

# The dynamics of multilateral agricultural policy reform

*Ivan Roberts, Troy Podbury, Neil Andrews and Brian S. Fisher*

---

Fourth Conference on International Trade, Education and Research CITER4  
'The WTO Millennium Round', Australian APEC Study Centre,  
Melbourne, 16–18 September 1999

*The Uruguay Round of multilateral trade negotiations achieved some success in the ongoing pursuit of agricultural liberalisation. Importantly, agriculture was brought under multilateral disciplines in a comprehensive manner for the first time. A significant achievement was the development of a broad framework for negotiating and implementing reductions in agricultural support. The round was also successful in negotiating reductions in volumes of subsidised exports and in providing at least minimum levels of access to markets. There were, however, a number of limitations both in what was agreed as part of the Uruguay Round and in how the Agreement on Agriculture has actually been implemented.*

*If the potential gains from more liberal agricultural trade are to be achieved, it is important that these limitations are addressed and that policy induced distortions to agricultural production, trade and prices are substantially reduced. The coming World Trade Organisation agricultural negotiations provide an opportunity to achieve fundamental reform of distorting policies. It is an opportunity that must not be missed.*

ABARE project 1612

**ABARE**

*Innovation in Economic Research*

GPO Box 1563 Canberra 2601 Australia  
Telephone +61 2 6272 2000 • Facsimile +61 2 6272 2001  
[www.abare.gov.au](http://www.abare.gov.au)

## Introduction

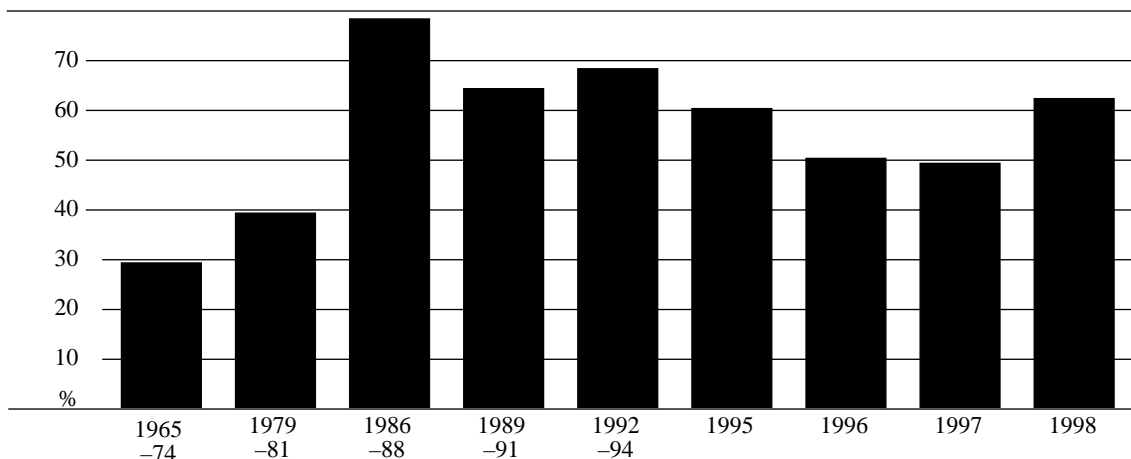
The coming World Trade Organisation (WTO) agricultural negotiations, which are to be launched at a Ministerial meeting in Seattle in late 1999, represent an opportunity to make substantial progress in liberalising agricultural policies internationally. A major test of these negotiations will be the extent to which policy induced distortions are reduced. This will require addressing the limitations of the Agreement on Agriculture, which resulted from the Uruguay Round of negotiations, as well as making substantial reductions to distorting forms of support.

## The need for multilateral reforms for agriculture

Agricultural assistance — as measured by the nominal rate of assistance (the ratio of the value of assistance to the unassisted value of production multiplied by 100) — is currently around historically extreme levels. Support in OECD countries is nearly as large as the almost unprecedented levels reached in the mid to late 1980s (figure 1; OECD 1999). In fact, agricultural protection in western Europe in that period was higher than at any time in living memory, with the possible exception of the late 1930s (figure 2; OECD 1999; Tyers and Anderson 1992). By 1998, total agricultural support in developed countries was still as high as levels in the early 1990s. Furthermore, there is evidence that support levels will remain very high or increase further in 1999. For example, US direct payment support is estimated to have increased by 80 per cent in the 1999 US fiscal year (October 1998 to September 1999; US Department of Agriculture 1999).

