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Contrasting trends

Agricultural policies and agricultural law in Australia and New Zealand and in other industrialised countries

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A contrast is observed between a trend toward deregulation in Australian and New Zealand agricultural policy and increasingly regulatory arrangements in other major industrialised countries. In Australia, agricultural support policies have been changing away from stabilisation and price support toward adjustment assistance, with the emphasis on assistance for farms with a prospect of long term profitability. Western European and North American support levels have increased since 1985, and efforts to reform agricultural policies in those countries are highly regulatory, requiring the costs of regulation to be set against the benefits obtained from reductions in market distortions and environmental problems.

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Introduction

Unlike many of the large northern hemisphere countries where there is a great deal of government intervention in the determination of agricultural prices and of conditions concerning production and trade, both Australia and New Zealand have relatively market oriented agricultures. In other words, the prices received by producers and those paid by consumers are predominantly determined through the operation of market forces with, in most instances, little influence exerted over prices by governments.

Generally speaking, agricultural industries are viewed in much the same way as other industries, and thus the concept of a specific agricultural law is quite foreign to the traditions of Australia and New Zealand. As agricultural law has not been regarded as a discrete area of Australian or New Zealand law, there are no universities or institutes which specialise in this aspect of the laws of these countries. Rather, the laws which relate to aspects of agriculture are considered as part of the general body of statute law. This situation is in marked contrast to that in the United States, for example, where there is a tradition of omnibus agricultural legislation which is reviewed and revised every four or five years (termed the farm bills); or in the European Community, where elements of the Treaty of Rome relate specifically to agriculture and where there are annual price determinations and periodic revisions to farm policy; or in Japan, where a framework for agricultural policy exists in the Basic Agricultural Law of 1961.

There is, nevertheless, a considerable body of law relating to agriculture in Australia and New Zealand. Major areas of such laws include: the establishment and conditions for operation of statutory marketing corporations; the operation of price support and stabilisation schemes in the limited areas in which such schemes operate; health and safety; provision of drought and disaster relief; provision for levying agricultural producers for financing research and for funding essential services; anti-dumping provisions of laws relating to international trade; elements of taxation law, such as those allowing the averaging of rural producers' annual incomes over a number of years; and assistance for adjustment of farm enterprises to changing economic conditions. Australia (but not New Zealand) is a federation, in which agriculture is primarily the responsibility of the constituent states. At the national level, in Australia, most of the acts which relate principally to agriculture are administered by the Department of Primary Industries and Energy.

In recent years, there has been a reduction in the extent of government involvement in the regulation of agricultural prices and production, in both Australia and New Zealand, which has been consistent with a general trend toward deregulation within these economies. This trend has been evident in Australia since the early 1970s. In New Zealand, the change did not commence until the mid-1980s, but it has been very pronounced, both in agriculture and in other sectors of the economy.

In this paper, the emphasis is on two principal topics. The first is the distinction, mentioned above, between the approach taken to price and production policies for agriculture in Australia and New Zealand in recent years, and the far more regulatory approaches taken in other industrialised countries. The second is the implications of policies pursued in other countries for the future size and profitability of Australian and New Zealand agriculture.

This paper is largely about agricultural policy, with agricultural law being considered insofar as it is the necessary means for instituting policies. Though the focus is largely on Australia, most of the conclusions which can be drawn for Australia also hold for New Zealand.

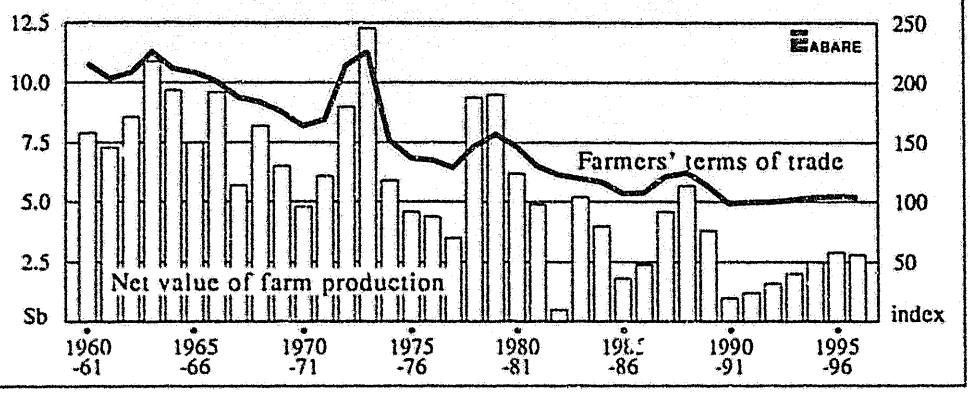
The situation of Australian and New Zealand agriculture is first outlined with particular reference to their dependence on global markets. This is followed by a section on the historical formation of agricultural law in Australia. The general principles behind the development of agricultural policies are then discussed. The final section of the paper is devoted to a discussion of the effects on producing countries such as Australia and New Zealand of trends in agricultural policies elsewhere.

External influences on Australian and New Zealand agriculture

The income situation facing Australian and New Zealand farmers (see figure 1 and table 1) is greatly influenced by developments in world markets. Those developments are in turn affected greatly by major economic events and, importantly, by agricultural support and protection policies pursued by other countries, in particular the major industrialised nations.

The major Australian and New Zealand agricultural industries are heavily export dependent, with exports accounting for between about 50 per cent and 95 per cent of total production,

Figure 1: Australian farm incomes In 1991-92 dollars



and as has been noted above they are essentially 'price takers' on world markets and receive little government assistance. It follows that the profitability of these industries depends heavily on ease of access to overseas markets and on the prices obtainable there. Both export prices and market access are influenced by government policies of other key trading countries, as well as by general economic conditions.

The agricultural industries need to be flexible in order to take advantage of market opportunities, adjusting their production toward those commodities that are most profitable at any particular time. Generally, farmers in Australia and New Zealand have displayed a substantial capacity to adjust their mix of outputs in response to market signals. Such flexibility can pay high dividends when there are large differences in profitability between different farm products. To illustrate the importance in Australian agriculture of the

Table 1: Australian extensive agricultural (broadacre) industries
Average farm cash income per farm, in nominal dollars

	1987-88	1990-91 p	1991-92 s	1992-93 z
	$	$	$	$
All broadacre industries	55 520	21 880	20 500	24 600
Grains, oilseeds and legumes	55 950	33 720	46 800	48 100
Mixed livestock–crops	58 590	22 280	30 400	33 200
Sheep	67 310	19 060	1 800	9 000
Beef	31 750	22 700	24 900	27 500
Sheep–beef	66 570	17 000	10 800	15 900

p Preliminary estimate. s Provisional estimate. z Projection.
Source: ABARE (1992).

influence of external market factors and flexibility to adjust production mixes, in figures 2 to 5 indexes of crop production, livestock slaughterings, output of livestock products, and total agricultural production are shown. The times when particular factors are known to have had a major influence on the various industries are indicated on each figure. However, there have been periods — of which the early 1990s is an example — when profitability is low across a wide range of the internationally traded farm products.

