

australian commodities

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global trade liberalisation

opportunities for Australian farmers

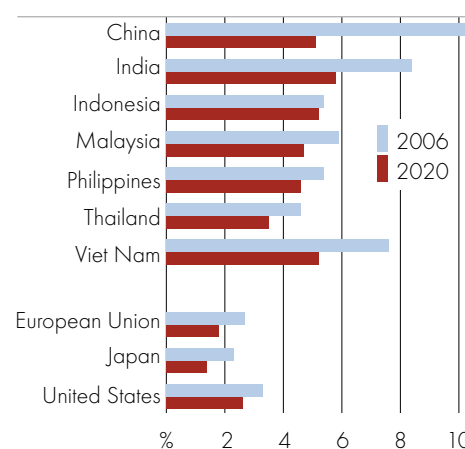
> roneel nair, q.t. tran, caroline gunning-trant, roslyn wood and don gunasekera

- » **Global merchandise trade liberalisation would be expected to generate substantial benefits for the international community, including Australia. Two illustrative merchandise trade reform scenarios, analysed here, provide broad insights into the probable changes in agricultural trade.**
- » **Global merchandise trade liberalisation would boost Australia's agricultural exports by an estimated US\$9 billion (in 2006 dollars) in 2020, relative to what would otherwise be the case (the 'reference case'). There would also be considerable global benefits, with world agricultural trade estimated to expand by more than US\$286 billion in 2020, relative to the reference case.**
- » **Much of the expansion in Australia's agricultural exports occurs in the dairy, beef, sugar and wheat industries. Australian dairy product exports are estimated to increase in value by 39 per cent and beef exports by 34 per cent in 2020, relative to the reference case.**
- » **If bound merchandise tariffs and subsidies were cut by 50 per cent rather than eliminated, then estimated agricultural exports in 2020, relative to the reference case, would rise by less than half of the estimated gains under the global merchandise trade liberalisation scenario.**

introduction

A successful outcome in the Doha Round of multilateral trade negotiations under the World Trade Organisation (WTO) would stimulate the growth of new markets created by evolving consumption patterns internationally, particularly in rapidly growing developing countries. For many of these countries, accelerating consumer demand for agricultural products will be met through international trade because the resources required to produce goods domestically are not always located in areas where markets are expanding, and where consumption is growing at a faster pace than domestic

fig A GDP growth rates



trade reform

production. Australian farmers are well placed to secure access to many of these markets, especially those in developing countries where income and population growth translate into increased purchasing power.

In China and India, the world's most populous countries, rates of economic growth in 2006 were 11 per cent and 8 per cent respectively. By 2020, GDP growth rates are projected to be 5 per cent in China and 6 per cent in India (figure A). One recent trend that deserves emphasis is the robust economic performance of prominent south east Asian countries: the resurgence of Indonesia, Malaysia, the Philippines and Thailand, and the emergence of Viet Nam, as it integrates into the world economy.

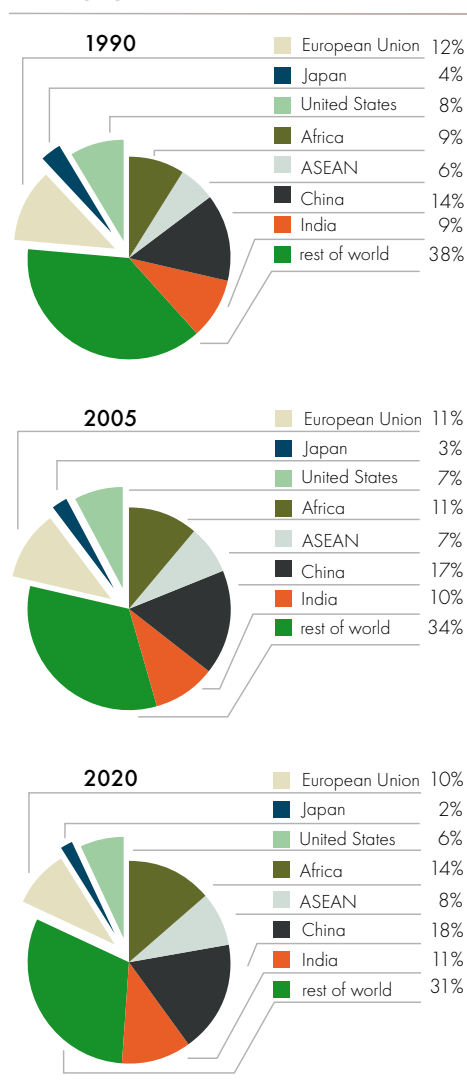
In addition to economic growth, rapid urbanisation in developing countries – associated with sustained, broadly based economic growth – will expand demand for livestock