Agricultural support is concentrated in, but is by no means limited to, the developed countries of western Europe, Japan and, for some commodities, the United States. There are many factors that influence support levels for agricultural industries over time in various countries. These include, among others, changes in prices for outputs and inputs,

Figure 1: Nominal rates of assistance for agriculture in OECD countries

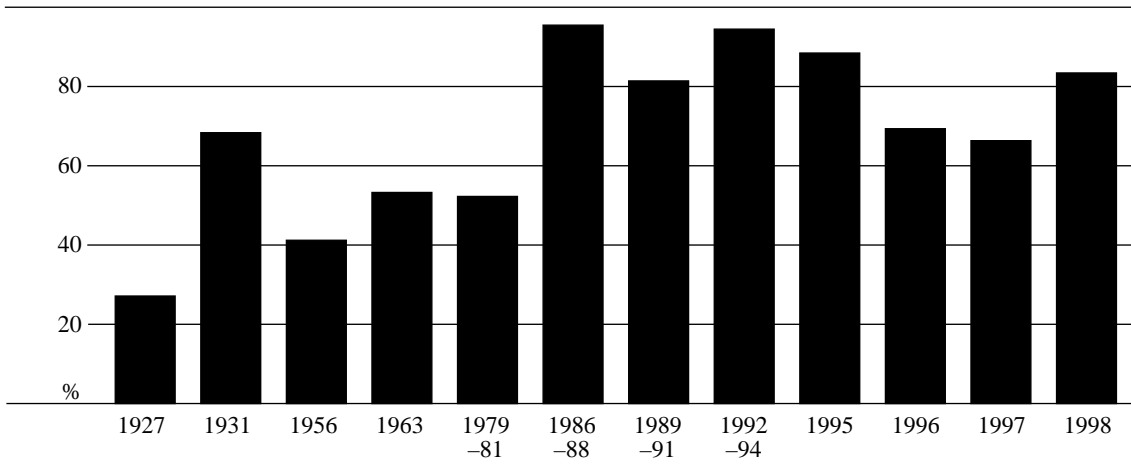


Note: The nominal rate of assistance is the ratio of the value of assistance to the unassisted value of production multiplied by 100.

**ABARE CONFERENCE PAPER 99.25**

Figure 2: Nominal rates of assistance for agriculture in Western Europe

**ABARE**



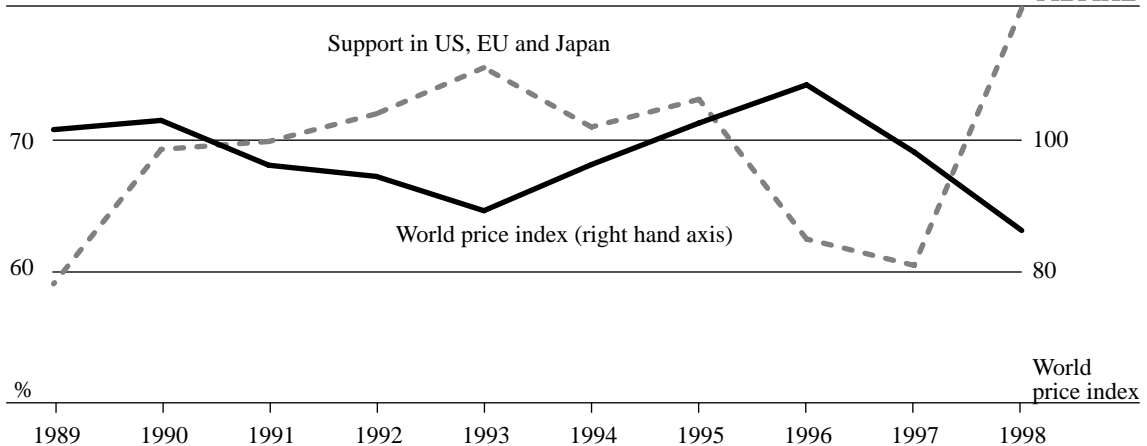
*Note:* The nominal rate of assistance is the ratio of the value of assistance to the unassisted value of production multiplied by 100.

levels of agricultural incomes, the size of agriculture in the economy and political attitudes toward industry protection. It can be observed, however, that protection levels tend to fluctuate inversely with short term movements in world market prices (figure 3).

Agriculture has lagged behind other major sectors in achieving economic gains from trade liberalisation. Those gains arise from the increased efficiency of resource use that stems from greater specialisation, with potential benefits globally and in most economies. There are many gainers from trade liberalisation, including taxpayers and consumers in countries with large distortions, and efficient producers globally, resulting in net economic gains for the world as a whole. Broad ranging multilateral negotiations, not only for agriculture but for many sectors, provide an opportunity for countries to achieve those gains.

