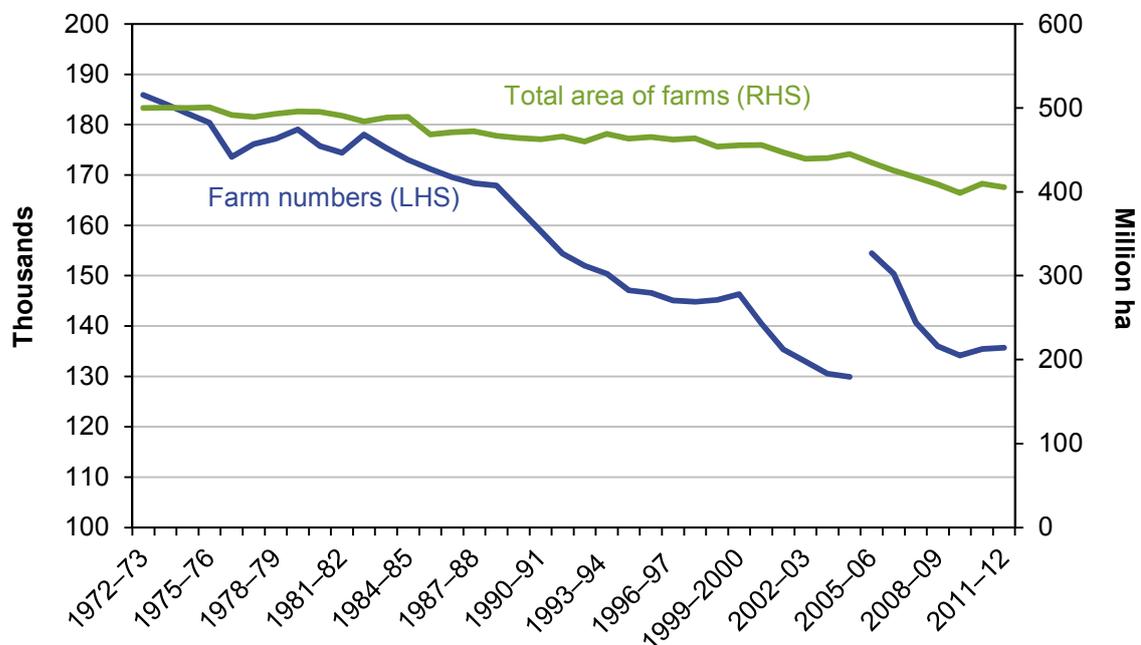
While the share of Australia’s exports constituted by agriculture has declined, agricultural exports have increased in both volume and value terms over several decades. For instance, in 1985-86, the real value of agricultural exports stood at \$18 billion, increasing to over \$42 billion by 2012-13.

Sources: ABARES (2013a); ABS (*Australian System of National Accounts, 2012-13*, Cat. no. 5204.0, *Labour Force, Australia, Detailed, Quarterly*, Cat. no. 6291.0.55.003); Commission estimates based on ABARES (2013a); PC (2013b).

Over recent decades, the Australian farm sector has experienced:

- increases in enterprise scale. The number of farm businesses has decreased more rapidly than the area of land devoted to agricultural production (figure 1), implying a trend towards larger and amalgamated farms. The average farm size was around 3000 hectares in 2011-12 (PC 2005, 2009c; Sheng, Zhao and Nossal 2011). For example, in the dairy industry, average farm herd size in 1979-80 was roughly 85 cows per farm. By 2012-13, this had increased to more than 260 cows per farm (Commission estimates based on ABARES 2013a and Dairy Australia 2014).

Figure 1 **Farm numbers and land in production have declined^a**



^a Farm numbers across all years are not directly comparable. Until 1985-86, farms with an Estimated Value of Agricultural Operations (EVAO) of \$2500 or more were included in records of agricultural establishments. In 1986-87, the EVAO threshold was raised to \$20 000, and in 1991-92, was raised to \$22 500, before being reduced to \$5000 in 1993-94. Further, from its 2005-06 agricultural census onwards, the ABS has used a register of agricultural establishments maintained by the Australian Taxation Office, whereas it previously used its own register. This change is represented by a series break in the graph above.

Source: ABARES (2013a).

- a shift in the composition of output, with a significant reduction in the share of the value of production accounted for by wool and wheat, coupled with modest increases in the shares of cotton and vegetable production (table 1).

Table 1 Farm output has diversified
Percentage share of the gross value of agricultural output^a

	<i>Average: three years ended 1984-85</i>	<i>Average: three years ended 2011-12</i>
Wheat	19	14
Cotton	2	4
Sugar cane	4	3
Vegetables	5	7
Cattle and calves	15	17
Sheep and lambs	4	6
Pigs	3	3
Poultry	3	4
Wool	15	6
Milk	8	9
Eggs	2	1
Other	20	26

^a Data are calculated using three-year averages to smooth annual fluctuations.

Source: ABS (*Value of Agricultural Commodities Produced, Australia*, Cat. no. 7503.0).

- an increase in the concentration of farm production, as many smaller farms have exited the sector. The largest 30 per cent of farms today account for roughly three-quarters of the value of output.

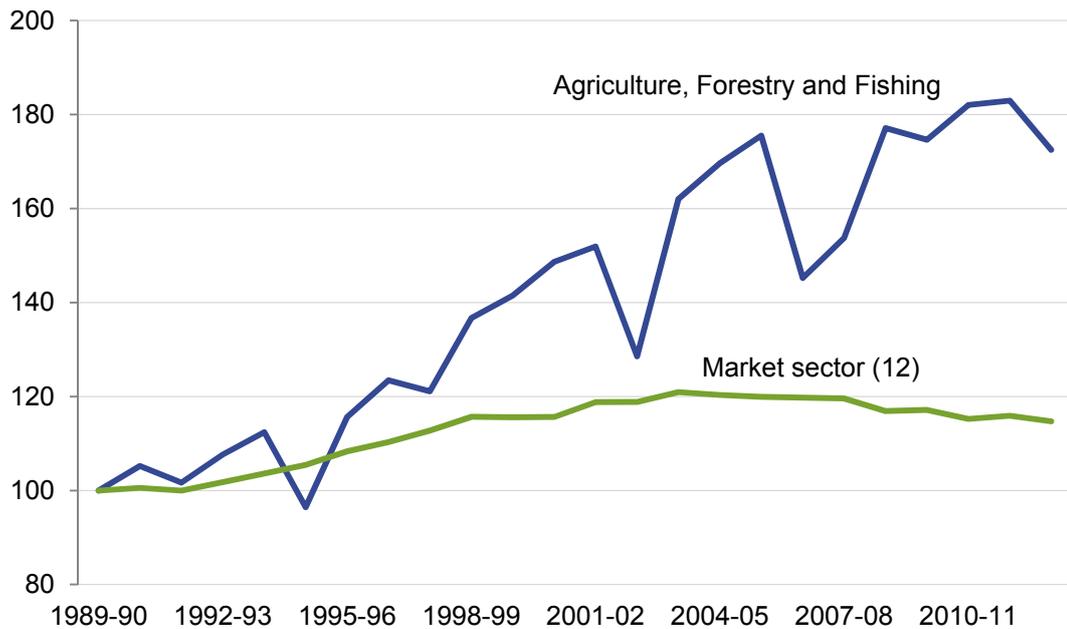
These developments have strengthened Australia's agricultural sector. Larger farms tend to perform better than smaller farms (Gooday and Nossal 2009, Hooper et al. 2002, PC 2005, Sheng, Zhao and Nossal 2011) for numerous reasons: economies of scale in production; marketing advantages, such as greater ease in establishing strategic relationships and entering into long-term supply chain arrangements with customers; greater bargaining power when purchasing inputs; and scope for increased specialisation (Hooper et al. 2002). Larger farms also have a greater financial capacity to invest in advanced production technologies (Sheng, Zhao and Nossal 2011).

The benefits of investment, competition and structural adjustment in the farm sector are mirrored in the sector's productivity performance. While measured rural sector productivity is volatile on a year-to-year basis (as inputs are unlikely to fall commensurately with output in drought years and because of the influence of the unmeasured input 'rainwater'), it has significantly outperformed the market sector average since 1989-90 (figure 2).

Innovations such as no-till planting, fodder conservation, improved animal genetics, artificial insemination, supplementary feeding and increased mechanisation have led to more efficient farm production. As an example of how productivity can be enhanced by innovation and its adoption by farmers, in the dairy

industry there has been an increase in average annual yield per cow from 2900 litres to as high as 5900 litres over the past 30 years (Dairy Australia 2013). This compares favourably with yield per cow in New Zealand, for example.

Figure 2 Rural sector productivity has outperformed the market sector^{a,b} 1989-90 to 2012-13



^a Multifactor productivity is measured as output per unit of combined inputs of capital and labour. ^b The market sector comparator is based on 12 other industry sectors considered representative of those sectors of the economy where the exchange of goods and services takes place at observable prices.

Source: ABS (*Estimates of Industry Multifactor Productivity 2012-13*, Cat. no. 5260.0.55.002, December 2013).

A strong capacity to adjust is crucial for agricultural competitiveness

Structural adjustment essentially entails the movement of resources to their most highly-valued uses when guided by market price signals. This facilitates higher national income levels, increasing community welfare (PC 2013b). The broad overview, presented above, of how Australia's farm sector has evolved is an illustration of how the process of structural adjustment has allowed the sector to increase its efficiency and competitiveness. But the ultimate test of competitiveness is whether Australia's agricultural producers outperform their competitors.

Policy can enable or stymie structural adjustment and also influences the distribution of its impacts. Recent Commission work has considered adjustment pressures in two agricultural industries — pigmeat and fruit growing — and the

design of policy responses that facilitate adaptation to shifting market conditions (box 2). The key message from these reports is to avoid measures that perpetuate the fragmentation of farms by discouraging those which are unviable from exiting the sector. Sectoral assistance, for example, distorts market signals and provides an incentive for uncompetitive farms to remain in operation. It will also impede more efficient farm businesses from expanding their operations by acquiring land to capture economies of scale.