products, horticultural products and processed food. Between 1990 and 2020, developing countries' share of the global urban population is projected to rise appreciably. For example, China's share of the global urban population is projected to expand from 14 per cent in 1990 to 18 per cent in 2020; for India it is projected to increase from 9 per cent in 1990 to 11 per cent in 2020. Together, the Association of South East Asian Nations (ASEAN) region and Africa are also likely to account for a rising share of the global urban population, albeit from a lower base compared with China and India (figure B). The anticipated expansion in world food consumption, as urban populations in developing countries diversify their diets, will require a sizable shift in global trading patterns.

Future growth in Australian agricultural exports, however, depends not only on changes in world population and income but also on the multilateral trade rules that countries agree to follow. In an increasingly competitive global market, Australian farmers rely on the existence of a more open, rules based international trading system. A large proportion of Australian agricultural production is exported, and prices received for these products are closely linked to world prices that are often distorted by agricultural protectionism and subsidisation in key countries.

The potential benefits of freer agricultural trade motivated WTO member countries to initiate the Doha Round of trade negotiations and to revise and expand the trade rules that were established in the Uruguay Round. The will to achieve open markets has not waned, despite the suspension of the negotiations in July 2006. It is important that the Doha Round outcome offers the prospect for greatly expanded trade, and opportunities for Australian agriculture to position itself to benefit from major changes in the world economy in coming decades.

fig B share of global urban population



box 1 commodity programs in the 2007 US farm bill

On 31 January the US Department of Agriculture (2007) announced its 2007 farm bill proposals. The proposals largely correspond to 2002 farm bill titles. The proposed commodity programs (title 1) include:

proposed commodity program

ABARE analysis

changes to marketing loan rates

New loan rates based on the crop's average market price over five years (excluding high and low years), with maximum loan rates as established in the House of Representatives approved version of the 2002 farm bill.

Loan rates in the proposal have been determined under the assumption that prices for grain and oilseeds are expected to remain at high levels. Given this, it is anticipated that marketing loan payments would be lower over the short to medium term.

new countercyclical payments for program crops

Replacing countercyclical payments based on price with countercyclical payments based on revenue.

The proposed countercyclical payments program would remain linked to crop prices, but the link is now weaker. On the basis of current price projections, spending under the new program is likely to decrease over the short to medium term.

additional income support

Increasing direct payments by \$5.5 billion over ten years.

The direct payment rate for upland cotton would increase from 6.67c/lb to 11.08c/lb. Additional direct payments to producers of upland cotton seem to coincide with the WTO Cotton Panel ruling that required the Congress to repeal step 2 provisions for upland cotton. While domestic prices for program crops are generally forecast to increase over the next few years, upland cotton is the exception, partly because step 2 was repealed.

planting flexibility

Allowing planting flexibility for fruits, vegetables and wild rice on program crop base acres.

This modification is consistent with the WTO Cotton Panel ruling, and would decrease the vulnerability of US direct payments to any challenges under the WTO.

revised dairy and sugar programs

Reauthorise the Milk Income Loss Contract (MILC) program.

The support price for milk would remain unchanged at US\$9.90/cwt. With payments on a historical base, and a declining payment for the price shortfall, expenditure under the reauthorised MILC program is estimated to decline over the short to medium term.

Balance sugar supply and demand, and prevent price support forfeitures.

The loan rate for sugar would remain unchanged at 18c/lb. It appears that a revised marketing allotment program would be used to enable lower domestic production of sugar, and accommodate the sugar import arrangements with Mexico under the North American Free Trade Agreement.