Figure 3: Nominal rates of assistance for agriculture and real world prices

**ABARE**



*Note:* The nominal rate of assistance is the ratio of the value of assistance to the unassisted value of production multiplied by 100.

## Necessary ingredients for success

To achieve potential domestic and global economic benefits from agricultural policy reform, the balance of production must be reoriented from currently high support countries to low support countries. This would enable increased agricultural production in the most efficient producing countries.

The key to this change is for producers and consumers in countries where prices are currently insulated from world markets to face lower market prices that both approach and change with world market prices. This does not prevent countries from supporting their agriculture. If countries do wish to continue to provide support then, to avoid most of the costs, that support should be provided in ways that are in fact minimally market distorting, and not just 'agreed' to be so.

Approaches to achieving reduced market distortions may vary. However, the greatest benefits would be achieved by imposing the largest support reductions on the most highly supported products. These include, among others, rice, wheat, feed grains, sugar and milk in Japan; wheat, feed grains, oilseeds, sugar, milk, beef and sheep meat in the European Union; and sugar and milk in the United States. In addition, many agricultural products in countries such as the Republic of Korea, Iceland, Norway, Switzerland and Turkey receive high levels of support that must be reduced if they are to contribute to significant reductions in distortions to world markets and trade.

### **Market access**

Reducing barriers to trade is critical in exposing producers and consumers more to market prices and to assuring market access for competitive producers. Reduced barriers would enable consumers in countries that currently restrict imports to obtain benefits from lower prices and more diverse sources. By being able to draw supplies from a wider ranges of sources, consumers would benefit from greater food security.

Many bound (maximum) tariffs exceed actual tariffs. Reductions in tariff barriers will be illusory if cuts in bound tariffs — which are the basis for both negotiations and commitments — do not reduce actual tariffs.

Some benefit from greater market access can be achieved by expanding minimum access using tariff-quotas. So far, however, tariff-quotas are being used as much to lock in highly distorting price support as to expand market access. If the potential gains from expanding market access are to be achieved, the tariff-quota mechanism should be transitory, with trade eventually exceeding the tariff-quota quantity. Otherwise, tariff-quotas will continue to be used in much the same way as the import quotas which tariffication was supposed to replace. In many instances, beyond-quota tariffs are currently prohibitive.

For tariff-quotas to be used up to their potential to advance trade, administrative arrangements must not impede the realisation of imports within the tariff-quota quantities.

### **Domestic support**

Greater exposure of producers and consumers to world prices does not mean that farm support must be eliminated. Indeed, a move toward genuinely decoupled domestic support could achieve many of the economic gains from liberalisation while allowing some level of farm assistance.

If decoupled support is to be effective as a means of replacing market distorting forms of support it is critical that the conditions for decoupled support ensure that it is minimally distorting and that those conditions are applied consistently. For support to be effectively decoupled, the price that farmers receive for their output must be the world market price and marginal costs should not be affected by support payments. If farmers believe that they can influence future support levels by current production decisions, support will not be minimally distorting.

Production limiting arrangements, as currently applied, lock in production capacity and are not fully decoupled. Changes to these policies to ensure that they are fully decoupled would be an advance. If this does not occur, payments made under such schemes must be subject to negotiated reductions.

### **Export subsidies**

Export subsidies are among the most trade distorting of support arrangements. With the marked reductions that have occurred for some commodities, the potential for further substantial cuts or even elimination of export subsidies appears to be a reasonable objective. Such an outcome would be an essential part of a successful agreement.

However, it would be a hollow victory if the main effect of reduction or elimination of export subsidies was a reorientation toward domestic support that is still markedly distorting, as has happened with so-called 'production limiting' arrangements. This reinforces the need for ensuring that domestic support arrangements that are exempted from cuts are properly decoupled.

### **Benefits from liberalisation**

There is an apparent paradox with agricultural protection. Most economies gain from liberalising trade and reducing market distorting subsidies, and the ones with the most to gain are those with the highest protection and largest distortions. In the case of agriculture,

the governments of these same countries tend to be the least willing to reform, for political reasons.

The benefits from liberalisation are widespread, but adjustments are typically regionally concentrated. With liberalisation, the previous recipients of support face adjustment costs and may incur financial losses. The potential losers are visible and vocal while the more numerous gainers are widely dispersed, with individual gains often small. In addition, the links between liberalisation and the subsequent gains are not usually evident to the gainers. So domestic consensus for agricultural reform can be difficult to achieve.

The path to reform can be eased through cooperative international approaches to mutually reduce agricultural support. If all countries reduce support, world prices would rise and become more stable while adjustment costs would decline. As others also reduce support, fears that domestic producers will be undercut by subsidised products from competitors will be reduced.