Box 2 Pressures for adjustment in two agricultural industries

The Commission's 2008 safeguards investigation into the importation of pigmeat in Australia found that the industry had been facing difficulties stemming from cost pressures and an increasingly competitive market. The Commission also found that adjustment assistance programs had the potential to encourage producers who would otherwise be unviable to remain in the industry. By delaying more efficient producers from acquiring additional land and resources, adjustment assistance was impeding industry-wide efficiency (PC 2008).

More recently, the Commission concluded safeguards investigations into the importation of processed fruit and tomato products. Growers of processed fruit have faced a long-term decline in the demand for canning fruit varieties, as consumer preferences have changed to favour fresh fruit and other forms of processed and packaged foods (PC 2013a). In response to these adjustment pressures, some growers may diversify their crops or change to alternative crops entirely (such as fresh fruit varieties), and some farmers may decide to exit the industry. The latter course could provide larger and more efficient growers with the opportunity to expand their operations.

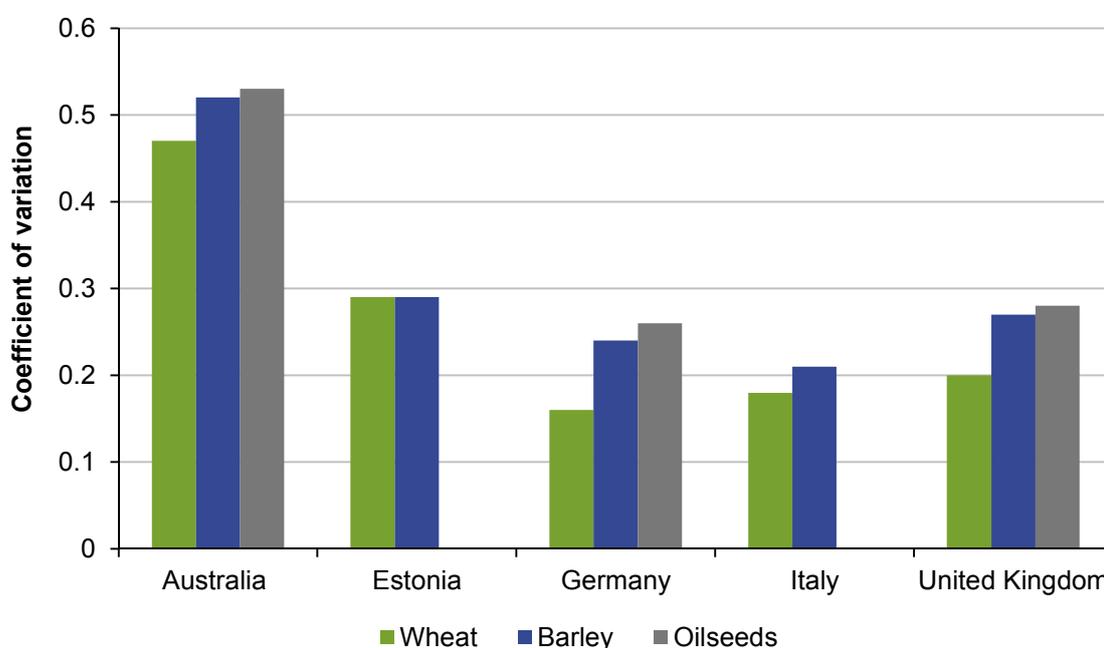
The ongoing pressures for adjustment, as exemplified in these two agricultural industries, highlights the importance of allowing resources to move to those areas in which they make the greatest contribution to economic efficiency and overall welfare.

2 Risk management strengthens resilience

As the Issues Paper acknowledges, farm businesses face a number of risks that may cause fluctuations in profits and farm gate returns. Risk levels, and risk types, may differ from farm to farm, and also differ across countries. Recent work by OECD researchers suggests the yield risk for Australian crop growers is very high by global standards, presumably due to the frequent occurrence of drought (figure 3). This means that there is no single set of risk management policies that would suit all farmers.

Figure 3 **Farm-level yield risks vary across countries and are high in Australia^{a,b}**

Variability of crop yields



^a Variability of yield data for oilseeds was unavailable for Estonia and Italy. ^b The coefficient of variation is measured as the standard deviation of the series divided by its mean, and thus gives an indication of the dispersion of data around their mean.

Source: Kimura, Anton and LeThi (2010).

The OECD (2011) defines three ‘layers’ of risk when considering the appropriate role for government in risk management:

1. Normal risk: refers to variations in prices, production and weather that do not require specific policy responses by government, because these are best managed by farmers in the ordinary course of business, and do not relate to market failure. Governments’ role should be limited to encouraging farmers to develop their own risk management strategies.
2. Catastrophic risk: infrequent events (such as disease outbreak) that affect many or all farmers over a wide area. While farmers may still ultimately be responsible for undertaking efficient preventative actions, there may be a need for government to help manage risks from spillovers caused by ‘free riding’ (such as legislating for clearance of noxious weeds).
3. Marketable risk: such as hail damage and some variations in market prices which can be handled through market tools, including insurance and futures arrangements. The role of government is limited to maintaining an institutional and legal framework, and perhaps playing a role in training.

In short, most risks are most efficiently managed by farm businesses themselves. Encouraging them to manage risks enhances self-reliance, and increases their ability to face difficult commercial circumstances. This also involves removing regulatory impediments to risk management, and promoting greater national harmonisation of regulations (for example, to make it easier to move farm equipment across jurisdictions). This, in turn, will strengthen the resilience of the agricultural sector to shocks and allow it a greater capacity to adjust swiftly to changing circumstances.

Importance of managing climatic risks efficiently

Climatic risks are acknowledged ‘facts of life’ for farmers. Farm businesses are able to adopt risk management strategies that reflect their own individual circumstances. Many farmers, for example, have responded to changes in weather patterns by modifying crop planting times and crop types (including opportunistic planting of winter and summer crops), as well as by changing their choices of fungicides and fertilisers (PC 2012b). Such management strategies can help to ameliorate the impact of climatic risks on farm businesses and to strengthen resilience to adverse conditions.

Drought, in particular, is a risk that farm businesses have always had to manage. The National Drought Policy of 1992 recognised that the primary responsibility for managing drought risk should lie with farm businesses, and that the role of government should generally be limited to that of providing an environment conducive to the promotion of self-reliance. However, provision was made to assist farmers suffering temporary financial difficulty during abnormally severe droughts — dubbed ‘exceptional circumstances’ — which were judged to occur once every 20 to 25 years on average. Once an area was declared to be in exceptional circumstances, a range of assistance measures would become available for eligible farm businesses in that area, such as exceptional circumstances interest rate subsidies, and the exceptional circumstances relief payment (PC 2009c).

A number of subsequent policy reviews found that many elements of the National Drought Policy were antithetical to the promotion of farmers’ self-reliance and efficiency — especially exceptional circumstances interest rate subsidies and transaction-based subsidies (PC 2009c). In 2008, the Australian Government acknowledged the need to reform drought policy and commissioned a national review (box 3).

Box 3 The Commission's review of drought support measures

The national review of drought policy in 2008 included reports by the Bureau of Meteorology and CSIRO on the implications of a changing climate for drought, an expert panel's assessment of the social impacts associated with drought, and a report into the economic impacts of government drought support measures. The latter was undertaken by the Productivity Commission.

The Commission concluded that attempting to classify certain areas of the country on the basis of whether they were affected by drought or not was inefficient, inequitable and inappropriate. Despite the National Drought Policy's stated objective that exceptional circumstances should only be declared for droughts of such severity that even the most prudent farmer would have difficulty managing them, the Commission found that it had been common for 30 per cent or more of Australia to be exceptional circumstances declared in any given year, and that some areas had been declared for 14 of the past 17 years.

The key recommendations of the Commission were to:

- terminate the exceptional circumstances declaration process
- terminate exceptional circumstances interest rate subsidies
- terminate the exceptional circumstances exit package
- terminate transactions-based subsidies
- direct significant public funding to research, development and extension to assist farmers prepare for, manage, and recover from the impacts of climate variability and change
- direct significant public funding to a continuous learning program, which should encompass advice and training for managing climate variability and for farm business management
- replace relief payments for farm households with an income support scheme designed specifically for the circumstances of farming families.

Source: PC (2009c).

The Commission's Drought Support report found that interest rate subsidies and other forms of concessional finance can be especially deleterious. They can encourage poor farm business management practices and act as an impediment to farm adjustments that need to occur through exits and amalgamations (PC 2009c). A number of participants to the inquiry also highlighted the potentially inequitable nature of subsidies more generally, and the consequences for other markets. For example, subsidies for fodder tended to bid up prices in areas where subsidies were not introduced, increasing costs for other users, such as intensive livestock farms.

Given the ready availability of credit for viable farm businesses (discussed later) and high average equity levels in farm businesses, the Commission concluded that

such support measures could not be justified on the grounds of a market failure and recommended the trial of an alternative drought support policy framework (box 4).

Box 4 Developments in drought reform policy following the national review

Following the recommendations in the Commission's Government Drought Support report, the Government established a drought reform trial program in part of Western Australia between 2010 and 2012.

The trial program, which included a specific income support program for farming families, was reviewed by an independent panel (Keogh, Granger and Middleton 2011). The panel concluded that the income support program was appropriate and worthwhile, and highlighted its ability to provide support to those in hardship, without reliance on a climatic trigger. (Instead of having to be located in a drought declared area, farmers were eligible for assistance if they satisfied income and assets tests.) The panel also observed that assistance provided for farmers who decided to sell their farms did not appear to be an effective mechanism for encouraging structural adjustment (Keogh, Granger and Middleton 2011).

In May 2012, the Transitional Farm Family Payment, which provided income support specifically for farming families, was introduced. This was replaced by the Interim Farm Household Allowance, which will be made permanent on 1 July 2014 with the implementation of the Farm Household Allowance (DAFF 2014c). Exceptional circumstances interest rate subsidies ceased in June 2012.

The new framework is supported by an intergovernmental agreement on drought reform which was signed by the Australian, State and Territory Governments in May 2013. One of the principles underlying the agreement was that there should no longer be exceptional circumstances declarations or 'lines drawn on maps' as a method of determining assistance (SCoPI 2013, p. 7).

