INTERNATIONAL TRADE IN AGRICULTURE

Communication from Australia

The following communication, dated 3 November 1989, has been received from the delegation of Australia with the request that it be circulated to contracting parties.

The Government of Australia has decided to circulate for the information of contracting parties an independent study entitled "US Grain Policies and the World Market".

The study was prepared by the Australian Bureau of Agricultural and Resource Economics. The Bureau is an independent, public and privately funded, economic research agency. It is responsible for determining its own research program, its research methods and the timing of the release of its research findings. It disseminates its findings widely through published reports.

The study is of direct relevance to on-going and future work in the GATT and in the Uruguay Round.

The contents of the study underline the importance of the high priority being given to negotiating measures to liberalise agricultural trade in the Uruguay Round. This objective is shared by the majority of contracting parties and circulation of the study is designed to assist them and others to realise this objective.

Some of the key findings of the study are that:

1. The grain policies pursued by the United States have been costly to US taxpayers and to the US economy in aggregate.
2. The policies have been relatively ineffective in providing support to those grain growers who are most in need.
3. The US policies have played a part in leading to competitive subsidisation that has imposed costs on all exporting countries.
4. Current circumstances in the world grain market and in international negotiations hold promise for liberalising reform.
Costs arising from the policies

US grain policies result in significant economic costs because they:
- distort relative production levels of program and other crops;
- result in a sub-optimal mix of resources in production; and
- periodically cause sustained supply-demand imbalances and substantial market dislocation.

These costs are most apparent when large supply imbalances arise such as the stock accumulations in the mid 1980s. However, even if such imbalances had not arisen the costs would have been significant because producers respond in their decisions to prices which bear little relationship to world prices and are constrained in their use of land, a key input.

The direct costs arising from the policies fall heavily on US taxpayers who in 1986 and 1987, provided support that was approximately equivalent to the value of total marketings of US grain.

Effectiveness of income support

As income support is related to the level of production, more assistance is provided to those with large farms than to those in most need.

Competitive subsidisation

The measures employed since 1985 by the United States to reduce the stocks which had accumulated and to increase exports are largely a consequence of past policies that permitted the stock accumulations in the first instance.

The measures have had no observable impact in reducing the exports of competitors seen to be 'unfair', in particular the European Community.

Aggressive subsidisation of exports under the export enhancement program is just as likely to harden the resolve of the European Community to retaliate as it is to induce liberalising reforms.

Competitive subsidisation by the European Community, the United States and Canada has considerably reduced production and exports by largely non subsidised producers in Australia and Argentina.

Opportunities for reform

Present market conditions of relatively low grain stocks and fairly high prices could interact with international negotiating efforts to facilitate liberalising policy reforms. However there are obstacles. In
the US context these include a reluctance to reduce support unilaterally and misplaced satisfaction with the costly policies under the 1985 Food Security Act.

Although the most desirable outcome of negotiations on trade liberalisation would be the removal of all support by all market participants, such an outcome could be impeded by a commitment in many countries to support farmers. If the removal of support cannot be agreed upon, an alternative approach would be to replace present mechanisms with arrangements that provide support in a far less distortionary way. One such approach is suggested in the study. It involves negotiable individual producer guaranteed price entitlements. The aggregate of these entitlements would need to be less than would be produced in the country at the world market price. The support would be provided from the budget and consumers would pay world prices. Such an approach, although not optimal, could provide a catalyst to reform.

It should be noted that the report is not an official report of the Australian Government. The analyses and contents are solely the responsibility of the Australian Bureau of Agricultural and Resource Economics. The Australian Government has noted the most recent comprehensive negotiating proposals advanced by the United States and the consistency of those proposals with many of the findings in the Bureau report.

The Australian government encourages all participants to continue with their efforts to bring about a liberalised world agricultural trading environment.

Two copies of the full study by the Australian Bureau of Agricultural and Resource Economics on "US Grain Policies and the World Market" have been distributed to each contracting party.

A copy of the summary of the study (English only) is attached to this document.
U.S. grain policies and the world market

Policy Monograph No. 4
Australian Bureau of Agricultural and Resource Economics
KEY ISSUES AND CONCLUSIONS

This study deals with two interlinked, evolving problems. The first is the inflexibilities which the US regulatory system imposes on the US grain industries and which, because of the size of the United States in the world market, have an important influence on that market. The second is the difficulty faced by the United States and other traditional exporters in adjusting to the presence of a new exporter, the European Community, which has extremely inflexible policies with the effect of encouraging exports. These two areas of inflexibility, in conjunction with changes in world grain import demand, have major implications not only for the United States and the European Community but also for Australia and other grain exporters.