Potential economic gains from agricultural liberalisation are illustrated by an analysis of the effects of a 36 per cent reduction in all forms of support in all countries, using the GTAP general equilibrium model, as developed by Hertel (1997). This was the agreed tariff cut under the Uruguay Round and it is assumed that actual reductions in all forms of support would be at that level. These reductions in support lead to estimated global economic gains of US\$34 billion a year<sup>1</sup>. The largest gainers would be the economies where agricultural support is currently the highest as those are the ones with the largest distortions. However, most countries, including those in the Cairns Group of low agricultural support countries, China and India also gain (figure 4).

## Approaches to reform

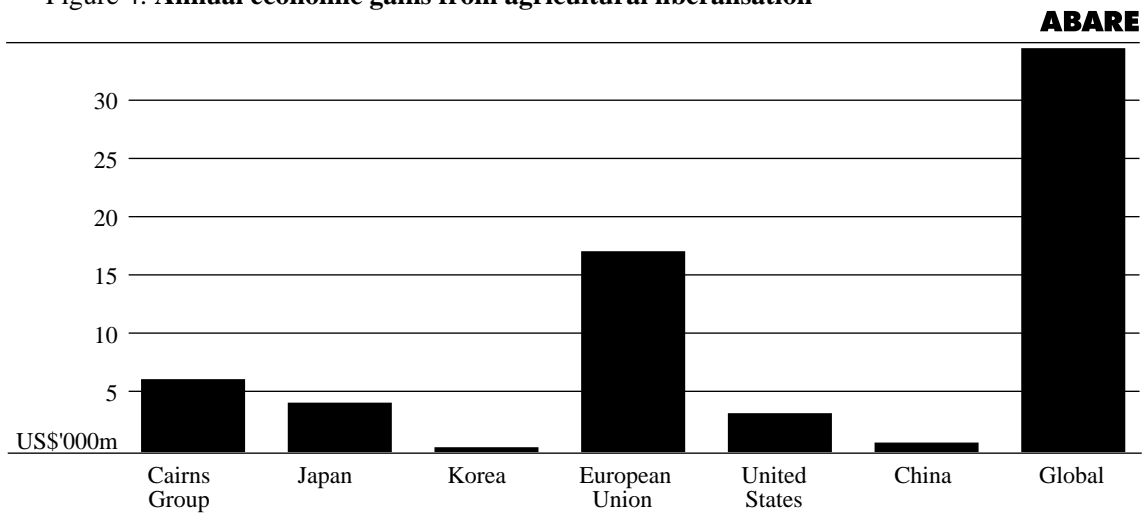
There were two main approaches to reducing agricultural market distortions under the WTO Agreement on Agriculture. One was to reduce barriers to trade and market distorting domestic and export subsidies. The other was to encourage countries to reorient support away from highly distorting price support to less distorting decoupled or production limiting arrangements. Payments under these arrangements are exempted from agreed reductions in domestic support.

There has been a shift in policy balance since the early 1990s. Support through direct payments has increased and market price support, while still by far the major form of assistance, has declined.

---

<sup>1</sup> In this analysis economic gains are estimated as changes in equivalent variation. This is the amount of money that would need to be given to individuals at the initial price to make them as well off after a price change as they were before the price change with their initial income (Gravelle and Rees 1992).

Figure 4: Annual economic gains from agricultural liberalisation



The main direct gains in reducing barriers to trade and market distortions as a result of the Uruguay Round were through reductions in barriers to trade and in export subsidies.

### Market access

The reductions in actual tariff levels from tariffication whereby tariff and nontariff barriers were converted to tariffs and negotiated down, were generally small. Reasons include a base period when protection levels were the highest for at least half a century and the degree of latitude that countries were given to determine base tariff levels (dirty tariffication).

Some gains were made in assuring current access and opening up markets through minimum access arrangements, using tariff-quotas as the relevant mechanism. However, those gains were not large. The tariffs for beyond quota imports were generally prohibitive, enabling tariff-quotas to be used largely as a tool for managing trade within highly distorting support systems rather than for prising or keeping markets open.

Special safeguards, which are supposed to provide a cushion for producers against surges in imports and precipitate reductions in world prices are, in some instances, being used as an integral part of market management systems. With EU sugar, for example, they effectively render the negotiated reduction in the tariff level irrelevant.

### Domestic support

Domestic support disciplines agreed in the Uruguay Round were probably weaker than for market access and export subsidies. The ‘aggregate measure of support’ for each country that was to be reduced was agriculture-wide, allowing considerable scope for reshuffling support between commodities as market conditions changed. Importantly also,

**ABARE CONFERENCE PAPER 99.25**

the base period adopted, 1986–88, was one of high protection, so, with return to more normal market conditions, countries had to do little, if anything, to meet commitments.