In the late 1960s and early 1970s, international market conditions for both grains and wool were poor, but the beef market was relatively buoyant. For wool, market conditions were poor at that time partly because Australian sheep numbers had expanded to very high levels throughout the previous two decades, and partly because of increased competition from synthetics. When a drought occurred in 1972, many sheep farmers reduced the size of their flocks. Nevertheless livestock numbers, in total, on Australian farms remained relatively high because cattle numbers had been rising in response to the apparently more favourable market outlook for beef than for alternative products at the time.

In the period from late 1973 to early 1977 there were two major developments which were to have a large impact on Australian agriculture. One was the large oil price increase from late 1973, and the other was the marked reduction in Japanese and US imports of beef from 1974 to 1977. (In the case of the United States, import limitations were 'triggered' under the Meat Import Law.) The increase in the price of oil resulted in the transfer of substantial funds from oil importing countries to oil exporting countries, which included the then Soviet Union and several developing countries. A large part of these funds were in turn reinvested in other developing countries. The increased purchasing power of developing countries, where consumption of food was responsive to income growth, resulted in an upsurge in world demand for grain, and hence increased grain prices. In the meantime, the Australian beef industry was going through a period of substantial herd reduction as a result of the fall in beef prices associated with the large reductions in Japanese and US imports and the high cattle numbers which had built up by that time. Hence there was a strong incentive for farmers to move out of beef production and into crop production, and the latter increased sharply in the late 1970s.

In the early 1980s, there was a period of severe drought which reduced grain production, while livestock numbers still remained relatively low. However, by 1983, the drought had broken and the grain crop reached a record level from which it declined only slowly.

Figure 2: Australia: index of crop production 1984-85 = 100

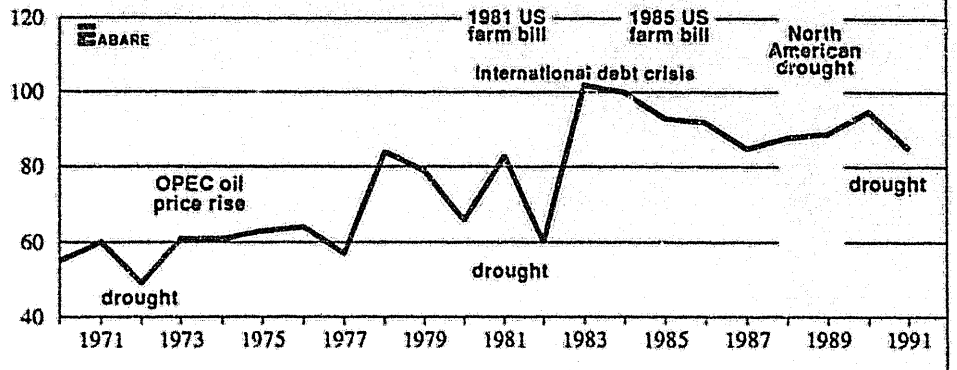


Figure 3: Australia: index of livestock slaughterings 1984-85 = 100

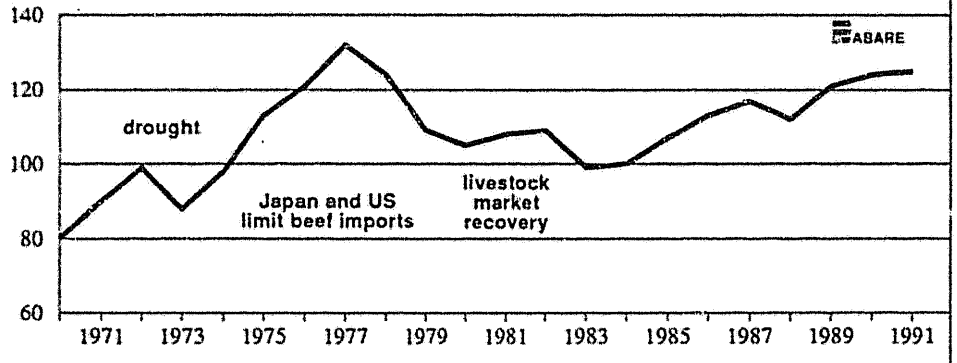


Figure 4: Australia: index of production of livestock products 1984-85 = 100

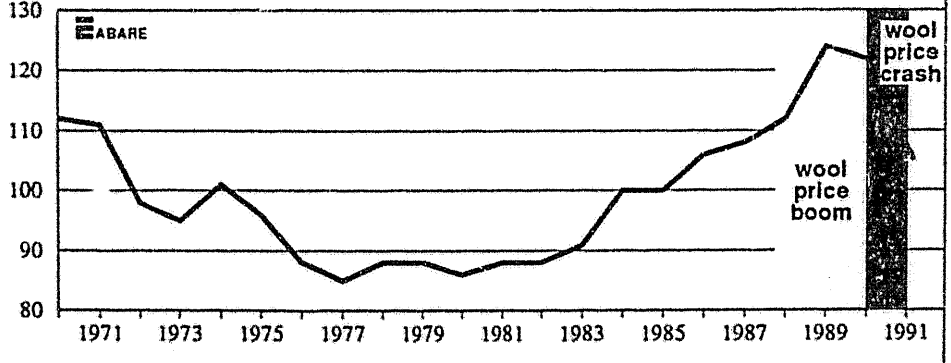
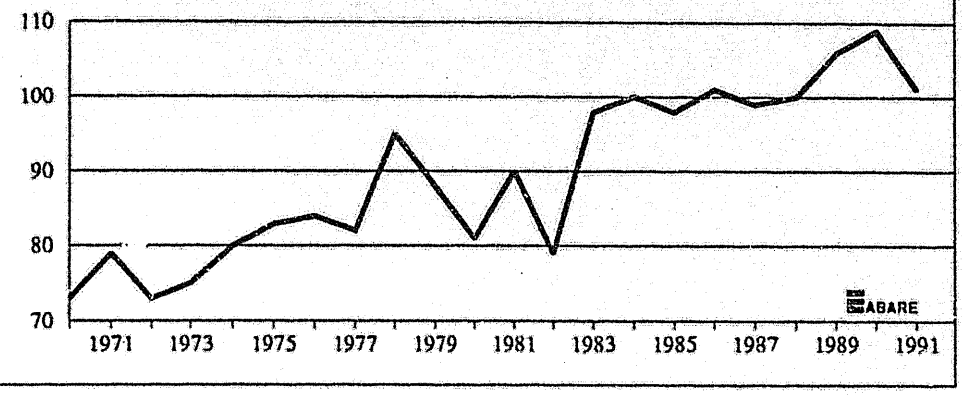