Government intervention in the US grains industry
The basic system of government intervention in the US grains industry was developed to meet a need that was clearly evident more than half a century ago — to alleviate the farm income and rural poverty problems in the wake of the great depression. With the passage of time, market imbalances have arisen, both as a result of market changes and of the support system itself, and the mechanisms used have been modified and adapted. Despite such adaptations, the stated objectives of the system — in particular, farm income support — and its basic mechanisms have been retained. Meanwhile, the size and other characteristics of US grain farms and the balance between domestic and export markets have changed greatly. In particular, US support policies were initiated when there was a large number of small farms and when the US grain industry was oriented to the domestic market. Now, US production is mainly from a small number of large farms and exports are far more important. Yet the same basic measures of price support and acreage regulation operate.

Though the mechanisms applicable in the US system are capable of flexible use, political factors and administrative inertia have resulted in substantial inflexibilities and a propensity to maintain policy settings that have at times perpetuated
Intrusion of trade policy objectives into internal policy

Retaliatory protection

US policy interventions

Programs wasteful of resources

market imbalances. When the need to address the imbalances is acknowledged, typically there is a reversal of policy settings which causes major disruption to trade and prices. The system has imposed considerable costs on the US economy. Some of those costs are evident in large periodic budgetary outlays on support. Others are hidden, but in economic terms are probably more important; these involve distortions to resource use and large costs of program administration and income transfers.

US grain policy and the EC Common Agricultural Policy

The inflexibilities and costs characterising US grain policies are indicative of a need for reform, irrespective of policies in other countries. Support has been institutionalised and dependence created. The arguments in favour of reform have, however, been obscured by the intrusion of trade policy objectives which have been used to further institutionalise US protection. The most important individual development in this context is the continuous expansion of the EC grain industry under the protective umbrella of the Common Agricultural Policy, which has resulted in the European Community being transformed from a large net importer of grains to a significant net exporter. This development has occurred against a background of static world import demand in recent years. It has provided a rationalisation for retaliatory US protective policies on grounds of winning back market share in the face of unfair competition.

Reasons to reform US grain policies

The fundamental interventions in US grain policies involve:
- government provision of income support through the deficiency payment–target price mechanism;
- government restriction of acreages planted, by means of incentive programs, in order to restrain supplies, which otherwise would be excessive because of the production stimulating effects of supported prices; and
- public stock management, in support of market prices and to meet other goals such as ‘export enhancement’.

The programs are very wasteful of resources. This would be the case even if they resulted in similar production and trade, in the specific grains supported, to those that would occur in their absence. The administered pricing and area restriction arrangements result in relative uses of land and other inputs which differ significantly from those that farmers would choose in order to maximise their profits in a normal competitive environment. This change in relative resource use imposes costs on the economy. The programs also distort the markets for non-program products that are not permitted to be produced on areas diverted from the program crops, imposing further costs on the economy. Clearly, costs arise as a result of
diverted land not being allowed to be used in the most profitable alternative way.

The provision of support falls heavily on US taxpayers who, in the mid-1980s, were providing transfers to US grain growers equivalent to well over half of the market value (at the farm level) of the crops concerned. In both 1985-86 and 1986-87, net program outlays for wheat and feed grains were approximately US$16b; those in 1987-88 were US$9.7b.

Perhaps the greatest deficiency of the programs is that a large part of the support has been going to the growers producing the largest quantities rather than to those in need. Since a stated objective of the programs is to provide income support, they have to this extent been inefficient. At the same time, program benefits have been factored into farm asset values, principally land values, thereby providing strong incentives for land owners to try to ensure, through political processes, that the support is perpetuated.

The economic costs associated with support under the wheat and maize programs in recent years have been estimated at some US$2–3b a year. However, these are just the costs directly induced by the programs. The programs involve large transfer payments, and the economic costs associated with the additional taxes to finance those transfers is significant. It is estimated, using the results of a study by Ballard, Shoven and Whalley (1985), that in both 1986 and 1987 the incremental welfare costs associated with the additional taxation alone were around US$5b. To these costs should be added the substantial administrative, lobbying and information costs that such detailed administered schemes entail. The resultant costs are of substantial consequence, in the context of industries with a total annual value of production (at farm-level market prices) of some US$20–25b.