Perhaps even more importantly, large areas of domestic support were excluded from cuts on the grounds of them being minimally distorting or production limiting. Some types of support that were included in these categories actually lock resources into the highly distorted uses that were established with previous policies. In addition, other forms of support considered to be minimally distorting, such as expenditure on research and development, infrastructure, extension and advisory services, marketing and promotion services, insurance subsidies, environmental programs, or regional assistance, would be significantly market distorting if not applied at optimal levels.

The present agreement encourages reorientation of support away from areas where there was some success in achieving reductions, such as export subsidies, toward domestic support, especially in categories that are exempted from agreed reductions in domestic support.

**Export subsidies**

The reduction in subsidised exports is perhaps the main gain from the Uruguay Round. Competitive export subsidisation plagued the wheat market from the mid-1980s to the mid-1990s. Since that time subsidised exports have declined greatly (figure 5). However, that advance is partly illusory as the European Union has replaced much of its export subsidies for cereals with direct compensation payments that cover production, including the quantities exported. Those payments retain several production and trade distorting features but are excluded from reduction commitments.

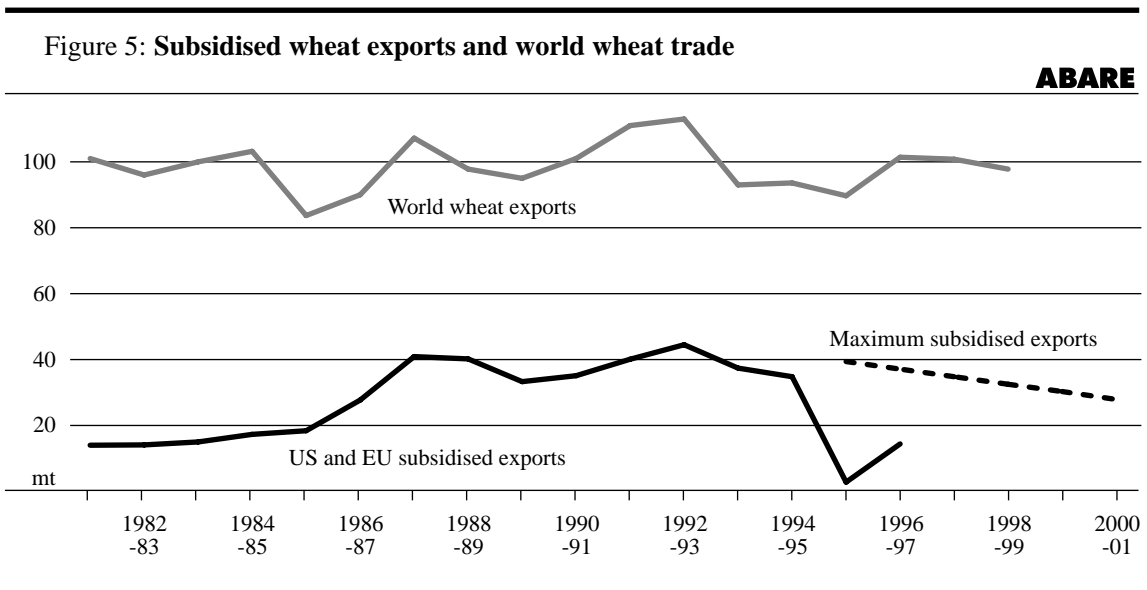
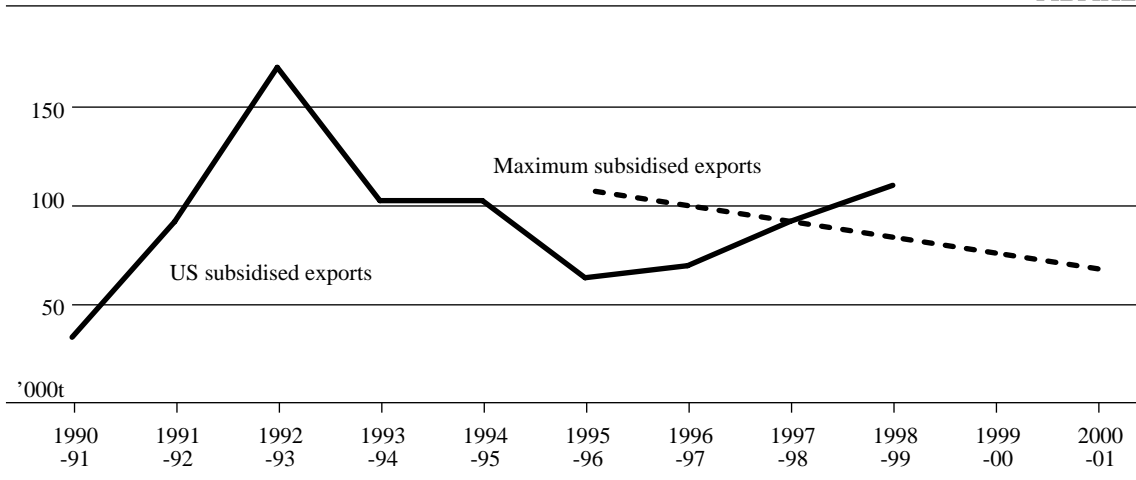