Figure 5: Australia: index of total agricultural production 1984-85 = 100



Market prices of grain in the first half of the 1980s were relatively buoyant. However, the reason was not that international demand had continued high as a consequence of the oil induced income transfers. In fact, international demand declined appreciably in the early 1980s because of a tightening monetary policies in the industrialised countries and the associated international debt crisis that had commenced in the developing countries. The primary reason that reasonable market conditions were experienced by Australian grain growers was that the United States decided, in its 1981 farm bill, to set its grain 'loan rates' (the prices at which the US government effectively purchases domestically produced grain) at such levels as to maintain relatively high world prices. As a result of that policy action, the United States accumulated large stocks domestically, greatly reduced its exports and, in so doing, provided (temporarily) improved trade conditions for other grain exporting countries.

By 1985, when the United States enacted another farm bill, there were strong political pressures in that country to reestablish the competitiveness of US grain internationally. It was decided to address the problem of its large surpluses through grain area reduction programs, and also through greatly reducing loan rates and — importantly for other market participants — by the use of export subsidies (the Export Enhancement Program). This approach, in conjunction with the, by then, relatively high level of subsidised EC grain exports, resulted in the release of high volumes of subsidised US and EC grain onto world markets. Furthermore, Canada at the same time introduced large subsidy schemes for its grain growers. The combined effects of these developments resulted in very low world grain prices in 1986 and 1987, which were relieved only by the severe North American drought of 1988 and 1989. At the present time, the incidence of subsidised exports on world grain markets remains high, although the market is currently significantly less depressed than in 1986 and 1987.

Australian agriculture might have been reasonably placed to adjust to the relatively depressed state of the grain market since the mid-1980s if the wool market had remained buoyant. In fact the wool market went through a boom period from 1987 to 1989, associated with a high level of demand by the centrally planned economies including China, the then Soviet Union and Eastern Europe. The collapse of central planning in the Soviet Union and Eastern Europe, and a lower level of imports by China, contributed to the large contraction in demand for Australian wool at the end of the 1980s. With the reduction of demand, stocks rose rapidly, exerting pressure on the reserve price that was placed on Australian wool by the Australian Wool Corporation (the price at which the Corporation at that time purchased any wool that was not bought commercially). After the reduction of the reserve price and later its removal, market prices fell markedly and production has fallen in response.

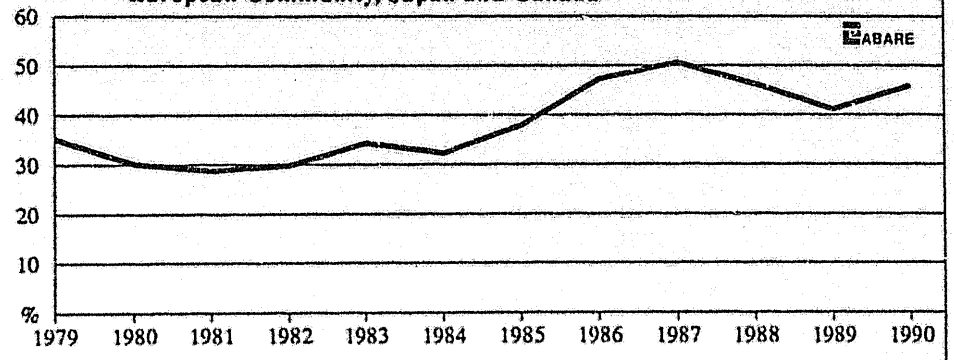
The beef industry has not recently been as adversely affected by international developments as have the grain and the sheep industries. This was partly because of the improved access to the Japanese market that has been negotiated. However, this year, exports to the United States have once again been restrained under the provisions of the US Meat Import Law.

The boom in the wool industry from 1987 to 1989 was important in sustaining relatively high agricultural incomes in Australia in those years, as were the effects of the North American drought and somewhat lower levels of agricultural support and protection in the major industrialised countries in 1988 and 1989. However, the wool market has since weakened markedly, as discussed above, while farm incomes in many parts of Australia were further reduced in 1991-92 as a result of drought. Those drought conditions are continuing in the early part of 1992-93 in some areas of eastern Australia.

Influence of protection in other countries

From the above, it is evident that agricultural and trade policy measures in major markets and competing countries have an important influence on the profitability of Australian agricultural industries. The same conclusion can be drawn for New Zealand, where most agricultural industries are even more strongly export oriented than those in Australia. Generally, when major purchasers decide to restrict imports, or major competing countries increase their levels of farm income support or export subsidies, the result will be a reduction of world prices and hence of incomes to producers in countries which are heavily export oriented and where there is little government support. Of course, Australia

Figure 6: Average agricultural producer subsidy equivalent:United States, European Community, Japan and Canada



and New Zealand are not unique in being affected in this way. Many developing country exporters are similarly affected.

The degree of support to any industry by any government can be measured as a 'producer subsidy equivalent', which is the total support received by producers in the industry that can be attributed to any form of assistance. To provide a basis for comparing levels of support between industries within and between countries, these producer subsidy equivalents are often expressed as percentages of the total value of production by the industry, including the support. It can be seen from figure 6 that levels of agricultural support and protection in the major industrialised agricultural exporting countries (the United States, the European Community, Japan and Canada) increased sharply in the mid-1980s and have remained high. These high levels of support have been an important reason why farm incomes in Australia (table 1) are now so low. Of course, there are other important factors that have affected economic conditions in Australian and New Zealand agriculture. Conditions in the wool industry, in particular, are little affected directly by agricultural protection in Europe, North America and Japan, as European protection for the sheep industry is mainly for meat animals while sheep numbers are low in North America and Japan. Nevertheless, the wool industry has been affected indirectly. The very low profitability of Australian grain growing in 1986 and 1987, which was related to the greatly increased level of export subsidisation by the United States and the European Community and the much increased level of production support in Canada, contributed to the transfer of resources from grain growing to wool production in those years. (The extent of the transfer was also influenced by the high prices for wool at the time and optimism about future prices for wool.)