The public stockholding policies pursued by the US government have been costly to taxpayers, and it is far from clear whether the degree of price and income stabilisation thus conferred on producers is in accord with their risk preferences, particularly when it is remembered that those preferences are modified by other price support arrangements.

Since 1985 a significant part of the costs to US taxpayers from public stock management has arisen from losses on government trading through the provision of stocks as bonuses under the Export Enhancement Program. These costs include the value of grain for which the government had in effect paid the loan rate plus the costs of storage.

**Specific effects of the policies**

From an international perspective, other exporters have reason to be concerned about US policies if:
- they result in larger production and exports than would be achieved in their absence; or

**Key Issues and Conclusions**

- Taxpayers pick up tab
- Inefficiency in providing income support
- Estimated costs from programs
- Problems with public stockholding
- Concern if policies:
  - stimulate US exports
- dislocate trade and prices

**Long run capacity effects of policies**

- they result in or contribute to large, periodic dislocations of trade and market prices, due either to alternation of excessive stock accumulation and destocking or to government funded price discrimination between markets.

**Long term and short term influences on prices**

US policies have ensured prices to US producers that, over the long term, have been well above those obtainable from the market. They have also increased US producers’ income security. Consequently, they are likely to have stimulated investment in grain growing, thereby expanding production capacity in the long term. As a result they have probably contributed, along with the generally buoyant market conditions in much of the 1970s, to excess capacity in most of the 1980s.

US policies may be viewed largely as generating short term supply, price management and income support decisions which have long term effects. While the long term effects may have been to stimulate production and depress price, the short term policy adjustments made during the 1980s have probably neither increased nor reduced average annual US grain production significantly over the decade. The production effects of the various area reduction programs have probably counterbalanced the immediate production stimulating effects of high target prices and (at times) high loan rates. If that is the case, this combination of contrary interventions has been a costly and inefficient way of leaving output at roughly its ‘free market’ level.

Even without these US policies, there would have been a period of depressed world grain prices in the 1980s. It appears that the policies resulted in the price fall being restrained until 1985-86, through the accumulation of large US stocks which were only then released.

Thus, although the United States could be seen as having caused, through its stock release policies, the depression of prices from 1985-86 until early 1988, the underlying reasons for the price reduction were much deeper. They lie in the high level of capacity installed in all exporting countries in the 1970s, and in the reduction in world import demand in the 1980s. In the case of the United States, however, the expansion in capacity in the 1970s would have been encouraged by farmers’ awareness that, in the event of any future deterioration in market conditions, commodity programs would provide them with price support.

EC protection played a significant part in both the capacity expansion in the 1970s and the reduction in import demand in much of the 1980s. But the fundamental forces responsible for the increased capacity in the 1970s in the United States and the other main grain exporting countries (Canada, Australia and Argentina) were low real interest rates, rapid economic growth
in importing countries and a shortfall in domestic production in the Soviet Union. These factors resulted in high market prices, market expansion and expectations of future profitability which in turn led to increased investment in grain production. Reasons for the depression of import demand in the 1980s include the international recession, the international debt crisis and substantial increases in grain production in certain major importing countries, particularly India and China.

The large US stock accumulations from 1982-83 to 1985-86 were a consequence of attempts by US policy makers to cope with supply imbalances and farm income problems resulting from the already mentioned production capacity increase of the 1970s and reduction in world import demand, together with an appreciation of the US dollar. These attempts by the US government took three main forms:

- purchases of stocks to prevent or cushion market price falls;
- provision of increased support payments (mainly deficiency payments) to US producers; and, increasingly,
- payment of incentives to farmers to limit their areas planted.

Such programs are all expensive to taxpayers and impede the adjustment of capacity to changing demand — not only in the United States but elsewhere as well. It is no coincidence that the offloading of excess US stocks in the years 1986-87 to 1987-88 was on to a heavily supplied market. Production capacity in other countries would have been stimulated by market prices which, in the first half of the decade, were supported by US stock accumulation.

**Market shares and retaliation**

The 1985 Food Security Act, under which the US policy direction was set for the rest of the 1980s, was framed in a period of crisis in US farm incomes and of declining US export sales. Winning back lost markets was a principal stated objective of the measures in that act, and of others instituted around the same time.