Figure 6: US subsidised exports of skim milk powder

**ABARE**



For dairy products, negotiated limits on export subsidies are constraining subsidised exports only somewhat. The limits for butter far exceed any expectations of subsidised export volumes and are not a constraint. For skim milk powder, subsidising countries are using unused export subsidy credits from early years in the implementation period to enable them to exceed the annual volume limits in subsequent years (figure 6).

### Decoupling and production limiting arrangements

The switch toward direct payments has been mainly in the European Union for major crops and beef, with the payments being under production limiting or ‘blue box’ arrangements as defined in the agreement. The United States has retained substantial direct support payments for major crops but has changed to more decoupled arrangements. Support under both decoupled and production limiting arrangements is exempted from domestic support limitations under the agreement.

Decoupling, or breaking the links between support and key market variables including production, prices and input use, enables income support to be paid to farmers in a less market distorting manner than otherwise. Decoupling has the potential to subject both producers and consumers directly to world prices.

Decoupled support, if implemented correctly, can substantially lower market distortions. Consequently, reorientation of support toward decoupled payments is desirable if support is not totally eliminated. Nevertheless even the most stringently designed and implemented decoupled arrangements are likely to distort production somewhat through insurance and wealth effects.

The benefits of changing to decoupled direct payments in terms of reducing market distortions take time to be realised. Most of the capital resources attracted into supported activities by years of price support will continue to be used for agricultural activities,

probably for several years after support payments are decoupled. These fixities maintain production above levels that would apply if support payments had never been made. However, in the long term, provided decoupled arrangements are rigorously applied, production would approach levels likely to be achieved with no support.

The effectiveness of decoupling in reducing distortions will be thwarted if farmers expect to be able to influence future payment benefits by current production choices. For example, they might increase yields by using more inputs if they believe that future benefits are likely to be linked to yields in years after the initial base period.

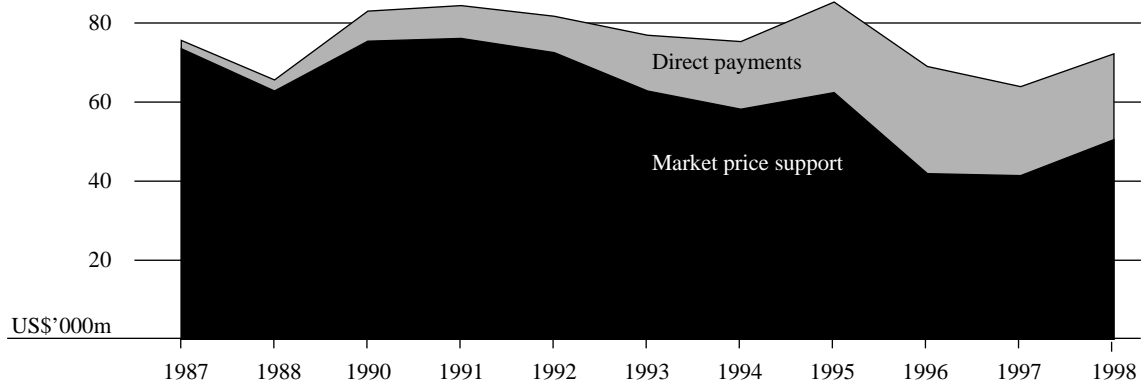
US direct support payments for major crops since 1996 are relatively decoupled in a direct sense. However, US producers are still not responding to world market prices because of other forms of support including loan rates, marketing loans and cotton competitiveness subsidies. So, the US support system for wheat, feed grains and cotton is not fully decoupled. These other forms of support are within the very liberal limits agreed under the Uruguay Round.