In February 2014, the Australian Government announced a new drought assistance package worth \$320 million. \$280 million of this package consists of concessional loans to be provided in 2013-14 and 2014-15. Recipients of the loans will be able to restructure a proportion of their existing debt at a lower interest rate, and/or to use the loans to meet operating expenses and recovery costs (DAFF 2014b). Up to \$12 million has been allocated for the installation of water-related infrastructure by drought-affected farm businesses (DAFF 2014a).

Notwithstanding that the broad thrust of the Commission's recommendations to move away from drought support were subsequently accepted by governments (box 4), the Australian Government recently announced a \$280 million concessional loans scheme for drought-affected farm businesses (DAFF 2012b). As noted above, such measures risk delaying adjustment in the sector.

The importance of water trading

Access to water is a key component of the agricultural supply chain and is critical to agricultural output and productivity. An efficient system for trading water rights helps farmers to manage risks from variable water availability and increases farm productivity by allowing water resources to be allocated to their highest value uses within a trading area. Barriers to trade in water can impose unnecessary costs on farmers and limit agricultural output and productivity, especially during drought.

Barriers to rural water trading were identified in the Commission's 2010 report on market mechanisms for recovering water in the Murray-Darling Basin (PC 2010b). These included:

- volumetric caps on trade in water entitlements out of irrigation districts
- inefficient pricing of water storage and delivery infrastructure (such as excessive termination fees charged by infrastructure operators when farmers sell water rights out of a region, and water delivery pricing that does not reflect the true cost of the infrastructure involved)
- inefficiencies in processes used to establish and trade water rights (such as the time taken for the regulatory approval and registration of trades, and the processes of transforming commonly-held water entitlements into individually salable property rights).

Progress has been made in recent years in removing unnecessary barriers to trade in rural water (NWC 2011). Further reforms (such as those being pursued through COAG and the National Water Initiative) will further improve the ability of farmers to manage risks and boost farm output, competitiveness and productivity.

The Commission has also highlighted the benefits of carryover rules for entitlement holders, including encouraging more efficient use of water resources by allowing entitlement holders to make efficient inter-temporal decisions and in doing so, maximise their own water efficiency (PC 2011a).

Public subsidies for rural water storage and delivery infrastructure (such as those paid under the Sustainable Rural Water Use and Infrastructure Program) can also act as barriers to water trading. For example, subsidised investment in water infrastructure in a less productive irrigation region may discourage farmers in that area from selling their water into a region that is more productive (and operates without any subsidy). The net effect of the subsidy could be to lower agricultural productivity across the two regions.

The Commission (PC 2010b) also found that subsidising rural water infrastructure under the Sustainable Rural Water Use and Infrastructure Program was:

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- a less cost-effective means of recovering water for the environment compared with purchasing water rights from willing sellers, particularly in view of the strong existing incentives for irrigators to invest in water-saving projects.
 - unlikely to be an effective means of sustaining irrigation communities. The Commission noted that access to irrigation water was only one of a number of factors affecting rural communities, and that policy directed at influencing the future viability of regional communities would be better pursued through general policies that have regard for all of the drivers of change.

There is evidence that water trading allows water to shift to its most valued use, increasing productivity and overall output. The Commission notes a 2010 study by the National Water Commission showed that between 2001 and 2006, the value of agricultural production in the southern Murray Darling Basin increased by nearly 2 per cent despite a 14 per cent reduction in water use over the corresponding period. Modelling for the study estimated that water trading in the southern Murray Darling Basin increased Australia's gross domestic product by more than \$220 million in 2008–09 (NWC 2010).

In summary, the Commission considers that measures which encourage farm businesses to manage water supply risks strengthen the resilience of the agricultural sector to shocks and allow it a greater capacity to adjust swiftly to changing circumstances. They therefore underpin a vibrant and dynamic rural economy.

3 Improving productivity and competitiveness

Productivity growth is a key factor in improving farm gate returns, and as noted earlier, the sector has achieved substantial improvements in productivity, outperforming the market sector average over recent decades. But ultimately agricultural producers compete against producers in other countries who are also improving their efficiency.

A multitude of factors influence farm productivity. Many of these are within the control of farm businesses, but others are not, such as the prices and quality of critical inputs. This section focusses on factors that would be amenable to policy intervention or improved by better policy design.

The policy areas and topics covered are not comprehensive and draw on the findings from recent Commission inquiries and research reports. They cover i) aspects of the supply chain and infrastructure provision, ii) access to capital, iii) research and development and policies relating to genetically modified crops, and iv) industry assistance policies. A number of other Commission reports which

have reviewed other potential impediments to competitiveness such as regulatory impacts, including native vegetation regulations, are included in Appendix A.

Ensuring supply chain efficiency

The Issues Paper highlights the need for efficient, reliable logistics to succeed in competitive global markets. This is particularly true given around 60 per cent of Australia's agricultural production is exported, with commodities such as wool and cotton exporting as much as 98 per cent of production (Australian Government 2014a).

The Commission has analysed supply chain issues in reports on *Road and Rail Freight Infrastructure Pricing* (PC 2006) (box 5) and, more, recently in its draft report into *Tasmanian Shipping and Freight* (PC 2014b) which, among other things, recommended urgent review and reform of coastal shipping in Australia.

In a review of *Wheat Export Marketing Arrangements* (PC 2010c) the Commission found that there was potential for efficiency gains in the grain supply chain, and that increased competition could provide a catalyst for this (box 5). Foreign investment is also likely to have a major role to play in this area, as has been demonstrated in the wheat industry (see below). Since the Commission's wheat report there have been significant pro-competitive developments in grain supply chains, largely associated with foreign investment.

The major supply chain issue raised in the Wheat Export Marketing inquiry was access to port terminal facilities. There were widespread concerns that wheat exporters with port terminal operations could use their control of those terminals to advantage their wheat export operations at the expense of rivals.

The Commission found that the access test which was introduced at the time of wheat marketing deregulation had been effective in ensuring access to wheat export terminals. However, in the long term the benefits are likely to diminish and the associated costs (particularly related to reduced investment incentives) are likely to become more significant and outweigh the benefits.

Box 5 Improving the efficiency of supply chains

The Commission's *Road and Rail Freight Infrastructure Pricing* report (PC 2006) identified substantial scope to improve the efficiency of supply chains and made several findings and recommendations of relevance to agricultural supply chains. These included:

- the application of detailed cost-benefit analysis, incorporating social impacts, to all potential projects, which improve investment decisions and the efficiency of infrastructure investment
- removing prescriptive approaches to regulating heavy vehicles that inhibit innovation, limit the efficiency and productivity of road freight, and increase transport costs
- scope for moderating rail access regulation and investigating whether vertical re-integration of some networks (particularly regional grain networks) would promote their long-term commercial viability without detracting from wider community benefits
- road infrastructure funding decisions to include a clear project selection process, stakeholder involvement and public transparency, and systematic post-project evaluation.

The *Wheat Export Marketing Arrangements* report (PC 2010c) found and recommended that:

- improved supply chain efficiency would increase returns to growers
- thorough cost-benefit analysis, taking account of the economic and social aspects of road and rail use, was required when making investment decisions
- investment decisions needed to consider linkages with other industries
- the 'access test' introduced at the time of wheat marketing deregulation had been effective in ensuring a relatively smooth transition to the new arrangements but, over time, the benefits would diminish and associated costs would become more significant
- the access test should be abolished and access to grain terminals be subject to Part IIIA of the [then] Trade Practices Act (with merit in the adoption of a voluntary code to govern port access).

The Commission therefore considered that the access test should be abolished from 1 October 2014 and be replaced with a *voluntary* code of conduct. Subsequent amendments to the *Wheat Export Marketing Act 2008* (Cwlth) (WEMA) mean that from 1 October 2014, port access in the bulk wheat export industry will be regulated by a *mandatory* code of conduct approved by the Minister for Agriculture and prescribed under the *Competition and Consumer Act 2010* (Cwlth).

The Commission still favours a voluntary code of conduct and does not consider a mandatory code to be necessary — particularly in view of the pro-competitive

developments in the supply chain (detailed below) since the Commission made recommendations in this area in 2010. Development of a mandatory code of conduct will require similar efforts to the original ‘access test’ (which imposed compliance costs running into millions of dollars) to balance the need for ongoing investment with the need to ensure access to facilities for exporters. A mandatory code will similarly impose substantial compliance costs which are ultimately likely to be borne by wheat growers.

However, the requirement for a mandatory code has been legislated, and current legislative arrangements mean that if a mandatory code of conduct is not developed by October 2014, then (in the absence of further legislative change) the current ‘access test’ arrangements will stay in place by default. The Commission considers that regardless of the regulatory mechanism employed, given that competition in the sector is intensifying, the regulatory requirements should become less onerous over time.

The recent developments that have reduced concerns about the potential abuse of monopoly power within the wheat export supply chain include:

- Two multinational companies have made significant investments at Western Australian ports. Bunge has developed loading and storage facilities at Bunbury, and Heilingjiang Feng Agricultural has invested in loading and storage facilities at Albany after taking a long term lease over a disused wood pellet export facility. These facilities provide competition to CBH, the dominant bulk handler and grain port operator in Western Australia (Hinkley 2013)
- In New South Wales, a new port terminal has opened, and another facility has been announced. The Newcastle Agri Terminal, which is operated by a local company and includes CBH, Glencore and Olam among its investors, opened in early-2014 (NAT 2012). Qube Holdings and the Noble Group have announced a joint venture to develop a grain handling facility (‘Quattro Grain’) at Port Kembla, with Cargill and Emerald also having the option of taking an ownership stake in the facility (as well as making commitments to use it) (Qube Holdings 2014).
- Grain exporter Emerald, which owns the Melbourne Port Terminal, has announced it intends to invest significantly in the grain supply chain to double its storage and handling capacity to 3 million tonnes (Emerald Grain 2014).

There is also media speculation that Qube Holdings might make further similar investments (possibly in Victoria), and that CBH is planning further east coast investment in grain supply chains, potentially further increasing competition to GrainCorp.