Historical trends in agricultural policy in Australia and New Zealand

Early history

A history of agricultural policies in Australia and New Zealand must begin with the early periods of European settlement in the late 18th and early 19th centuries. In Australia, where all land was initially deemed to be owned by the Crown (that is, in effect, by government) much of the emphasis was initially on conditions for private land tenure and on encouraging settlement. By the 1830s, systems for land purchase by auction were established. However, in the more remote parts of the country, large areas were being taken up by 'squatters' — that is, people who settled on Crown land to graze animals without government permission.

Following an upsurge in population in the 1850s as a result of the gold rushes, the emphasis of land policy was on closer settlement and subdivision of pre-existing agricultural holdings. This emphasis was to remain until the 1960s (Campbell 1982, p. 225). Since that time, however, the emphasis has changed more toward adjustment of farm sizes and characteristics to meet changing market conditions.

Nationwide policies relating to price and income support for producers of agricultural products in Australia date from 1901 when Australia became a federation of six states. (Before then, individual colonies imposed import tariffs, mainly to protect secondary industry rather than agriculture, and with large divergences between the colonies.) At that time, a bounty along with a tariff was introduced to provide significant support for the sugar industry. Other schemes were introduced in the mid-1920s to provide support for butter and dried vine fruit. Those schemes operated through import tariff support for domestic market prices to offset low export prices, and in 1938 a similar two-price scheme was introduced for wheat (Shaw 1982). On the international front, Australian and New Zealand agricultural products were accorded preferential duties and quotas on the British market from 1932, so by the end of the 1930s almost all agricultural industries, except for cattle and sheep, were receiving some kind of government assistance (Shaw 1982).

The constitution of the federation of Australia does not include provisions which relate specifically to agriculture, which thus remains in the domain of the states. However, it does include two sections which have had a profound effect on the powers which both the

Commonwealth (federal) and state governments can exercise over the marketing of agricultural products. Those sections relate to the constitutional division of powers between the Commonwealth and the states. These are Section 92, which states that interstate trade and commerce shall be 'absolutely free', and Section 51(i), which gives the Commonwealth Parliament power with respect to overseas and interstate trade and commerce (see Coper 1987 for a discussion of some of the legal issues surrounding these sections).

Although those who drafted the constitution, in inserting Section 92, probably had nothing in mind beyond the abolition, upon federation, of tariffs and other protective barriers affecting items entering interstate trade, the operation of that section has proved a stumbling block for primary producers who might wish to achieve higher prices on the domestic market than are obtainable internationally, and hence obtain support for their industries (Lloyd 1982, p. 356). Essentially the problem which faced primary producers who wished to do this was that it would require limiting competition on the domestic market, and any attempt to do so in one state could be undermined by the ability of individuals to move produce from one state to another. (They would have an incentive to do so, to take advantage of the higher price in any state where domestic supply had been limited.) Nevertheless, some states have been able to introduce statutory marketing arrangements having this effect, and where there was agreement between state and Commonwealth governments that such arrangements were desirable nationally, complementary Commonwealth and state legislation was often enacted.

Even in such instances, the effective perpetuation of the arrangements depended on the continuing cooperation of all state governments. When any state government did not wish to continue to participate in control of supply and price, the existence of Section 92 could undermine the arrangement nationally. This was the experience when margarine production restrictions which were applied to protect the dairy industry were eliminated in the early 1970s. A more recent example is the weakening of egg marketing arrangements when one state lifted its production restraints.

The post-war period: price stabilisation

The situation of some kind of government support being provided to most agricultural industries except the extensive grazing industries continued in the period following the Second World War. In more recent years, however, there has been a considerable reduction in government intervention, as will be discussed later.

One important element of support arrangements has been price stabilisation. Over the years, efforts have been made to modify the risks stemming from the income variability faced by Australian and New Zealand farmers, through schemes to stabilise prices (although price is not the only factor which is highly variable and which influences the risks faced by farmers in this part of the world). In some cases the schemes adopted have been based on stock accumulation and release by statutory marketing authorities, or on levies on producers in years of high prices and payments to producers from the resulting 'stabilisation funds' in years of low prices.

In other instances, efforts were made to increase the average level of prices to producers, or to provide some guaranteed price linked to production costs (as estimated through indexing methods). These last mentioned 'cost of production' pricing schemes were relatively widely adopted in the period from the end of the Second World War until the early 1970s. They were applied to wheat and some horticultural commodities such as dried vine fruits and apples and pears for export. By the 1970s, however, such schemes had lost much of their appeal, and they are now no longer used. Some of the shortcomings that can be seen in 'cost of production' schemes include disregard of the effects of long term changes in demand, problems in effectively measuring costs of production given changes in the quality of inputs, and difficulties of accounting for changes in productivity.

In Australia, there has been a change in wheat marketing legislation away from price stabilisation to the provision of guarantees on loans raised by the Australian Wheat Board (the wheat marketing authority) to cover advance payments to producers. The returns to producers on each season's crop delivered to the Wheat Board are pooled, and this guarantee secures a proportion of loan funds raised by the Wheat Board to finance initial payments to producers on the season's crop. For 1992-93 the guarantee on borrowings covers 82.5 per cent of the net value of the crop that is estimated at the beginning of the marketing year.

The 1970s: a change of direction

The early 1970s were a turning point for agriculture and agricultural policies in Australia. Whereas previously the emphasis had been on rural development, with substantial government intervention to provide price and income support, the emphasis began to switch toward policies which encourage adjustment to changing market circumstances. Adjustment can take many forms: changes in the sizes and management structures of farms and farm businesses, changes in the commodities produced, the inputs used, and

methods of marketing. Adjustment policies are designed to provide limited and short term support to individual farmers who have operations which are viable in the long term but who have short term financial problems, to enable them to adapt to changing economic conditions, and at the same time to help farmers whose operations are non-viable to leave the industry. This policy package, known as the Rural Adjustment Scheme, is discussed further below.

The move toward policies which emphasise the adjustment of farms and industries to changing economic conditions, rather than the insulation of farmers from those changes through price support, was precipitated by a number of factors. These included greater exposure of Australian agriculture to changes in demand internationally when Britain entered the European Community in 1973, and increasing competition for resources domestically with the growth of large export-based mineral industries. These factors increased awareness of the economic costs of resisting adjustment through protection.