The US government markedly increased direct support payment rates in 1998 when world prices fell. However, this was done in a way that meant that US producers still respond at the margin to much the same prices as they would face without the additional support. So the additional payments may not have had a direct effect on producers' incentives. However, the higher payments when world prices are lower could provide a signal to producers that future price risks will be offset by increases in direct payments. This could, over time, reduce incentives for farmers as a group to diversify investments and could result in higher levels of farm production. Also, if the increase in support indicates to US farmers that the mechanism for adjusting payments in future years may depend on their production decisions, then the degree of decoupling in the present arrangements could be eroded. Furthermore, the extra payments could reduce growers' expectations of risk, reducing their responsiveness to market conditions.

The switch away from market price support toward direct payments in the European Union is shown in figure 7. Support under the production limiting arrangements adopted by the European Union for arable crops (grains, oilseeds and protein crops) and beef since 1992 is excluded from agreed cuts to domestic support. Such support, which includes compensation payments for crops and headage payments for cattle, retains definite production distorting elements. For crops, individual farmers receive payments on areas actually planted subject to commitments under area reduction programs, although there are supposed to be regional limits to payments. Such arrangements lock in production capacity at around base period levels while advances in productivity, in particular, the responsiveness of cereal production to fertilisers, are continuing to increase production. For beef, the extent to which the direct payments have replaced price support is less than

Figure 7: EU agricultural support

**ABARE**



for cereals. Headage payments are linked to animal numbers and provide incentives to sustain animal numbers and production at around the distorted base period levels.

The EU support systems for both arable crops and beef remain hybrids of price support backed up by border measures and export subsidies and direct payments. Price support levels are now much lower than before 1992, the reductions having been replaced by the compensation and headage payments. On that part of support represented by the difference between world prices and internal prices, the system remains as market distorting as ever. There are some decoupling elements for arable crops because payments are based on past, not current, yields. However, this does not appear to have been effective so far in reducing the intensity of production.

Overall the reforms in the European Union since 1992 have amounted to replacement of very market distorting arrangements by somewhat less but still markedly distorting arrangements that lock in most of the previous production distortions. However, these reforms have reduced the extent of consumption distortions arising from the high levels of market price support that previously applied.

## Threats to the success of the negotiations

Several threats to the coming agriculture negotiations can be readily identified. In particular, some governments may be attracted to protectionist policies rather than outward looking trade oriented approaches.

## The Asian currency upheavals

Following the Asian currency crisis there is a risk of some of the directly affected countries looking inward. There are also risks from the depressed world import demand situation

and the currency appreciation that has occurred in developed countries. In the United States, for example, farmers' incomes have been affected by both lower export demand and an appreciated currency. A result has been a large upsurge in agricultural support. Generally the United States is an advocate of trade liberalisation to attain the benefits of economic growth. Its advocacy, in practice, in that role will be important to the success of the negotiations.

The extent of the impact of the Asian upheavals on the agricultural negotiations will partly depend on the timing of recovery in the affected Asian countries. While some signs of economic recovery are emerging, full recovery will require significant structural reforms. These reforms will need to be successful if sustainable economic growth is to be achieved.

### **US 'fast track' authority**

US support of more liberal trading arrangements and less distorted markets will be important for a successful outcome from the coming negotiations. As yet the US Congress has not given 'fast track' authority for the coming negotiations. Such authority would enable any agreement reached to be rapidly considered by the Congress and either accepted or rejected entirely. Absence of this authority would allow Congress to accept, reject or modify individual components of the agreement. Such a situation could place limits on what the United States is prepared to accept in the negotiations. It could even prevent a final 'agreement' being reached in the agricultural negotiations. While lack of 'fast track' authority represents a major threat to reaching final agreement, it will not prevent the negotiations from commencing. However, granting fast track authority would provide an important signal that the United States is committed to achieving a successful outcome to the negotiations.

### **'Multifunctionality' of agriculture**

Another possible threat to negotiations could arise from the increasing emphasis that is being placed on the so-called 'multifunctional' nature of agriculture, particularly in developed countries with high levels of agricultural protection.

Advocates of the concept of 'multifunctionality' emphasise the unpriced spillover benefits of agriculture that are additional to the supply of food and fibre. The focus of this argument is on benefits ranging from environmental values, rural amenities, cultural values, rural development and rural employment. In a policy context, the provision of agricultural support is seen in some countries as an appropriate mechanism to enhance these benefits.

However, in addition to the positive spillovers from agriculture there are negative spillovers. These include environmental damage, such as chemical and animal effluent leaching into water supplies, increased salinity and loss of vegetation. Further, there is

considerable evidence that protecting agriculture worsens the negative spillovers (US Environment Protection Agency 1990; Mahé and Ortalo-Magné 1999).