The ACCC recently announced a draft decision proposing to consent to a request from GrainCorp to vary regulatory arrangements at its Newcastle port terminal, acknowledging the increasingly competitive environment (particularly around Newcastle). The effect of the changes would be to remove most of the existing access regulation at the terminal (with only the Continuous Disclosure Rules remaining) (ACCC 2014). The Commission considers that the ACCC's draft decision indicates an appropriate future direction for regulation of grain port terminals.

Getting public infrastructure decisions right

An efficient supply chain requires appropriate quality infrastructure services. Governments can have a role to play in the provision or funding of infrastructure when net social benefits can be clearly demonstrated. This requires that proposed investments in infrastructure be transparently and rigorously evaluated. When projects do go ahead funding should be sourced from those who directly benefit from the infrastructure. In many cases, this is likely to be both the community and industry.

The Commission's draft report on Public Infrastructure has reiterated the importance of thorough cost-benefit analysis, stressing the high cost of poor project selection, particularly if investment decisions displace projects with larger expected net benefits. The Commission's draft recommendations aim to improve the institutional and governance arrangements surrounding public infrastructure provision. The proposed measures cover the processes, procedures and policy guidelines for planning and selecting public infrastructure projects; the rigorous use of cost-benefit analysis; public consultation; and reporting of decisions (PC 2014a).

Efficient scale: competition policy and international competitiveness

For the purposes of enhancing agricultural exports, there may be some benefit from larger-scale producers and integrated processing facilities. For instance, in the dairy industry, New Zealand's Fonterra has become the largest milk processor and dairy exporter in the world, and has a globally-integrated supply chain. In contrast, recently in Australia there has been concern about increased concentration of ownership of dairy processors (due to concerns about the consequences for domestic market competition). The issue of more concentrated ownership structures in agricultural industries producing internationally-traded goods would be an appropriate matter for consideration by the current Competition Policy Review.

Access to capital

Farm businesses tend to be capital intensive and returns are volatile. The ability to access capital markets is therefore vital for farmers, as the Issues Paper highlights. Farmers rely on capital markets to expand their businesses and to manage income variability. Compared to other sectors of the economy the predominant source of funding comes from borrowing, mostly from banks. This raises issues about the capacity to borrow and debt sustainability.

The following key facts on rural debt help to put these issues into perspective:

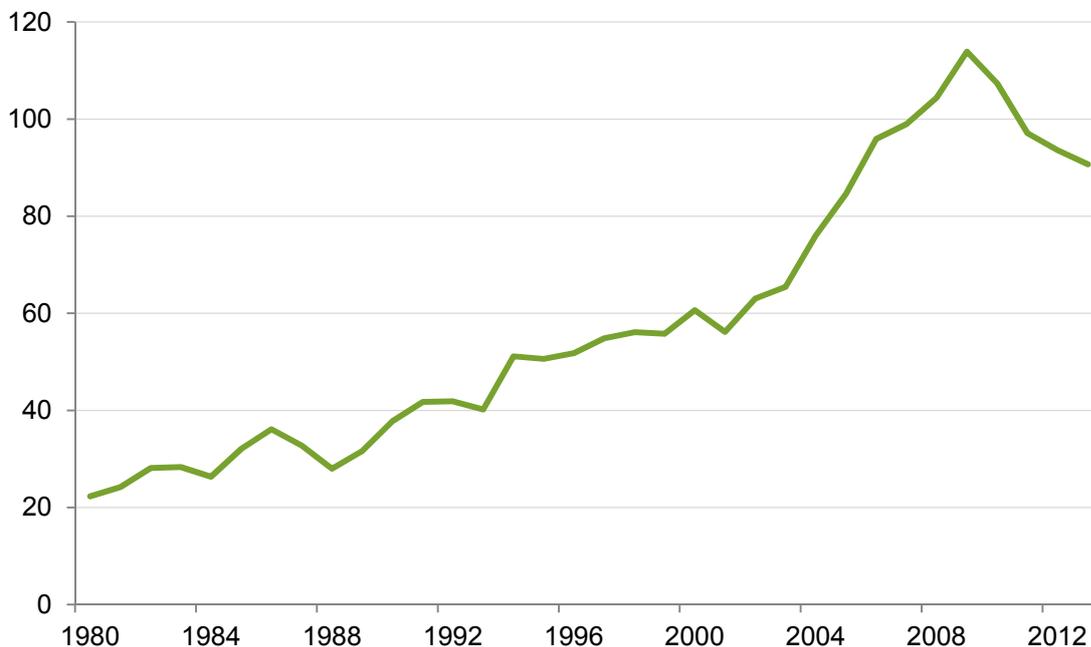
- Between 1980 and 2013, rural debt grew from 22 to 91 per cent of annual agricultural production (peaking at 113 per cent in 2009, then falling in the years following the global financial crisis) (figure 4).
- The proportion of cash income used to repay loans increased from 6 per cent in 2000–01 to 11 per cent in 2006–07 before easing to 9 per cent in 2011–12 (Australian Government 2014a).
- The average equity ratio (that is, equity expressed as a percentage of farm capital) for broadacre farms was estimated at 88 per cent, and for dairy farms at 80 per cent. Nine per cent of broadacre farms, and 28 per cent of dairy farms, were estimated to have equity ratios below 70 per cent, while 68 per cent of broadacre farms and 38 per cent of dairy farms were estimated to have equity ratios exceeding 90 per cent in 2011–12 (ABARES 2013b).
- In the broadacre sector 70 per cent of debt is held by just 12 per cent of farms and around 54 per cent of broadacre farms have less than \$100 000 in debt (ABARES 2013b).

The increase in rural debt is considerable. However, it is to be expected that rural debt would have risen in response to financial deregulation in the mid- to late-1980s and lower nominal interest rates at the same time as average farm size and capital intensity increased. With the ability to offer credit previously restricted (and banks unable to effectively price risk) bank lending to farms was constrained. The rate of debt accumulation also increased in the 10 or so years before the global financial crisis due to strong competition within the financial sector, including from non-bank lenders. This was not confined just to rural lending. As the Australian Bankers' Association has said:

From the late 1990s till 2007, business surveys and other evidence indicate that small businesses generally had sufficient access to bank finance. Due to this high availability of funding and competition, margins were contracting on business lending by around 10 basis points per annum, and the risk premiums being charged reduced. Some lenders eased their credit standards and non-bank lenders made credit available to segments of the market that were not being served by banks due to their risk profile. (ABA 2011)

Figure 4 Rural debt has eased from its recent peak

Rural debt as a percentage of annual agricultural production, 1980 to 2013



Sources: RBA 2014, ABS (*Australian National Accounts*, Cat. no. 5206.0).

Following the global financial crisis, there was a reassessment of risks associated with business lending, and the non-bank sector had a diminished presence. This saw debt levels as a percentage of production fall from their peak.

The Issues Paper observes that ‘the combination of variable incomes and limited sources of capital for family farms means that farmers and their lenders are relatively conservative when it comes to borrowing’. ABARES farm survey data confirm this observation. They also show that rural sector debt falls overwhelmingly on the largest producers who are generally best equipped to handle it and that few small farms have equity ratios below 70 per cent. Taken together, at this time, the level and composition of rural debt is likely to be sustainable for most farm businesses.

The growth in rural sector lending suggests that access to capital also seems to be generally forthcoming. That said, the Issues Paper asks whether there is a role for greater government involvement in the provision of finance to the rural sector, or an increased role for institutional or foreign investment. The Commission’s Drought Support inquiry considered the merits of government providing loans to farmers, and particularly whether there was a case for providing concessional loans (which have been commonly provided by governments in recent years in response to drought conditions).

The Commission found drought-affected farmers to be reasonably catered for by the financial system, and argued that providing loans at concessional rates could encourage farmers to take on higher levels of debt than they would otherwise be comfortable with. On concessional finance, the report stated:

The Commission does not support offering concessional finance to a group of borrowers to induce them to borrow at a higher level than their own risk preferences would allow. A greater sensitivity to a loss of the farm due to the high non-monetary value placed on farming is rational and does not provide an efficiency case for measures to encourage farmers to take on more debt. (PC 2009c, p. 204).

Some stakeholders in the rural sector have suggested that the government set up a specialist financial institution to provide concessional rural finance. Institutions such as the Commonwealth Development Bank and the Australian Industry Development Corporation have fulfilled similar roles in the past. They served a purpose when the financial system rationed credit and there was arguably room for specialised government-owned entities to make less attractive, but still viable loans to borrowers unable to obtain private finance. However, financial market deregulation and the expansion of financial intermediation to the farm sector has eroded their initial *raison d'être*.

Moreover, the Commission, in a different context, has cautioned against extending or creating a new *raison d'être* for direct government financing when there is no solid policy rationale. For example, the Commission's report on Australia's Export Credit Arrangements reasoned that the Export Finance and Insurance Commission's mandate to operate within a 'market gap' — where the private sector was not able or willing to service viable Australian export transactions or overseas projects — was so broad that it captured transactions that have no market failure rationale for government intervention (PC 2012a).

The Commission, however, considers that there is potentially a greater role for institutional or foreign investors in the agriculture sector. In particular, foreign investment offers an additional source of funding and creates linkages with other businesses and export markets. This can help to increase the internationalisation of Australia's rural industry, by improving and extending supply chains and market access, and by increasing industry competitiveness. Examples of how foreign investment can promote improvements in agricultural supply chains are discussed later in the submission.

Promoting innovation: R&D arrangements and policies towards genetically modified grain

Are arrangements for investment in R&D optimal?

Research and development is vital for improving the efficiency, productivity and competitiveness of the agricultural sector. The Commission reviewed arrangements for Australia's Rural Research and Development Corporations (RDCs) in 2011, and made a number of recommendations to improve existing arrangements (box 6).

Box 6 **Australia's Rural Research and Development Corporations**

The Commission undertook an inquiry into arrangements for Australia's Rural Research and Development Corporations (RDCs) in 2011. Recommendations by the Commission included:

- reducing the existing cap on dollar for dollar matching of industry contributions by government
- creation of a new, uncapped 20 cent in the dollar subsidy for industry contributions above the level that attracts dollar for dollar matching
- provision be made to allow for 'government directors' to be appointed to RDC boards where appropriate
- improved project evaluation, performance reporting and monitoring
- creation of a new RDC to sponsor broader rural research.