An analysis in this study shows that US loss of market share for wheat in the first half of the 1980s was about equally attributable to appreciation of the US dollar and to inflexible loan rate and stock release policies. Protection by other exporting countries contributed little directly to the loss during those years, although continuous EC protection would have resulted in the Community holding a higher market share throughout this period than it would otherwise have done.

There is little justification, in terms of economic principles, for a country to regard some arbitrary or historical share of the world market as an entitlement which it is prepared to defend. If a given market share can be attained only through subsidisation of production and exports, its attainment will be at the cost of reduced national welfare. Nevertheless, it is evident that pursuit of a specified market share has been a convenient
lobbying tool for farm interests and providers of marketing services in North America. The ostensible objective of obtaining a large market share for the nation may mask other aims: those of providing higher levels of support to farmers and sustaining high usage rates and thus profitability for suppliers of farm inputs and services.

In the three years after the 1985 Food Security Act was implemented, the United States largely recaptured — in terms of tonnage — the market share it held during much of the 1970s. Up to 1987-88, the greatly increased volume of US sales did not however, result in an increase in the value of US exports. This was largely due to the price depressing effects of reduced US loan rates, of the stock releases themselves and of increased support for grain industries by competitor economies, principally the European Community and Canada. The value of US exports rose in 1988-89 not because of US export measures but because the North American drought of 1988, in conjunction with previous stock releases and only normal production elsewhere, depressed available exportable supplies relative to import demand.

In 1986-87 and 1987-88 the European Community and Canada markedly increased their support, without exercising the same degree of production restraint as the United States. The increases in protection by these other countries up to 1987-88 may be regarded either as retaliation against the United States (that is, against its low loan rate and its stock release and export bonus measures) or simply as shielding of their producers against the greatly reduced world prices. In either case, the effect was the same: competitive subsidisation, imposing economic costs on all participating countries and forcing substantial adjustment to the low world prices in those exporting countries which provide little support to their grain industries — notably Australia and Argentina.

In terms of economic efficiency on the world scale, such a development is adverse. The fact that Australian and Argentinian farmers have, over many years, been able to compete with little or no assistance is evidence of their relative cost efficiency. A downward adjustment of their grain industries, forced by the maintenance or increase of production and exports in countries where producers are given substantial protection, must result in a less efficient global mix of resource use.

**US stock releases and the Export Enhancement Program**

The Export Enhancement Program (EEP) and certificate arrangements that have applied in the United States since 1985 are largely responses to the stock accumulation of the first half of the 1980s, which as has been noted resulted from previous policies and economic conditions.

It could be argued that these measures are little more than ways of releasing previously accumulated stocks, thereby
righting a supply imbalance. The subsidy element which has depressed market prices since 1985-86 could be considered largely as cancelling out the market price support of the period of stock accumulation. This argument would be sustainable if it could be shown that (as seems possible, though only in a short term sense) US policies had not increased production and trade volumes over the combined accumulation and release periods. In the case of the EEP, however, the means of stock release is price discriminatory, targeting greater volumes on to certain export markets at reduced prices rather than on to a closely integrated domestic and export market with relatively uniform prices.

As a temporary means of surplus disposal, the EEP may be slightly less costly to the US economy than a general export subsidy on the same additional quantities of exports, if the markets targeted are those whose import demands are highly responsive to price reductions — provided that such markets can be identified and can be isolated from the rest of the world market. To some extent, this appears to have been done. However, both the EEP and certificate procedures would be grossly inefficient if employed as long term elements of a policy to expand production, releasing the added production to markets as bonuses or at values below the government cost of purchase (the loan rate) plus intervening storage and handling costs. Such a policy would induce extra production at costs to the nation that would be higher than the returns obtained, thereby reducing aggregate national welfare. If the main purpose of the EEP and certificate programs has been to release excessive stocks, the need for them will disappear when the stocks have been run down. If, however, the United States persists with these or similar policies — such as subsidising exports with cash or 'marketing loans' — after the excessive stocks have been dissipated, then it will have adopted policies having the same effects as those which have been applied by the European Community and of which it has been highly critical.

As it has transpired — largely through chance rather than decision — the certificate program, which has been used mainly for maize, has probably not imposed large direct costs on the US economy or US taxpayers. The upturn in grain prices resulting from the drought in 1988 would have offset earlier government losses on this program. However the program will have had significant indirect costs, associated with administration, analysis, information dissemination and the incorporation of this complex arrangement into producers' and traders' decision making.