It is important to recognise that using agricultural protection in one country to obtain multifunctional benefits lowers the benefits from agriculture, including multifunctional benefits, everywhere else. This includes developing countries.

A more efficient and potentially more effective approach to achieving multifunctional objectives is to use specific payments that are targeted at providing the multifunctional outcome. Indeed, there are already targeted policies explicitly aimed at achieving some of the multifunctional spillover benefits. Where this is the case, the spillovers are already being addressed. Consequently, there is no basis for pursuing those benefits through broad based agricultural protection. As the protection is not being targeted at the specific objective, this approach is neither effective nor efficient. Therefore, there is no justification for supporting domestic prices above world prices or for general agricultural subsidies in order to achieve multifunctional objectives.

### **Regional trading blocs**

Developments in regional trading blocs is another factor that could affect the effectiveness of the coming negotiations. In particular, the European Union is pursuing a process to expand membership to include several eastern European countries. Levels of agricultural support in these potential members are currently well below those in the European Union. In the next agricultural negotiations it will be important to ensure that commitments on agriculture that individual countries enter into cannot be weakened or avoided through those countries joining a trading bloc in the future.

### **The situation of developing countries**

The implications of trade liberalisation for developing countries are important both for the success of the next negotiations and for the advancement of these countries' economies.

In the Uruguay Round developing countries were accorded special and differential treatment allowing them lower cuts to tariffs, a longer implementation period and wider exemptions from cuts to domestic support than developed countries.

There is a wide diversity among developing countries in their resource endowments, stage of development and economic and institutional structures. Most have much lower levels of agricultural protection and support than the large developed countries, but some have substantial protection.

In many developing countries, institutions that support efficiently functioning markets, such as secure and readily transferable property rights and legal and administrative systems that enable low cost transactions, are not as well established as in developed countries. Many also have inadequate infrastructure. Many have skewed income and property distributions and some groups in society may be largely excluded from benefits from trade reform. In such cases institutional reforms and infrastructure development together with trade and investment liberalisation will be required to realise their economic growth potential and the welfare improvements that this can bring.

As already discussed, protection in industrialised countries can have serious negative economic impacts on developing countries. The imposition of such costs on developing countries is unjustified. In any case, with increasing globalisation, the costs and risks from not opening up economies are increasing.

In the coming negotiations, developing countries can choose approaches ranging from seeking liberalisation for a wide range of sectors including agriculture in developed countries as well as for themselves, to defending their own support and not exerting pressure on developed countries to liberalise. The former has promise of economic gains to themselves as well as for developed countries. The latter has the likely outcome of reducing economic gains both domestically and globally.

As market distortions from agricultural protection are greatest in developed countries, liberalisation for agriculture will result in a reorientation of agricultural production toward developing countries that have the comparative advantage to become larger exporters. Developing countries as a group would benefit from agricultural liberalisation.

Agricultural exporting developing countries and those that emerge as exporters clearly benefit from agricultural liberalisation. The situation is less clear for agricultural importers as world agricultural prices would be somewhat higher than without liberalisation and, depending on the effect in stimulating domestic food production, food import bills could rise. Because some will not have a comparative advantage in agriculture, multilateral liberalisation is important for a wide range of activities, giving such countries opportunities to benefit overall from gains from trade in other sectors.

The main potential for market growth in food demand is in developing countries. However, that potential will only be realised with economic growth. Trade liberalisation and, for many, other institutional reforms and infrastructure development, will be prerequisites for realising their growth potential.

## Concluding comment

The next WTO negotiations represent a moment of truth for multilateral trade reform in agriculture. Much preparatory work has gone into bringing agriculture fully into the multilateral trading system. But, that work will be of limited value unless market distortions in agriculture can be reduced substantially toward levels for other major traded goods.

## References

- OECD 1999, *Agricultural Policies in OECD Countries: Monitoring and Evaluation: 1999*, Paris.
- Gravelle, H. and Rees, R. 1992, *Microeconomics*, 2nd edn, Longman, London.
- Hertel, T.W. 1997, *Global Trade Analysis: Modeling and Applications*, Cambridge University Press, Cambridge.
- Mahé, L.P. and Ortalo-Magné, F. 1999, 'Five proposals for a European model of the countryside', in CAP and the Countryside, *Economic Policy*, April.
- Tyers, R. and Anderson, K. 1992, *Disarray in World Food Markets: A Quantitative Assessment*, Cambridge University Press, Cambridge.
- US Department of Agriculture 1999, *Agricultural Outlook*, June-July, Economic Research Service, Washington DC (and previous).
- US Environment Protection Agency 1990, *Agriculture and the Environment: OECD Policy Experiences and American Opportunities*, Washington DC.