The Commission considered that the creation of a broader research body would provide the community with better value for money for its investment by widening the usefulness of the research undertaken.

Source: PC (2011b).

The Commission found the RDC model, based on co-investment between rural industries and the Australian Government, had a number of strengths. In particular, the design helped ensure public money was not spent on projects considered of no practical value by industry, reduced duplication of effort, and facilitated faster take-up of research outputs.

However, the Commission found arrangements did not adequately cater for rural R&D research of benefit beyond specific industry groups, that there were no incentives for producers to increase their level of investment over time, and that much of the research funded would have been funded privately by industry without the need for public financial support.

Biotechnologies and the benefits and costs of genetically modified grain

The Issues Paper notes agricultural biotechnologies, such as genetically modified (GM) crops, have the potential to increase agricultural productivity, by producing higher yields and reducing input costs. However, restrictions in some jurisdictions limit the adoption of such technology (Australian Government 2014a).

In the Commission's 2008 Pigmeat Safeguards inquiry report, the Commission noted that a number of jurisdictions had continuing moratoriums on the commercial release of GM canola, despite moratoriums having been lifted in other jurisdictions, and a number of GM canola varieties with herbicide tolerance having been approved for commercial release at the Commonwealth level by the Gene Technology regulator (PC 2008).

At the time, the Commission recommended that the moratoriums should only remain in place if there was objective evidence that the costs of GM canola were greater than the benefits, and indicated that the existing evidence suggested this was unlikely to be the case.

South Australia, Tasmania and the Australian Capital Territory continue to prohibit GM crop production despite moratoriums being lifted on other jurisdictions. GM canola was approved for commercial use in New South Wales in 2008, and Western Australia in 2010. The Victorian moratorium was allowed to lapse in 2008 (Gibbs, Harris-Adams and Davidson 2013).

A recent report by ABARES staff found that Australia's regulatory environment for GM crops 'continues to impose an unnecessary burden on many agricultural businesses through inconsistent regulation and lengthy decision-making' (Gibbs, Harris-Adams and Davidson 2013, p. 40), with the inconsistencies stemming from the moratoriums. These inconsistencies are likely to reduce productivity and innovation within the agricultural sector.

The Commission reiterates its recommendation from 2008 that the remaining moratoriums should only remain in place if there is objective evidence that the costs of GM canola (or other crops, once approved by the Gene Technology regulator) are greater than the benefits. Current evidence still suggests this is unlikely to be the case.

Industries assistance policies distort prices

As noted in the Issues Paper, government assistance levels can affect the returns that can be earned in various sectors of the economy, and therefore the

attractiveness of different sectors in terms of attracting workers, capital and other resources. For example, the competitiveness of the agricultural sector is affected by the presence of tariffs within the sector, and elsewhere in the economy.

Tariff protection creates winners and losers

The Commission produces estimates of tariff assistance in its annual Trade and Assistance Review. In estimating the assistance provided, the Commission considers three elements:

- tariffs on imported goods increase the price at which those goods are sold on the Australian market, and thus allow scope for domestic producers of competing products to increase their prices ('output assistance')
- tariffs also increase the price of local and imported goods that are used as inputs and thus penalise local user industries. This 'input cost penalty' is reduced if tariff concessions are available to Australian producers.
- 'net tariff assistance' is calculated as output tariff assistance less the input assistance, or input penalty, imposed by tariffs, and represents the 'effective' assistance provided through tariffs to industry (PC 2013c).

In its most recent estimates for 2011-12, the Commission estimated that most of the industry sub-groups in the primary production sector suffered a net burden from tariffs throughout the economy, although the horticulture and fruit growing, and forestry and logging subsectors received positive net assistance from tariffs due to some imported products in these two particular industry groupings attract tariffs (for example, grapes and softwood conifers) (table 2).

Table 2 Tariff protection in the primary production sector^a

Tariff assistance by primary sector industry 2011-12, \$million

<i>Industry</i>	<i>Output assistance</i>	<i>Input cost penalty</i>	<i>Net tariff assistance</i>
Horticulture and fruit growing	154.3	-8.3	146.0
Sheep, beef cattle and grain farming	0.2	-17.2	-17.1
Other crop growing	2.0	-3.8	-1.8
Dairy cattle farming	-	-2.8	-2.8
Other livestock farming	-	-4.0	-4.0
Aquaculture and fishing	0.8	-13.1	-12.2
Forestry and logging	52.3	-10.3	41.9
Primary production support services	-	-13.8	-13.8
Primary production	209.5	-73.4	136.1

. - nil. ^a Totals may not add due to rounding.

Source: PC (2013c).

The Commission's estimates of net tariff assistance suggest that tariffs elsewhere in the economy adversely affect the competitiveness of most primary production sub groups. These tariffs are overwhelmingly of benefit to the manufacturing sector. The Commission estimated manufacturing received \$7.685 billion of the total \$7.895 billion of 'output assistance' in 2011-12.

This analysis relates only to tariffs and does not reflect the full impact of all industry assistance on the sector as a whole. When tariff and budgetary assistance was combined, the effective rate of assistance for the primary production sector was 3.3 per cent, compared to 4.1 per cent for manufacturing (PC 2013c).¹ However, a large part of the assistance for the agricultural sector has been in the form of drought support which, as noted earlier, can itself distort prices and affect farm businesses inequitably and inefficiently.

Distortions from biofuel subsidies

In the safeguards inquiry into pigmeat imports, the Commission questioned the appropriateness of excise arrangements for ethanol production in Australia, and called for a review of policy towards the biofuel sector. In the long-run, the Commission considered there was potential for the arrangements to increase grain prices and adversely affect consumers and livestock industries (PC 2008).

The excise arrangements (known as the Ethanol Production Grants Program) seek to encourage production of ethanol in Australia. While ethanol attracts the same rate of fuel excise as petrol (38.143 cents per litre), excise paid on ethanol produced and supplied for transport use in Australia from locally derived feedstocks is fully reimbursed (Ferguson 2012). Producers and users of Australian produced ethanol are effectively subsidised by an amount equivalent to the forgone excise payments on displaced petrol sales. Ethanol imports are effectively frozen out. Local ethanol production is protected by arrangements equivalent to a tariff.

The Bureau of Resources and Energy Economics recently undertook an assessment of the key costs and benefits associated with these arrangements.

In short, the Bureau found the program had relatively few benefits and came at a relatively high cost. While the environmental benefits of ethanol are seen as one of the major benefits of the program, the Bureau estimated greenhouse gas abatement

¹ The primary production sector received \$1.440 billion in budgetary assistance in 2011-12, with the sheep, beef cattle and grain farming sub sector accounting for \$567.9 million of this, mainly in the form of the Farm Management Deposits Scheme, Income Tax Averaging Provisions for Primary Producers, the Small Business Capital Gains Tax concession measures, and assistance to the Grains R&D Corporation (PC 2013c).

under the program cost taxpayers around \$274 per tonne of abatement. Each direct job in ethanol production (estimated to be between 160 and 200 jobs) was seen as costing between \$545 000 and \$680 625 (with the cost per job halved if it were assumed that there were an equal number of indirect jobs created by the program).

To ensure ongoing efficiency and competitiveness in the agricultural sector, it is important that resources are allocated to their most productive use. It is therefore important that taxation arrangements for the sector do not result in resource misallocation. The excise arrangements for ethanol production seem to provide considerable scope for such distortion.

Further, although the program has been in operation since 2002, ethanol use in Australia represents only one per cent of overall fuel consumption, with only three ethanol producers currently in operation. While the program is currently scheduled to be reviewed in 2021, the Commission reiterates its recommendation from the pigmeat report, particularly in view of the recent BREE assessment, that a review of the ethanol excise arrangements be undertaken well ahead of this date.

4 Australian agriculture in the global economy

Australia's agricultural sector has a long history of participation in international markets. There are current and emerging issues in the global economy that are, or have, the potential to affect Australia's agricultural sector, and consequently, its ability to address the eighth issue identified in the Issues Paper: enhancing agricultural exports, as well as the fourth issue, competitiveness. As the Issues Paper recognises, for example, the expansion of Asian economies — as well as increased numbers of people in those countries reaching higher and middle income brackets — will provide a source of demand for Australian agricultural exports in the decades to come (Australian Government 2014a).

However, other factors might serve as potential risks to the sector's ability to increase exports — for instance, many countries still have restrictions on the import of agricultural commodities, such as tariffs and excessively stringent quarantine regulations. By allowing resources to be allocated to their highest-valued uses, the removal of trade barriers will also help to ensure global food security, by maximising the efficiency of worldwide agricultural production. Thus, there are a number of forces at play that will continue to influence both the volume and destination of Australia's agricultural exports.

Australia's agricultural exports increased during the 1990s, but declined between 2001-02 and 2009-10, as a consequence of both higher domestic demand for food

products, and drought (Nguyen et al. 2013). More recently, agricultural exports have recovered, increasing in value terms from almost \$32 billion in 2010-11 to \$38 billion in 2012-13 (ABARES 2013a). By contrast, Australia's imports of agricultural products (in value terms) increased from roughly \$10.5 billion in 2010-11 to nearly \$12 billion in 2012-13. This underlines Australia's status as a net exporter of agricultural output (table 3).

Table 3 Australia is a net exporter of agricultural commodities
Agricultural imports and exports, 2012-13

<i>Commodity</i>	<i>Exports, \$m</i>	<i>Exports (% share)</i>	<i>Imports, \$m</i>	<i>Imports (% share)</i>
Grains and oilseeds	12 469	33	210	2
Horticulture	1 896	5	1 996	17
Industrial crops ^a	5 918	16	654	6
Meat and live animals for slaughter	7 087	19	535	5
Wool	2 869	8	0	0
Dairy products	2 229	6	689	6
Other ^b	5 324	14	7 723	65
Total agricultural commodities	37 972	100	11 807	100

^a Comprises cotton, sugar and wine. ^b Mainly consists of substantially and elaborately transformed foods.