Australian and New Zealand agricultural products were previously accorded preferential access to the UK market, and on British entry to the Community most of these preferences were lost. The shock was initially greater for Australia, as New Zealand was still given significant access to the EC markets for butter and sheep meat, but that access has since been substantially reduced for butter. The Australian and New Zealand agricultural sectors thus became more exposed to world market forces. New Zealand initially tried to cushion its farmers against falling prices by provision of substantial direct support for its major agricultural products (in the form of supported prices paid by marketing authorities), especially for sheep meat and dairy products. However, the cost was great, and when large fiscal deficits developed in the early 1980s it became evident that such support could not be sustained. From the mid-1980s, New Zealand adopted a policy of market orientation and adjustment (Rayner 1990) similar to that which Australia had begun to adopt.

The withdrawal of government involvement in pricing of agricultural products and in marketing has been relatively gradual in Australia. In contrast with the rapid general change in New Zealand, reforms to industry support schemes have been taking place on an industry-by-industry basis. Examples of reduced Australian government involvement include: the discontinuation (already mentioned) in the early 1970s of margarine production restrictions which had been applied to support the dairy industry; the replacement of an import prohibition on sugar by a tariff in 1989 and the subsequent approximate halving of this tariff; the removal of export subsidies on apples and pears in the 1980s; and the

modification of wheat marketing arrangements in 1989 to allow competition, on the domestic market, between the Australian Wheat Board and private traders.

These reforms have been consistent with the Australian government's approach to industry support more generally. In both Australia and New Zealand, there has been a recognition of the costs arising from protection and regulation. In New Zealand, there has been a determined effort, not only to contain, but to eliminate those costs.

In Australia, a system has been in operation for almost two decades whereby assistance to industries (of all sectors, not only agricultural) is subject to regular inquiry and consideration by the government. The direct costs of regulation and the indirect costs of misallocation of resources are major considerations in such inquiries. There is a trend toward lower levels of protection in industries generally, and the system of review and policy examination (together with fiscal constraints) has been important in influencing the abovementioned trend toward less rather than more intervention in agricultural marketing. In New Zealand the approach has been more radical. In 1984 the government decided to remove support arrangements almost entirely, and by 1986 agricultural support had been reduced to very low levels (OECD 1991).

The Rural Adjustment Scheme

The underlying theme in the latter part of this section has been that the trend in government policy in Australia since the early 1970s, and in New Zealand since the mid-1980s, has been toward less government intervention and support for industries generally, including the agricultural industries. The emphasis of agricultural policy has increasingly been on facilitating adjustment to economic change. While most of the adjustment is occurring through normal commercial transactions, there are often specific circumstances in which the smooth adaptation of farming enterprises to changing economic and market circumstances is impeded. The Australian Rural Adjustment Scheme is intended to help rural enterprises that are experiencing financial pressure, but are assessed as having sound prospects in the longer term, to improve their commercial viability (Gleeson, Bell, Kopic and Moon 1992). The scheme is not aimed at keeping farmers on the land or maintaining farm enterprises that are not viable in the long term.

The Rural Adjustment Scheme has three components: concessional finance to farmers experiencing short term financial difficulties; 'carry-on' finance to farmers in industries or regions experiencing a short term downturn; and household support to help those with non-viable farms to leave the industry. Increasingly, the farms being supported are those

judged to be most productive in the future. The targeted nature of the support has limited the size of the funds involved. This is in contrast with price support schemes, which apply irrespective of the economic conditions facing producers and which can involve very large government outlays. (Moreover, such schemes can reduce the efficiency of resource use and still not improve the long term financial situation of those assisted.)

The trend toward targeted adjustment assistance in Australia has recently been reinforced with the inclusion of drought assistance under the Rural Adjustment Scheme. Previously, drought relief was provided as disaster assistance throughout any 'drought declared' area. As with the other elements of the scheme, individual farmers will now be subject to assessment for eligibility for drought assistance on the basis of their long term viability. State drought relief measures such as fodder and stock freight subsidies are also to be phased out.

General principles of agricultural policy

Significance of stated policy objectives

The lack of a basic agricultural law or of a clearly stated set of overall objectives for agricultural policy, such as have been formulated in many countries, could have influenced the nature and extent of agricultural support and intervention in Australia and New Zealand relative to other countries. Lloyd (1982, p. 353) remarked on the 'striking' diversity of Australian price policy instruments compared with countries overseas. He noted that, although the details of policies in the European Community are complex, the Community 'is relatively unified and comprehensive in its price policy'. He made similar observations about US policies.

It may be asked whether it is the existence of specific objectives, as stated in a fundamental agricultural law, that is responsible for a more unified and consistent approach to agricultural law in some countries than in others, or whether other factors have been responsible for such consistency. It may also be asked whether consistency of approach to the development and application of policies for agriculture is desirable, when conditions facing different regions or farm industries differ markedly.

On the first of these questions, it does not appear that the stated objectives of agricultural legislation (for example, in the United States, European countries and Japan) are sufficient to ensure a relatively consistent approach to agricultural policy. On the contrary, countries

which have different approaches to policy can have virtually the same stated policy objectives. Such objectives seem always to be expressed in general terms, and to extol the importance of guaranteeing regular supplies, ensuring a fair standard of living for rural people, stabilising markets, ensuring reasonable prices to consumers, increasing productivity, and achieving a rational development of agricultural production and the optimum utilisation of factors of production; see, for example, Article 39 of the Treaty of Rome 1957, and the Japanese Basic Agricultural Law of 1961 (as reported in ABARE 1988, pp. 12–13). Apart from the fact that some of these elements are probably mutually inconsistent in many countries, there may be a wide range of interpretations of what precisely is meant by them. For example, perceptions of what constitutes a fair price will differ from person to person. Tangermann (1985, p. 85) pointed out that many of the real objectives of agricultural policy are left out of such statements of purpose, and can be recognised only through analysis of the policies themselves and of the motivations of the policy makers at the time that they introduce legislation

As noted above, while the stated objectives of policies for agriculture are often common between countries, there can be vastly different approaches to meeting those objectives. For example, a country could aim to attain an objective of adequate incomes for farmers. One approach to achieving that goal might be to provide price support for certain products. Another approach (exemplified by Australia's Rural Adjustment Scheme) could be to provide assistance to enable farmers to be more flexible in adjusting to market forces, including, if necessary, leaving agriculture.