An argument used by US government spokespersons to justify the EEP and reduced loan rates has been that they will force the European Community to reform its Common Agricultural Policy and to play a more positive part in multilateral

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**Direct costs of certificate program probably not great**
As sources of pressure on EC, US policies have had little influence on EC. However, in 1987 the estimated cost to Australia as a result of EEP price discrimination was far greater, in relation to the size of its wheat industry, than that to the European Community. The reason is that a far larger proportion of Australia’s production (which is only about a quarter of that of the Community) than of EC production was exported to EEP targeted markets; the EC industry sells mainly to the domestic market.

The main costs to other exporting countries that can clearly be identified as arising from the EEP result from the price discriminatory element of the policy. The other important effect of the EEP is that of the associated stock disposal. Because the bonuses are provided in kind from US government stocks, they increase total supplies to the market, thereby reducing the average market price. Even if US grain policies had not stimulated production and exports over the combined accumulation and release periods, they would have imposed significant costs on other countries.
costs on other exporters. The elevation of world prices in the accumulation period would have increased investment in wheat growing. The subsequent price reduction would have resulted in significant losses on such investments, and in costs of adjustment in making changes to enterprise mixes which otherwise would not have occurred.

Although, in a short term sense, the US programs may not have stimulated production over the 1980s, the large releases of US stocks from 1986 to 1988 were very disruptive to the market. The reason is that those stocks were released at a time of depressed world import demand (at least until mid-1988). Market prices would have been relatively low in that period even without the US public stock releases. On normal commercial considerations, there was no incentive for large stock releases in that period (although physical limits on storage capacity would probably have necessitated some releases). In addition to the low prices and the prospect of future price increases, interest rates were low. Consequently, the policy of releasing stocks, in conjunction with that of reducing the loan rate, deepened the trough in world prices in that period. The releases of stocks at that time, in conjunction with the shortfall in 1988 North American production due to drought, provide potential for highly volatile prices in the early 1990s.

Most of the increase in US exports that can be associated with the EEP would have occurred if the same volumes that were released as bonuses had been released in a non-discriminatory manner (such as through the general certificate arrangements). It is estimated that, in 1987 and 1988 combined, the EEP increased US exports of wheat by some 11.5 Mt — but that some 8 Mt of this would still have been exported if the same volume of stocks had been released in a non-discriminatory manner. The recovery in US market share between 1985-86 and 1988-89 resulted primarily from the real US dollar depreciation, lower loan rates and the EEP, which together outweighed the effect of substantially increased protection by competitors.

In any attempt to force reform through competitive subsidisation, the United States is at a substantial disadvantage relative to the European Community. Because it is a much larger grain producer and exporter than the latter, it will face very much larger total costs for any given rate of subsidy on production and exports. Also, the US system's dependence on budgetary support makes the costs readily visible, whereas in the European Community much of the support is incorporated in inflated prices to consumers and is therefore less apparent — though just as real.

An argument that has sometimes been used to 'justify' use of measures such as the EEP is that Canada and Australia have monopolistic marketing boards (for their grain and wheat, respectively) and that the monopoly selling power of those organisations places US sellers at an unfair disadvantage.
In the case of the Australian Wheat Board, at least, such an argument appears to be weak, as Australian supplies are not large enough to influence world prices significantly and the organisation is grower funded. In contrast, the US Commodity Credit Corporation has a substantial influence on world prices, and the EEP is financed through taxpayers' funds. The EEP, by enabling US exporters to differentiate in prices between export markets, overcomes some of the inflexibility which otherwise limits US competitiveness when world prices are low. But to put EEP sales on a comparable basis to Australian exports, the scheme would need to be grower financed.

**Desirable and possible changes**

The fundamental options facing the United States as regards policies for its grain industries include: adaptations of present policy mechanisms, either to expand or reduce production and exports; pursuit of policies which are theoretically optimal, either for US producers or for the US economy; the provision of significant support to US producers, but in such a way as to limit distortions of market supplies and prices (termed 'decoupled' support); and a non-intervention policy.

Though free trade is an optimal strategy internationally, there are various arguments that can be advanced for intervention in a country whose policies can affect world market prices, as can the United States with regard to grain. Those arguments are based on the premise that such countries can use their market power to extract benefits from the market, either for the nation as a whole or for its producers. The means to do this are restriction of production to some optimal level (which will always be below the level that would occur under free trade), and price discrimination between markets. Although such gains can be conceptualised, it is doubtful whether they could be significant in practice because of the costs associated with restricting production and differentiating prices between markets, in an industry which is competitively organised in its production processes and in much of its marketing.