Sources: ABARES (2013a).

Foreign investment is important, although foreign ownership is low

In recent years, there has been an increased interest in the extent to which foreign investment in Australian agriculture has occurred. The three main areas where foreign investment in Australia's agricultural sector might occur are:

- farm businesses and food processors
- agricultural land
- tradeable water entitlements.

When foreigners purchase agricultural, or other, resources in Australia the sellers benefit directly. Moreover, the resources cannot be shifted abroad (except to the extent they are embodied in goods) and they may also be sold back to residents.

As noted in the Issues Paper, in addition to providing a source of capital, foreign investment can also expose domestic businesses to new technologies and techniques, and potentially improve overseas market access. It may also promote

greater domestic market competition. Thus, foreign direct investment is likely to have a role to play in increasing the export focus of Australia's rural industry, and in both improving supply chains and increasing their competitiveness.

Without foreign investment, Australian agricultural enterprises would be limited to accessing domestic savings to finance their operations. Foreign investment in the agricultural sector increases the supply of capital, which makes possible greater levels of investment, production and employment in the sector. As Moir observed (2011, p. 3):

Foreign companies engaged in agribusiness activities have typically provided investment funding that would not otherwise have been available. In some cases they have financed expansion in productive capacity, and in others they have financed restructuring in the industry to improve efficiency and viability.

One example is wheat exporting, where foreign owned exporters have been able to enter the bulk export market and have facilitated exports through their overseas contacts. Another example is the dairy industry, where approximately half of the milk produced in Australia is processed by foreign companies (Moir 2011).

The ABS has surveyed the level of foreign ownership of Australian agricultural land, agricultural businesses, and water entitlements from a sample of approximately 11 000 farm businesses. Overall, the survey indicated that levels of foreign ownership in Australian agriculture amounted to only a small proportion of agricultural assets (table 4).

Table 4 Ownership of Australian agricultural assets
As at 31 December 2010

	<i>Wholly Australian owned (units)</i>	<i>Wholly Australian owned (per cent)</i>	<i>Wholly or partially foreign owned (units)</i>	<i>Wholly or partially foreign owned (per cent)</i>
Farm businesses	133 623	98.5	1294	1.5
Agricultural land	352 807 599 ha	88.6	44 854 082 ha	11.3
Agricultural water entitlements	12 465 414 ML	91.5	1 169 271 ML	8.5

Source: ABS (*Agricultural Land and Water Ownership Survey, December 2010*, Cat. no. 7127.0).

Preferential trade agreements have complex effects

The greatest benefits of trade liberalisation would be realised from multilateral efforts undertaken on a non-discriminatory basis (PC 2010a). Multilateral reductions in tariffs, quotas, and other trade restrictions improve the global allocation of resources and enhance efficiency. They do this by allowing each

country to direct its resources to the areas in which it has a comparative advantage. However, in many countries, agricultural sectors remain relatively highly protected and these arrangements are a frequent stumbling block in global trade negotiations.

Following the stalling of negotiations under the Doha Round, the number of bilateral trade agreements enacted has increased. Bilateral trade agreements have the potential to benefit agricultural industries that are granted more favourable access to export markets, although the precise effects on Australian agriculture and the wider economy will differ from agreement to agreement. Generally speaking, bilateral agreements that reduce trade restrictions such as tariffs and quotas faced by Australian farm businesses can facilitate an increase in exports and production. They may also result in lower input costs for farm businesses via cheaper imports.

A significant potential economywide cost of bilateral trade agreements is trade diversion, whereby goods from lower-cost suppliers are displaced by goods from higher-cost suppliers due to lower trade barriers faced by the latter group. Countries not given similar access are discriminated against. Whether trade diversion occurs will depend on the nature of the agreement and the parties involved. If an agreement is signed with a country that is not the lowest-cost producer of the goods for which trade barriers are reduced, the possibility of trade diversion arises. Trade diversion would not occur, however, where the country against whom barriers are reduced is the least cost producer of the goods in question.

Furthermore, there is a natural and arguably magnified incentive in a world of bilateral negotiations to *retain* barriers to trade, as a future negotiating instrument, or to conclude agreements whereby Australia is perceived to have ‘gained’ more from export access, when the most significant benefits of trade come from access to lower cost imports.

A major potential cost of bilateral trade agreements arises from rules of origin, which are necessary to ensure that goods entering from a partner country are legitimately from that country and qualify for preferential treatment. Rules of origin are often complex and unnecessarily restrictive, thus curbing actual increases in trade. A number of participants to the Commission’s 2010 study of *Bilateral and Regional Trade Agreements* highlighted that additional costs and complexity arose as a result of rules of origin arrangements, especially for exporting businesses (PC 2010a).

In addition, bilateral trade agreements do not necessarily result in the immediate and complete removal of tariffs, quotas, and other trade restrictions. For example, Japan currently imposes a 38.5 per cent tariff on Australian beef. Under the terms of the recently announced Japan-Australia Economic Partnership Agreement, Japan’s

tariff on Australian frozen beef will be reduced to 19.5 per cent on full implementation, while the tariff on fresh beef will be lowered to 23.5 per cent over 15 years (Australian Government 2014b). Furthermore, in the case of agriculture, agreements to reduce tariff and quota barriers might not lead to genuine improvements in market access due to other restrictions, such as quarantine requirements (PC 2010a). Although such requirements may be legitimate, there may also be instances where they are excessive, and used to restrict trade.

While preferential bilateral or regional trade agreements are capable of enhancing market access for agricultural exporters, their inherent limitations mean that they should only be entered into where they will deliver net benefits to the entire economy. The Commission has previously recommended that pre-negotiation modelling be overseen by an independent body and include alternative liberalisation arrangements to those proposed in agreements. Further, the Commission has also recommended that full and public assessments of proposed agreements be made after negotiations have been concluded (PC 2010a).

Anti-dumping arrangements can have harmful unintended consequences

Although there may be a role for anti-dumping arrangements in a rules-based international trading system, such arrangements also have a number of costs (PC 2009a) which are of potential relevance to the agricultural sector.

Recent proposals to reverse the onus of proof such that importers, to avoid the imposition of duties, would need to demonstrate that they had not dumped products in Australia, has the potential to result in more successful anti-dumping actions. It also risks amplifying the costs associated with the system (box 7). For instance, resources attracted to, or that remain within, industries that are the beneficiaries of dumping protection generally provide a lower return to the community than if they were employed elsewhere. In addition, longstanding dumping measures reduce the likelihood that recipient industries will respond to competitive pressures, such as by maintaining product quality and undertaking innovation.

Box 7 The anti-dumping system has costs

In its inquiry into Australia's Anti-Dumping and Countervailing System (PC 2009a), the Commission identified a number of deficiencies of the anti-dumping system, which could add to its communitywide costs, including:

- the lack of consideration of the wider economic impacts of anti-dumping measures
- measures can too easily become akin to long-term protection, or outdated when market circumstances change.

Source: PC (2009a).

Of course, anti-dumping measures imposed on imported agricultural products would, all else given, protect the domestic industries producing like products. But there could be perverse offsetting effects. Domestic industries that use agricultural goods that are subject to anti-dumping measures would face an increase in their costs of production and a consequential loss of competitiveness. As a result, local food processors, for example, could lose market share to imports of processed goods, reducing their sales and demand for local agricultural inputs. It is also very likely that Australian consumers facing higher prices for certain agricultural products would switch to other products (for example, different food types).

An increase in the number of anti-dumping actions could also directly raise the costs of agricultural producers if anti-dumping duties were applied to their intermediate inputs. And if trading partners followed Australia's example and implemented stricter anti-dumping regimes, Australian agricultural exporters could increasingly become the target of investigations and anti-dumping measures.

A Selected relevant Commission publications

This appendix gives a brief overview of prior Productivity Commission reports, submissions, and studies relevant to agriculture. Some of the main conclusions and recommendations for policy are highlighted here; the full reports can be downloaded from the Commission’s website: www.pc.gov.au. Conclusions and recommendations relate to regulatory and institutional arrangements at the time the reports were written, and do not reflect subsequent changes to policy settings and frameworks.

Table A.1 Productivity Commission reports relating to agriculture

<i>Report (year)</i>	<i>Main conclusions/recommendations</i>
Battery Eggs Sale and Production in the ACT (1998)	<ul style="list-style-type: none"> • Legislation to ban the production and sale in the ACT of eggs produced by battery hens would improve layer hen welfare, especially over time. However, economic costs arising from the ban would include higher egg prices and adjustment costs resulting from the premature retirement of productive assets. Any consumer health, environmental and OH&S effects stemming from the ban would be negligible. • There could be an increase in aggregate employment in the industry due to higher labour intensity of alternative egg production systems. • Labelling of egg cartons to indicate the production system used would be of benefit to consumers.
Submission to the Review of the NSW Rural Assistance Act 1989 (1998)	<ul style="list-style-type: none"> • Little evidence to justify assistance on the grounds that rural adjustment is impeded by barriers to entry or exit. • In some circumstances relating to adjustment, government may have a role to play in information provision and promoting better environmental outcomes. • Social welfare rationales for assistance need to be assessed in the context of support available through general welfare assistance. • Concern that some state assistance programs may have acted to transfer income to selected farms and activities without flow-on benefits to the broader community. • A revised rural assistance legislative instrument should be introduced, which makes predominant the interests of the community as a whole.
Submission to the Tasmanian Dairy Industry Review (1998)	<ul style="list-style-type: none"> • Any test of regulations would have to set their efficiency costs against distributional outcomes and short-term adjustment costs that would accompany deregulation. • However, given developments in other jurisdictions, an important consideration for Tasmania would be whether it should prepare for a more deregulated environment, which would provide scope to manage the adjustment process.