Significance of regulatory frameworks

What seems to be generally more important, in determining a country's agricultural policies, than the existence of a clearly defined statement of policy objectives, is the existence of a particular regulatory and pricing framework, of which only the parameters are easy to change, rather than the instruments themselves. It is quite striking that both the European Community and the United States have sets of mechanisms which met the policy makers' interpretation of the overall policy objectives at the particular times when they were introduced. In the case of the European Community, there is the system of variable import levies, export 'restitutions' (export subsidies to cover the difference between world prices and supported internal prices) and intervention purchasing which was adopted from the early 1960s to put into effect the policy makers' interpretations of the objectives stated in the Treaty of Rome and the findings of the Stressa conference (see Fennell 1979). In the case of the United States, it is the system of target prices, loan rates,

deficiency payments and area reduction plans, and the systems of marketing orders (dictating the prices that licenced buyers must pay in various regions of the country) which were developed largely in the period of the New Deal in the 1930s, to address the problems of family farms in the wake of the Great Depression (Vetne 1981; Lloyd 1982, p. 353). In both of these instances, efforts were made to develop a coherent and comprehensive approach, or a system, to put into effect particular policy objectives.

These systems of agricultural support were devised to address the objectives of specific times. In time, the crisis arising from the Great Depression passed, and in Europe more recently the nature of agriculture changed greatly and the former deficit status of the European Community in temperate agricultural foods also passed. However, the intervention mechanisms and the nature of agricultural protection in these large economies remained.

This is not to say that, once these systems for intervening in the operation of markets had been adopted, there was no further development of the mechanisms used. In both cases, there has been a continuous stream of development of complementary and additional mechanisms to 'improve' the system or to adapt it to changing circumstances. The result has been the accretion of a large body of regulations and mechanisms for market management. Some examples of mechanisms which have been added in this way in the United States are the Export Enhancement Program and the 'third base' concept in the grains programs (see Stucker and Collins 1986; US Department of Agriculture 1990). Examples in the case of the European Community are co-responsibility levies, budget stabilisers, headage payments (government payments per animal), area reduction programs and, recently, compensation payments (see Commission of the European Communities 1991). The experience in those countries has been that once mechanisms are adopted to modify or 'improve' the system, they are seldom removed. Even if not in constant use, they are retained in case they might be useful at some future time.

This progressive addition of mechanisms to address perceived weaknesses in a regulatory system results in an increasing demand for administrative and legal services. Scarce resources which could be more fruitfully used elsewhere in these economies are diverted into an increasingly cumbersome agricultural administration system. The costs of regulation increase, in addition to the resource misallocation costs that arise from the interventions which the regulations are instituted to enforce.

Differences in levels of agricultural support between countries

That the degree of intervention by governments in agricultural support and marketing is lower in Australia and New Zealand than in other industrialised countries is evident from the estimates of producer support that are published by the OECD (1992), as shown in table 2.

Various arguments have been advanced by analysts to explain why agricultural protection levels are higher in some industrialised countries than in others. Honma and Hayami (1986, pp. 40–2) argued that it was largely because countries in North America and Oceania (Australia and New Zealand) have a comparative advantage in agriculture that those countries have low levels of protection relative to Asia and Western Europe. They also concluded that a unique bias toward high protection levels for agriculture in East Asia has arisen from the rapid rate of industrialisation there, and the need to contain the social and political difficulties arising from the consequent adjustment pressures on agriculture.

New Zealand and Canada

These arguments provide only a partial explanation as to why agricultural protection levels are higher in some countries than others. Developments over the past decade indicate that major changes can take place in levels of agricultural protection in various countries, as a result of government initiatives. New Zealand provides a good example. There, the producer subsidy equivalent of support, as a percentage of the total value of production including support, has fallen from an average of 25 per cent in the first half of

Table 2: Agricultural producer subsidy equivalents in selected OECD countries: average 1990 and 1991 a

	%
Japan	66.0
European Community	49.0
United States	29.5
Canada	45.0
Australia	15.0
New Zealand	4.5

a Producer subsidy equivalent (PSE) is a measure of support to producers. The PSE shown here takes into account all support measures including market price support, direct payments, reductions in input costs, general services and sub-national (for example, provincial government) support. The percentages are of the value of production including such support.
Source: OECD 1992.

the 1980s to only 4 per cent in 1991. In contrast, there has been a very large increase in the level of agricultural support in Canada over the past decade, the producer subsidy equivalent rising from 32 per cent (in the same sense) in the first half of the 1980s to 45 per cent in 1991. Both New Zealand and Canada might be considered to have a natural comparative advantage in agriculture relative to Western Europe or East Asia, but agricultural protection in one declined greatly in the period considered while it increased appreciably in the other. Clearly, differing economic or political considerations in these two countries must account for the differing trends in agricultural protection.

In the case of New Zealand, it was considered to be necessary to reduce the costs associated with support, given current account and fiscal constraints. The process of policy reform that resulted in the great reduction in protection levels was probably easier than it would have been in many other countries because in New Zealand there is only one level of government that is responsible for agricultural policies, namely the national government. In Canada, the provincial governments have considerable influence on agricultural policies. Just as there were difficulties in fiscal management in New Zealand, there were also difficulties in Canada, which has experienced large national budget deficits. Canada resorted to increased support. It is noteworthy that much of the increase in Canada's agricultural support was through direct budgetary payments (rather than, for example, high consumer prices), despite Canada having continuing large budget deficits (US Department of Agriculture 1991). At least a partial explanation lies in the Canadian government's need to satisfy strong interest groups in some of the provinces in order to obtain support for national-level policies (many of which may have little to do with agriculture).

The European Community

In the case of the European Community, the levels of agricultural support and protection are high, and the support is provided largely by measures which insulate domestic market prices from the influence of world market developments, at levels usually well above world market prices. As a result of this insulation and support, substantial surpluses have been generated for many years now. These surpluses are being sold on world markets with the aid of export subsidies. In terms of economic efficiency, such arrangements have been very costly, since they result in higher prices to domestic consumers than would otherwise apply and require substantial budget outlays on export subsidies. Exports achieved by means of subsidies result in the expenditure of more resources within the Community, in total, than is earned by the disposal of the exports on world markets. In recent years total annual transfers from EC taxpayers and consumers to the farm sector

have been around 68 billion ECU (OECD 1992). This high cost was acknowledged by the Commission in proposing the reforms which have recently been instituted (Commission of the European Communities 1991).