Some economists have argued that the United States should subsidise production and exports, on the ground that export demand for US grain is sufficiently responsive to price reductions (elastic) so that the country can increase gross export returns by increasing its export volume. Most estimates indicate that US export demand is inelastic in the short run, but it is likely to be elastic in the long run. However, it can be shown that, irrespective of the demand elasticities, the US economy would lose from a policy of expanding production and exports beyond their market equilibrium levels. The costs of producing the extra quantities exported would exceed the returns obtainable for them.

There are strong arguments for reforms that reduce government involvement, in the United States and elsewhere. These
arise both from the global optimality of free trade, which maximises benefits obtained from comparative advantage and specialisation, and from the costs and problems associated with either present or alternative forms of intervention. To the various resource and efficiency costs associated with US policies, discussed above, can be added the threat of competitive subsidisation, which would ensure that the nation would produce large quantities for export valued by the market at well below the value of the resources used in their production.

Nevertheless, there are many obstacles to progress in the direction of reduced government involvement. American farmers have come to expect supported returns. Indeed, a substantial part of their wealth consists of program benefits that are capitalised into the values of farm assets — mainly land. In addition, there is much commonality of interest between farmers and political representatives of rural areas, which are heavily represented in the political process.

Importantly in the present context, US farmers and politicians are reluctant to take the initiative in liberalising policies unless other countries do likewise. Although such liberalisation would be in the US national interest even if it were unilateral, there would be a reluctance to accept the adjustment costs associated with such action if it were believed that protectionist competitors would merely take advantage of the US willingness to adjust.

Another obstacle to liberalisation, at present, is that the intervention policies embodied in the 1985 farm bill are popularly believed to have been successful. The low farm incomes, high indebtedness, falling asset values and declining competitiveness that characterised the first half of the 1980s have given way to more prosperous times. Many of the reasons for the recovery lie in macroeconomic developments — lower real interest and exchange rates. But the massive government support from 1986 to 1988 contributed also. Furthermore, the increased market prices arising from the 1988 North American drought may have given a false impression that problems of excess capacity are a thing of the past.

How can reform toward liberalisation be encouraged in such an environment? A need to restrain public spending in order to wind back the large US budget deficit provides one motivation, but to date has resulted in marginal policy changes only. It is likely that significant change will occur only if some agreement can be reached with the European Community and other major traders to reform policies at the same time. A strong motivation is provided by the likelihood, otherwise, of costly competitive subsidisation. Internally, in either the US or EC policy environments, it may be that reform is achievable only if ways can be found to continue to provide support to producers, but to provide it in such a way as to minimise its impact on
production, consumption and trade — that is, to 'decouple' support.

Necessary changes to attain liberalisation in the United States include the phasing out of:
- the gap between target prices and market prices;
- area reduction programs; and
- public stockholding, stock management and export incentive schemes.

The various facets of any scheme to institute these reforms would need to be coordinated; otherwise, market prices could be greatly destabilised, jeopardising the success of the reforms.

Given that, politically, it could well be necessary to provide 'decoupled' support in order to attain such changes, a process of research and debate would be necessary to develop acceptable schemes. One possible scheme would be to provide individual growers with tradable price support entitlements, guaranteeing a supported price on an amount totalling less than would be produced at world prices, under any foreseeable market and weather conditions, in the absence of US intervention. The support could be paid as deficiency payments, so that US consumers would pay the world prices. Production beyond or outside the entitlements would be sold at world prices. To guard against price and supply fluctuations, growers could if they wished collectively develop and finance a stock management scheme. Alternatively, they might better satisfy their individual preferences regarding risk of income and price variation through instruments such as 'put options', as described by Gardner (1981).

It can be said that US grain policies are now at a crossroads. This has been said on many previous occasions, but the statement now seems justified. The supply imbalances that characterised most of the 1980s have been alleviated. Agriculture is being given a prominent place in multilateral trade negotiations. On the other hand, there are some in the United States who advocate 'tough' trade policies and 'market share enhancement', which are little more than euphemisms for protection. The United States, the European Community and others could constructively seek reform, or on the other hand there could be a hardening of traditional protective stances, at significant national cost to all grain exporting countries.