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Table A.1 (Continued)

<i>Report (year)</i>	<i>Main conclusions/recommendations</i>
Impact of Competition Policy Reforms on Rural and Regional Australia (1999)	<ul style="list-style-type: none"> • Most of the influences on rural and regional Australia are of a long-term nature and largely beyond government control — such as declining agricultural terms of trade, changes in technology and consumer tastes. • These long-term factors have been the main reason for the declining share of agriculture in the Australian economy and drift of population away from inland country areas. • National Competition Policy, though just one of the broad influences on rural and regional Australia, had become a scapegoat for some of the broader influences. • While the early effects of National Competition Policy favoured metropolitan areas more than rural and regional areas, it will bring net benefits to rural and regional Australia over the longer-term. • Where adjustment pressures develop with speed and are regionally concentrated, governments may need to consider whether specific forms of assistance might be warranted for some persons in adversely affected regions.
Submission to the Victorian Dairy Industry Review (1999)	<ul style="list-style-type: none"> • There is no net benefit from farm-gate controls in the industry, as benefits to dairy regions are offset by reduced income elsewhere.
Single-Desk Marketing: Assessing the Economic Arguments (2000)	<ul style="list-style-type: none"> • Most of the benefits of single-desk arrangements can be achieved without the compulsion required for a single-desk. • Economies of scale and scope in marketing can be achieved without monopoly selling and premiums are able to be received for customised and high-quality service. • R&D and quality control can be achieved and funded by more targeted mechanisms. • Single-desk arrangements can impose potentially large opportunity costs, such as by limiting producers' flexibility to innovate in marketing, product development, supply chain relationships, and the adoption of new technologies.
Citrus Growing and Processing (2002)	<ul style="list-style-type: none"> • An increase in low-cost, high-quality frozen concentrate orange juice from Brazil resulted in reduced returns and financial problems for some Australian growers. • Growers who found it more difficult to adapt were typically those with significant quantities of production processed into concentrate, and had small orchards with limited resources. • Industry growth is impeded by regulatory factors, such as overseas barriers to trade and costly labour market arrangements. • The industry has access to a range of general government support programs to improve its performance and facilitate adjustment to economic change. • Additional industry-specific assistance would not be justified, as much of the industry is already adapting successfully to change, and diversity of farms means that specific assistance would not target problem areas in an efficient or equitable manner.

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Table A.1 (Continued)

<i>Report (year)</i>	<i>Main conclusions/recommendations</i>
Impacts of Native Vegetation and Biodiversity Regulations (2004)	<ul style="list-style-type: none"> • Retention, management and rehabilitation of native vegetation and biodiversity on private land are important for many reasons including resource sustainability and protection of endangered ecosystems. But existing regulatory approaches are not as effective as they could be in promoting these objectives and impose significant costs. • The effectiveness of restrictions on clearing of native vegetation has been compromised by: a lack of clearly-specified objectives; disincentives for landholders to retain and care for native vegetation; and the inflexible application of targets and guidelines across regions with differing characteristics such that perverse environmental outcomes often result. • Costs could be reduced and effectiveness improved if regulatory regimes followed good regulatory practices that promoted transparency and accountability. But more fundamental change is required to promote better targeting of policies to achieve clearly-specified environmental outcomes as efficiently as possible. There is also an urgent need for more equitable cost-sharing arrangements. • The Commission proposes a process of greater devolution of responsibility to the regional level, formalised within national and State/Territory guidelines. Landholders, individually and/or as a group, would bear the costs of actions that directly contribute to sustainable resource use and, hence, the long-term viability of their operations. Regional bodies would determine what actions are required. The wider community would pay for the extra costs of providing 'public-good' environmental services, such as biodiversity conservation, that it demands. Using regional institutions to deliver public-good objectives would promote coordination and consistency of approaches. • Not only would this approach be more equitable but, by encouraging and rewarding the ongoing cooperation and effort of landholders, it would be more efficient and effective in achieving desired environmental outcomes: <ul style="list-style-type: none"> – Landholders would have positive incentives to retain and manage native vegetation and to deliver specified environmental outcomes in flexible, innovative and cost-effective ways. – Payments to landholders for public-good conservation would facilitate increased scrutiny of costs and benefits of policy intervention.
Trends in Australian Agriculture (2005)	<ul style="list-style-type: none"> • The agricultural sector has undergone significant change in the last three decades, with key drivers being shifts in consumer demand, changes in government policies, technological advances, emerging environmental concerns, and declining farm terms of trade. • The volume of real agricultural output and exports have continued to increase, while agriculture's share of the economy has declined. • There has been a trend towards fewer and larger farms, and the bulk of agricultural output is generated by a small number of large farms. • The sector has become increasingly export-oriented, and exports have become more diverse. • Off-farm employment has become increasingly important to maintaining family farm incomes. • Agricultural productivity has grown strongly over the last three decades — more than twice the rate achieved in the market sector as a whole. • Productivity growth has accounted for the entire increase in output by the agriculture sector over the last 30 years.

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Table A.1 (Continued)

<i>Report (year)</i>	<i>Main conclusions/recommendations</i>
Rural Water Use and the Environment: The Role of Market Mechanisms (2006)	<ul style="list-style-type: none"> • Water markets are making a significant contribution to increasing rural water-use efficiency. Further reform is needed to ensure that water moves to its highest value uses (including environmental uses). • Market mechanisms to address environmental externalities need to be targeted to location and scale — no ‘one size’ fits all. Poorly designed programs can impose high costs that may outweigh potential gains. Appropriate arrangements for environmental managers should be established as soon as is practical based on a comprehensive review of different institutional structures. Environmental managers need to be able to enter markets to source water and to access the full range of water and water-related products on the same terms and conditions as other market participants. • ‘Saving’ water via major infrastructure works is often costly compared with other options and may reduce water available for other uses. • Subsidies that seek to improve the uptake of particular technologies or practices solely to increase the productivity of water use are likely to be inefficient. • The Living Murray Initiative could be implemented more effectively if current efforts to source water ‘permanently’ are supplemented with additional water products (such as seasonal allocations, leases and options contracts). Appropriate institutional arrangements should be put in place to establish an agency specifically charged with purchasing a portfolio of water products to suit the needs of environmental management in the River Murray. • Using administrative arrangements to allocate water for environmental purposes conceals the opportunity cost of meeting environmental targets. Market mechanisms are usually a more efficient means of re-allocating resources. • There are opportunities to improve entitlement regimes through unbundling of water entitlements and water-use approvals, and facilitating efficient intertemporal water-use decisions. Separating delivery entitlements from water entitlements may also be beneficial where there is congestion in water delivery. • A number of impediments to water trade reduce economic efficiency and should be removed. In particular, governments should enable other participants to trade in water markets, and open up interdistrict water entitlement trade, and remove exit fees.
Stranded Irrigation Assets (2006) (staff working paper)	<ul style="list-style-type: none"> • Stranded or under-utilised irrigation assets do not necessarily represent an impediment to the efficient use of infrastructure, the allocation of water entitlements, or the use of water. • Proposals to manage the adverse financial impact of stranded assets — such ongoing payment of access, ‘tagging’ and ‘exit’ fees — will reduce the economic gains potentially available from water entitlement trading. • A more efficient approach would be the introduction of full cost recovery infrastructure pricing. • Where irrigation assets are under-utilised or stranded and remaining irrigators are unable to afford the increase arising from entitlement trading, charges should be set at levels that allow irrigators to continue using the assets, as long as they are sufficient to cover the costs that would be avoided by withdrawing the service.

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Table A.1 (Continued)

<i>Report (year)</i>	<i>Main conclusions/recommendations</i>
Annual Review of Regulatory Burdens on Business - Primary Sector (2007)	<ul style="list-style-type: none"> • DEWR should explore more effective ways to clarify for business the definition of 'significant impact' under the EPBC Act. • There should be an independent review of the Marine Orders Part 43 and related regulations within three years. The review should assess the extent to which the objectives of the regulations are being achieved, at what costs to the community, and recommend cost-effective options for improvement including self-regulatory options. • All relevant agencies should apply best practice policy design in developing the national framework for property rights and trading in water in order to avoid unnecessary burdens. In particular, the new national framework for water should facilitate market transactions so that scarce resources go to their highest value uses and any exemptions from the framework should be fully justified. Ongoing monitoring and evaluation of progress will be important.
Safeguards Inquiry into the Import of Pigmeat (2008)	<ul style="list-style-type: none"> • Governments should continue work on promoting consistency of regulations across jurisdictions, including more harmonised implementation and enforcement processes, including in food and ethanol regulation. • Regular independent reviews are necessary to ensure that government R&D funding directed to the pigmeat industry delivers net benefits to the community, and continues to satisfy program criteria. • Domestic support for the ethanol industry has the potential to raise domestic feed grain prices, and therefore have a negative impact on the pigmeat and other livestock industries. There should be a review into the overall economic impact of current and proposed policies relating to ethanol. The review, which could encompass assistance for other biofuels, should consider the impact of policies promoting ethanol production on consumers and other industries, including grain users. • Quarantine arrangements should impose only the minimum requirements needed to satisfy objectives. As new options emerge for dealing with quarantine risks, arrangements should be reviewed. • The remaining moratoriums on the commercial release of genetically modified canola should only continue if objective evidence indicates that the potential costs of GM canola are greater than its potential benefits. Current evidence suggests this is probably not the case.
Government Drought Support (2009)	<ul style="list-style-type: none"> • Australia has always had a variable climate, with drought being a recurring feature. In the future, experts predict higher temperatures and, for some regions, more frequent periods of exceptionally low rainfall. • The National Drought Policy Exceptional Circumstance (EC) declarations and related drought assistance programs do not help farmers improve self-reliance, preparedness and climate change management. <ul style="list-style-type: none"> – EC interest rate subsidies and state-based transactions subsidies are ineffective, can perversely encourage poor management practices and should be terminated. – EC household relief payments are limited to those in drought-declared areas, ignoring hardship elsewhere or for other reasons. They should be replaced. – The EC declaration process is inequitable and unnecessary. It should not be extended to new areas. Current declarations should lapse as soon as practicable.