Increasing complexity of regulation

According to the Commission, major reasons for the recent reforms include environmental problems arising from intensification of production (which occurred partly because the support received by any farm increased with the amounts produced); the concentration of support on large farms; the lack of improvement achieved in the purchasing power of farm families, and the rate at which families were leaving agriculture; and ever-increasing expenditure on agricultural support. The approach adopted in the recent reforms involves the application of yet further regulations to counter the above imbalances, many of which were caused or increased by the earlier interventions. The main changes appear to be in the group of crops including cereals, oilseeds and protein crops, and in beef. For cereals, the approach is to reduce internal support prices markedly, to provide full compensation to producers for the price reduction through direct payments from government (rather than from consumers, through elevated prices) and to control production through area reduction programs (some of which contain provisions as to how the set-aside land is to be rotated). For beef the approach is to reduce significantly the prices at which government buys, and to compensate producers through much increased headage payments for different types of animals, with regional limits on such payments, incentives for farmers to slaughter dairy calves rather than to fatten them and incentives for farmers to reduce stocking rates. In short, the approach is one of more detailed regulation which will involve substantial monitoring of areas planted by individual farmers, regional plantings, rotation practices, livestock numbers held by individuals and in regions, and stocking densities.

Such an approach, as it is applied to cereals, is similar to the grain programs of the United States. However, the detail with which incentive structures in the livestock sector are now regulated in the European Community appears to far exceed the degree of intervention in any other non-centrally-planned economy. Because of the regulatory restraints and administratively set incentives concerning the detailed operation of farms, the costs of these measures in terms of reduced efficiency of production are likely to be substantial.

With respect to environmental aspects, it could be argued that those costs could be justified if the benefits to the community generally exceeded those costs. However, in

making that comparison it is necessary to take into account the full costs: that is, the costs of administering the regulations, of policing them and avoiding fraud, and the costs to individuals and firms of understanding the rules, in addition to the direct costs of support for agriculture which are provided by taxpayers and consumers. The costs also include those of developing institutions such as university chairs of agricultural law and the costs of training and maintaining both legal practitioners and the administrative operatives who are needed to develop and interpret the body of law and to administer it.

One of the main reasons for the increasing complexity of regulation is that, once regulatory support mechanisms are in place and a large administrative and legal system has developed to operate and interpret them, it is in the interests of those who operate the system to ensure that the system is maintained or expanded. Such interest groups include administrators, politicians, legal practitioners, and even economic and social researchers. This factor seems to have been important in the ever increasing complexity of agricultural market intervention in the United States, Europe and some Asian countries. Politicians are reluctant to reform the system so as to reduce the role of these various groups. As a result, reforms tend to consist of complex arrangements that maintain or increase the demand for administrative and legal services.

Future impact of overseas agricultural policies on Australian and New Zealand agriculture

As was mentioned in the section on 'agriculture in the Australian and New Zealand economies', some improvement is expected in the conditions facing Australian farmers in the next few years, as can be seen from figure 1 above. Nevertheless incomes are still expected to be low in real terms relative to the 1960s and 1970s. Part of the improvement is likely to follow upon the reduction of the current high stocks of wool. More generally, the modest improvement in outlook is conditional on there being some recovery in world economic activity and also significant further reform of agricultural policies in major producing and trading countries. In this context, 'reform' is defined as the reduction of distortions to production, consumption, trade and world market prices (relative to those that would result from market forces alone) arising from government policy interventions. The Uruguay Round of multilateral trade negotiations, and attempts being made in some major industrialised countries to make their policy interventions less market distorting, are important in this respect. The subject of this section, therefore, is the effect on world markets — and hence on producers in non-interventionist countries such as Australia and New Zealand — of the types of reform that are being considered.

In the Uruguay Round, the kinds of reductions of agricultural intervention that are being discussed using the Dunkel text (Dunkel 1991) as a basis are relatively modest, given that the baseline used is the period between 1986 and 1990, a time of relatively high support and protection (see figure 6 above). Nevertheless, great difficulty has been encountered in reaching agreement.

One obstacle to the reduction of distortions in trade is that interest groups in some major trading countries can argue that reductions in support for production or exports will reduce competitiveness and international market share. The fact is that, where such subsidies are necessary to sustain competitiveness, they result in a greater value of resources being expended in producing and selling the subsidised products than is received from the sale of the products on international markets. The encouragement of domestic production is accompanied by higher domestic prices and lower domestic consumption, as well as lower world market prices, than would otherwise apply. Thus, the chosen types of farming are supported only at the cost of reducing the welfare of groups other than farmers in the countries concerned, and indeed reducing the general economic welfare in those countries. More generally, examination of which groups gain and lose from export subsidies and from protection and support policies generally reveals that domestic producers gain, domestic consumers lose, domestic taxpayers lose, the domestic economy in total loses, foreign importers gain, foreign exporters lose, foreign consumers gain and the world economy in total loses.

The distortions to world markets have been especially large for cereals since 1985, when the United States instituted the Export Enhancement Program (whereby sales to specified countries are subsidised) to support US exports generally and to counter the inroads into US export sales made by subsidised EC cereals. Competitive subsidisation by the largest exporters has depressed world prices to a significant degree. Clearly, such subsidies do increase the volumes of exports from these countries, at least relative to those from non-subsidising countries if not those of other subsidising countries. But the benefits of such increased exports are questionable when they are achieved at the cost of reduced national as well as international economic welfare. Estimates from studies by the World Bank (1986, p. 131) reveal that complete abolition of agricultural protection internationally, in 1985, would have increased world income by some $US41 billion per year in 1980 values. (The costs are likely to have risen since then, given the upsurge in support levels from the mid-1980s.) Moreover, it was found that the main losers were the countries which applied the support policies themselves. In a more recent study, Roningen and Dixit (1989) estimated that full removal of agricultural support and protection by industrial

market economies, in 1986-87, would have resulted in an increase in world market prices for various major agricultural products by an average (weighted by trade value) of 22 per cent. The largest estimated price increases were for dairy products (65 per cent) and sugar (53 per cent). The estimated increases for wheat and feed grains were 37 per cent and 26 per cent respectively, while that for ruminant meat was 21 per cent.

Some recent types of modification to agricultural support policy are now considered, with particular reference to their potential consequences for market oriented exporters such as Australia and New Zealand.

The 'decoupling' of agricultural support

It is evident that, in some major industrialised countries, the political and social forces for agricultural support and protection are strong, and yet there is an awareness of the costs of agricultural support. Efforts are therefore being made by some governments to develop methods by which income support can be maintained at high levels while limiting the costs. One method of both limiting the growth of budgetary outlays and reducing the costly distortions to production, consumption and trade that have arisen from past support is to break the links between amount of support and quantity of production or amount of inputs used. This approach is termed 'decoupling'. Support is decoupled if it provides no incentives affecting output, consumption or trade. In relation to any proposal presented as decoupling, the question must be asked to what extent it is so in reality.