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Table A.1 (Continued)

<i>Report (year)</i>	<i>Main conclusions/recommendations</i>
Government Drought Support (2009) (cont.)	<ul style="list-style-type: none"> • Governments need to commit to a long-term reform path that recognises that the primary responsibility for managing risks, including from climate variability and change, rests with farmers. To this end: <ul style="list-style-type: none"> – research, development, extension, professional advice and training to improve farmers’ business management skills and build self-reliance warrant significant government funding where they deliver a demonstrable community benefit. – Farm Management Deposits, notwithstanding their use for tax management, have encouraged farmers to save and to be more self-reliant, and should be retained. – policies relating to water, natural resource management and climate change, which all impact on farm businesses and local communities, are often at cross-purposes and need to be better coordinated and integrated. – all farm households in hardship — regardless of cause or location — should have access to an income support scheme that is designed for farming circumstances. • Similar recommendations from the previous reviews of the NDP have not been adopted. To ensure that this new policy direction is credible and enduring: <ul style="list-style-type: none"> – the NDP should be replaced with extended objectives for Australia’s Farming Future. – an intergovernmental agreement with independent monitoring and financial incentives for complying with agreed commitments should be established.
Wheat Export Marketing Arrangements (2010)	<ul style="list-style-type: none"> • The transition to competition in the exporting of bulk wheat has progressed relatively smoothly, particularly given difficult international trading conditions — a pronounced commodity price cycle, the global financial crisis, and exchange rate appreciation. • The regulatory arrangements for marketing bulk wheat exports have been beneficial during the transitional phase since deregulation. In the first year since deregulation, they have facilitated the entry of traders, with 12 million tonnes exported to 41 countries. • The benefits of accreditation of traders will rapidly diminish in the post-transitional phase, leaving only the costs. The accreditation scheme, Wheat Exports Australia and the Wheat Export Charge should be abolished on 30 September 2011. • The port terminal access test has provided greater certainty for traders and made access easier, more timely and less costly than it could have been by relying on potential declaration under Part IIIA of the Trade Practices Act. However, there are still some transitional issues associated with port access and contestability in the logistics supply chain. The access test accordingly should remain a condition for port operators to export bulk wheat until 30 September 2014. The benefits of the access test will diminish and could become costly in the long term without the checks and balances of Part IIIA of the Trade Practices Act. From 1 October 2014, regulated access should rely on Part IIIA, with continuation of mandatory disclosure, supplemented by a voluntary code of conduct by all port terminal services operators.

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Table A.1 (Continued)

<i>Report (year)</i>	<i>Main conclusions/recommendations</i>
Wheat Export Marketing Arrangements (2010) (cont.)	<ul style="list-style-type: none"> • There is evidence that increasing on-farm storage, and competition between road and rail, are leading to improvements in supply chain efficiency. However, it is important that the regulatory arrangements enhance efficiency in the transport and storage market by facilitating contestability. • The level and allocation of investment in road and rail infrastructure by governments should be based on rigorous cost-benefit analysis, with a focus on developing economically and socially efficient logistics chains.
Market Mechanisms for Recovering Water in the Murray-Darling Basin (2010)	<ul style="list-style-type: none"> • The 2011 Basin Plan will ultimately allocate water between consumptive and environmental uses in each catchment. The buyback aims to assist irrigators to adjust to the much lower diversion limits that are likely under the Basin Plan and to regain some water for the environment in the interim. The infrastructure program shares these broad objectives but also aims to help sustain irrigation communities. • The buyback is occurring before sustainable diversion limits (SDLs) are set under the Basin Plan, and before the liability for policy-induced changes to water availability has been resolved. This is creating uncertainty in the minds of irrigators and affecting the efficiency of the buyback. • SDLs must be based on scientific assessments of the amount of water that is required to avoid compromising key environmental assets and processes. The value people place on environmental outcomes, the opportunity cost of foregone irrigation, and the role of other inputs, such as land management, must also be considered. • The same cost-effectiveness tests should be applied to all water recovery options. Purchasing water from willing sellers (at appropriate prices) is a cost-effective way of meeting the Government's liability for policy-induced changes in water availability. Subsidising infrastructure is rarely cost effective in obtaining water for the environment, nor is it likely to be the best way of sustaining irrigation communities. • Other water products (for example, seasonal allocations and options contracts) are potentially valuable in meeting short-term environmental needs. • Tenders are sound purchasing mechanisms where active markets for water entitlements do not exist. But where active markets do exist, acquiring water directly from those markets is likely to be more efficient. • The 4 per cent limit on out-of-area trade of water entitlements should be eliminated as soon as possible. Limits on the amount of entitlements that can be sold to the Commonwealth through the buyback should also be eliminated. • Using the buyback to achieve distributional goals, system rationalisation or to manage salinity is likely to compromise its efficiency and effectiveness. Other more direct instruments should be used to address these issues.

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Table A.1 (Continued)

<i>Report (year)</i>	<i>Main conclusions/recommendations</i>
Australia's Urban Water Sector (2011)	<ul style="list-style-type: none"> • Some cities and towns' urban water demand can be best met by purchasing rural water from irrigators. Restrictions on rural–urban water trade impede the efficient allocation of water. In addition, there are impediments to water trading generally, which can affect trade within the rural sector as well as rural–urban trade. Prominent among these is the 4 per cent limit on annual trade of water entitlements out of irrigation areas, which is most commonly binding in Victoria. Any restrictions on water trading by regional urban water utilities should be independently reviewed and, if they cannot be shown to provide net public benefits, they should be removed.
Rural Research and Development Corporations (2011)	<ul style="list-style-type: none"> • The Rural Research and Development Corporations (RDCs) co-investment model has important strengths, including: helping to ensure that public money is not spent on research of little practical value; and facilitating greater and faster uptake of research outputs. • However, the current model has some significant shortcomings. <ul style="list-style-type: none"> – It does not cater well for broader rural R&D needs. – The overall level of public support for industry-focused research is too high given the sound financial reasons that producers or industries would have to fully fund much of this research themselves. – The basis for the Government's matching contribution to RDCs provides no incentive for producers to increase their investments in the model over time. • While the broad model should be retained, significant changes to the way in which the Government contributes its funding are called for. <ul style="list-style-type: none"> – The current cap on dollar for dollar matching of industry contributions by the Government should be halved over a ten-year period. – A new, uncapped, subsidy at the rate of 20 cents in the dollar should be immediately introduced for industry contributions above the level that attracts dollar for dollar matching. – A new, government-funded, RDC — Rural Research Australia (RRA) — should be created to sponsor broader rural research. With RRA in place, the other RDCs (except for the Fisheries RDC) should be left to focus predominantly on funding research of direct benefit to their industry constituents. • Some more specific changes should also be made, including to: <ul style="list-style-type: none"> – enable (though not require) the appointment of a 'government director' to the board of an RDC – improve the robustness and transparency of project evaluations, independent performance reviews, and the monitoring of program outcomes by the Government – collect better data on overall rural R&D funding and spending.

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<i>Report (year)</i>	<i>Main conclusions/recommendations</i>
Barriers to Effective Climate Change Adaptation (2012)	<ul style="list-style-type: none"> • Modelling suggests unmitigated climate change will have a significant negative impact on the Australian economy, with agriculture among the most heavily affected sectors. • Changes in the frequency, intensity, location and timing of extreme weather events are likely to be how most Australians experience climate change. Adaptation to these changes, and the effects of more gradual climate change, will occur over time as households, businesses, governments and communities respond to incentives to manage the climate (and other) risks they face. • A number of policy and regulatory barriers may inhibit adaptation responses, suggesting the potential for government action to improve outcomes for the community. <p>Governments at all levels should embed consideration of climate change in their risk management practices; and ensure there is sufficient flexibility in regulatory and policy settings to allow households, businesses and communities to manage the risks of climate change.</p>
Geographic Labour Mobility Draft Report (2013)	<ul style="list-style-type: none"> • Geographic labour mobility has been an important mechanism for adjusting to the demographic, structural and technological forces shaping the Australian economy. It has accommodated differences in the pace of economic activity across Australia and enabled wealth to be more widely distributed across the country. • The main factors affecting location decisions are personal, and attempts by government to act in contradiction to them are unlikely to be effective. • There are no simple levers to affect geographic labour mobility. Many policies aiming to influence where people live and work in regional and remote areas have had limited effectiveness. <p>The negative consequences of some poorly designed policies, such as taxation, housing and occupational licensing, include reduced geographic labour mobility. Reform in these areas would lessen impediments to geographic labour mobility, and also have broader benefits.</p>
Tasmanian Shipping and Freight Draft Report (2014)	<ul style="list-style-type: none"> • The Australian Government has outlaid more than \$2 billion since the inception of subsidised Tasmanian freight services (including the Tasmanian Freight Equalisation Scheme (TFES), the Tasmanian Wheat Freight Scheme and the Bass Strait Passenger Vehicle Equalisation Scheme). Without change a further \$2 billion can be expected over the next 15 years. • The Commission has identified deficiencies in the design and operation of the schemes, including: a lack of alignment between the objectives and outcomes; continuing use of out-of-date parameters; a number of unintended consequences; and a high level of administrative complexity. • At a minimum, the integrity of the TFES should be restored by ensuring payment rates reflect the most recent estimates used to calculate the notional cost 'disadvantage' (overall a lower figure than at present). • The Commission's draft recommendations aimed at addressing various anomalies in the schemes fall well short of what is needed to put Tasmania on a stronger economic footing — which the Commission considers should be the higher policy imperative.

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<i>Report (year)</i>	<i>Main conclusions/recommendations</i>
Tasmanian Shipping and Freight Draft Report (2014) (cont.)	<ul style="list-style-type: none"> • Several issues relating to the efficiency of Tasmania’s shipping and freight are the responsibility of the Tasmanian Government. These include: rationalising infrastructure assets such as ports and rail; private operation and ownership of freight infrastructure assets where this would improve their efficiency; and developing a sustainable integrated freight strategy. • Tasmania is serviced by high-quality but high-cost containerised shipping services. Given its reliance on sea transport, it is particularly vulnerable to coastal shipping regulation which should be reviewed and reformed urgently. <p>Tasmania faces broader economic and social challenges and the Australian Government should put less emphasis on freight subsidy schemes in favour of policy reforms which have national and Tasmanian benefits (such as coastal shipping reform) and those which directly enhance the competitiveness and productivity of the Tasmanian economy.</p>

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