To make support as decoupled as possible, its level must be independent not only of levels of production but also of the prices and amounts of inputs used. It must take the form of direct payments from government. However, even if support is delivered in such a way, it is unlikely to give an outcome that is identical to that without any support at all, because any addition to income can influence investment decisions and hence future production. Even so, the modification of support arrangements more toward direct payments is a step toward less trade distorting policies. At the very least, it permits domestic prices to be set at closer to world market levels, and hence reduces distortions to domestic consumption.

One instance of such a modification of support arrangements in recent years is included in the recently announced reforms to the Common Agricultural Policy (CAP) of the European Community. The new arrangements provide for considerably reduced internal support prices but with compensation for the reductions through direct payments in the case of

major crops, and greatly increased headage payments (payments on numbers of livestock held).

In the United States, recent moves toward fixing the area and yield bases from which 'program' payments are calculated in the United States might also be classed as introducing an element of decoupling, though they relate to only a part of a comprehensive system of support, important parts of which are clearly not decoupled. Those elements include not only the system of support prices (loan rates and target prices) but also the Export Enhancement Program, which distorts trade through subsidies (paid in kind) on exports to specific markets, and acreage reduction programs (see below) which are not decoupled since they directly reduce production.

In the case of the recent EC policy changes, there are elements which will tend to reduce market distortions. The main instances are the marked reductions in the internal support prices for cereals and the lesser, but still significant, reduction in intervention prices for beef (see Andrews, Roberts and Love 1992, pp. 205–6). Those changes should reduce the internal prices toward world market levels and hence reduce the extent to which the supported domestic prices depress domestic consumption. Nevertheless, the compensation arrangements appear to be far from decoupled, as the amounts of compensation paid are related to areas actually planted and to actual numbers of livestock held (both within specified limits). Thus, there remains a link between the amount of support and the amounts of production inputs used. The new arrangements will reduce the extent of overt export subsidies, and will reduce distortions to domestic consumption, but much of the underlying incentive structure, which has distorted production, remains. For cereals, oilseeds and protein crops, the problems arising from the costs of support and the levels of stocks which have accumulated are addressed through area reduction programs (see below). For beef, the constraining factors appear to be incentives to slaughter animals earlier, and therefore at lighter weights, and limits on stocking rates and on the numbers of cattle eligible for headage payments.

Area reduction programs

From the viewpoint of people in countries which are price takers on world markets, the use of area reduction programs by major producing and exporting countries which employ production or export subsidies is ambivalent. On the one hand, area reduction programs result in a direct reduction in the areas planted in countries whose support policies would otherwise have stimulated their production and exports and thereby

depressed world prices. On the other hand, an area reduction program can also be used by such a country as a tool to force policy objectives on others. Its withdrawal, without elimination of agricultural support measures, would have the effect of increasing the country's production and exports. That means that such a country can, if it wishes, use the manipulation of area reduction programs deliberately in order to increase its own market share, in the process depressing returns to growers in exposed competing countries. In these circumstances, market share reflects not relative efficiency but strategic trade ambitions.

Market prices received by exposed exporters may also be depressed as a result of either cooperation or competition between countries in the ways in which they use area reduction programs. If large producing countries decide, either in cooperation or individually, to institute large area reduction programs, such programs can as noted above alleviate the depressing effects of their other support measures on world prices. However, countries with otherwise high support levels could cooperate to set their reductions at low levels (that is, to place little constraint on their planted areas) to increase export volumes and to squeeze out competition from other exporters.

The same effect could result from competition between such countries for market share. One large country might take advantage of a large area reduction by another by reducing or eliminating its own area reduction. This would negate the market price 'supporting' effect of the other country's program. The country which instituted the initial large area reduction could subsequently decide to discontinue or greatly reduce it to regain market share. The eventual result would then be curtailment of the programs that were necessary to offset the market price depressing effects of these countries' other support arrangements, with the result that world prices would be depressed and producers in other countries would suffer. So, while area reduction programs can be seen, in a limited sense, to benefit suppliers in other countries, the extent of such benefits depends on the ways in which the programs are used. In some instances, the benefits could be very small or even negative.

It may be observed that for 1993, a US wheat acreage reduction of zero has been announced. If the US target price is above the farm gate market price equivalent in that year, the wheat program will be a clearly distortionary support policy, with support prices to producers above world prices and exports being subsidised through the Export Enhancement Program.

Concluding comments

Compared with most other industrialised countries, Australia and New Zealand have low levels of government assistance to agriculture; consequently, farmers in these countries are largely price takers on world markets. Neither country has a body of specific agricultural law such as the US omnibus farm legislation, nor a statement of agricultural policy objectives such as appears in the Treaty of Rome. Furthermore, there is no single system of agricultural support which applies across agricultural sectors, such as exists in both the United States and the European Community. There is, nevertheless, a significant body of legislation relating to agricultural activities.

Agriculture contributes about 4 per cent of the GDP in Australia and 6 per cent in New Zealand. In both countries, agriculture is highly export oriented, with agricultural exports accounting for about 30 per cent of the value of Australia's total exports and 60 per cent of New Zealand's. In recent years, farm incomes have declined markedly, due to several factors including adverse market developments in major importing countries and increases in competition from subsidised products on world markets. Levels of support for agriculture in Australia and New Zealand are also declining.

In recent years, the emphasis of agricultural policies in Australia and New Zealand has been away from price support, and increasingly on assistance in adjusting to economic change. This contrasts with the increasing government support and regulation observed in many countries, where there is a tendency to introduce additional regulations to reduce distortions of commodity markets and environmental problems caused by previous and continuing support measures. In some instances, such as the recent CAP reforms, the costs associated with regulation are likely to be large, involving the developing of a comprehensive network for monitoring farmers' operations and administering and interpreting regulations. If the new measures are effective in reducing the misallocation of resources created by previous policies, some reduction in overall economic losses may result. A far less costly means of reducing such losses, however, would be to reduce the levels of support for agricultural production and to assist farmers in adjusting to a market environment.

The future of Australian and New Zealand agriculture will depend to a significant degree on the reform of government policies internationally, so that market prices will not be depressed as much as in the past by such factors as competitive subsidisation of exports. In this context, the outcome of the Uruguay Round is very important.

One of the main messages in this paper is that highly regulatory arrangements that are introduced to overcome problems of supply imbalances and economic and environmental costs arising from previous policies are costly to institute, expensive to maintain, and politically difficult to dismantle once they are in place. The costs of regulation provide an important reason to consider the alternative to increasing its complexity. That alternative is to reduce the degree of regulation and to allow a much greater role for market forces.

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