The changes to farm programs under the US Administration's farm bill proposals reflect adjustments to approaches under the 2002 farm bill, rather than an overhaul of existing farm policies.

The farm bill proposals appear to be moving in the right direction, and will help to progress the Doha Round negotiations, however there is scope for further cuts to trade distorting support. An opportunity still exists for the Administration and the Congress to reform current trade distorting farm programs and contribute to a successful Doha Round outcome.

suspension of the Doha Round

In suspending the Doha Round on 24 July 2006, WTO Director-General Pascal Lamy urged WTO member countries to take 'time out to review the situation, time out to examine the available options and time out to review positions'. The progress made on the various elements of the negotiating agenda up to July 2006, including the key outcomes of the Hong Kong ministerial meeting in December 2005, was put on hold, pending the resumption of the multilateral trade talks when the negotiating environment was appropriate (WTO 2006a).

On 16 November 2006, the Director-General convened a meeting of the Trade Negotiations Committee in Geneva to propose the resumption of work 'across all areas of the negotiations' (WTO 2006b). On 14 December 2006, he reported to the General Council in Geneva and stressed the need to 'maintain the rhythm of the informal work in order to exploit the window of opportunity that remains in the first quarter of 2007' (WTO 2006c).

The Director-General resumed negotiations 'fully across the board' on 7 February 2007. 'Political conditions are now more favourable for the conclusion of the Round than they have been for a long time. Political leaders around the world clearly want to get fully back to business, although we in turn need their continuing commitment', he added (WTO 2007).

reform ambitions of major players need to aim higher

It is essential that the major players in the multilateral trade negotiations move to break the current impasse, and return to the negotiating table with improved offers. The European Union and developing countries have to accept high cuts to agricultural tariffs, and the United States needs to do more by way of both increased cuts and meaningful disciplines on agricultural subsidies.

With consideration of a new US farm bill scheduled for 2007, there is an opportunity for the United States to reform its farm policies (Bertini et al. 2006; Thompson 2005). A new farm bill could potentially be shaped to improve the overall welfare of the US farm sector and generate gains for others (Nair et al. 2005; McDonald et al. 2006) – see box 1 for preliminary analysis of the 2007 US farm bill proposals. However, it is unlikely that the Doha Round negotiations could be finalised within the term of the current US Trade Promotion Authority, which is scheduled to expire on 1 July 2007. US trade negotiations may be constrained unless the term of the current authority is renewed or temporarily extended (Congressional Research Service 2006).

importance of policy reform

Governments often resist trade liberalisation because of concerns about the ability of some domestic industries to adjust to changing market conditions. This perspective ignores the fact that industry adjustment is a continuous process caused by changes in economic conditions and other circumstances. The adjustment process involves resources shifting between alternative uses in the economy, according to changes in relative returns. When the resources required to produce goods domestically are not located in areas where markets are expanding rapidly, policy interventions such as trade barriers and subsidies allow certain industries to attract resources that would otherwise earn a higher return in other areas of the economy. Trade barriers and subsidies enable these industries to divert resources, distort markets and impose costs on other sectors in the economy. As a result,

global production patterns will not accord with how much of a commodity should be produced, how it is produced, and where it should be produced.

Genuine policy reform improves the allocation of resources, spurs enterprises toward their competitive advantage, and strengthens incentives to respond to market signals and take steps that generate benefits associated with improved industry competitiveness. Managing the transitional adjustment pressures from policy reform is an important issue for many countries, most notably in developing countries that have had limited experience in dealing with the domestic consequences of policy reform; partly because of inadequate governance, infrastructure and institutions. However, it is the case that open economies grow faster and are more dynamic. To delay opening up would only serve to attenuate or dilute the process of change, and prolong the period of time during which domestic industries face less competition from imports. This approach to policy reform is likely to perpetuate slow income growth and inhibit economic development.

Adjustment is a necessary aspect of the long term performance of industries, and the benefits from policy reform can only be obtained if industry adjustment is allowed to occur after reforms are implemented. The advantage of allowing world market prices to facilitate and guide the adjustment process is that it encourages producers to assess future prospects, consider options for change, and take appropriate action. Their response will be to alter production decisions, generate enterprise restructuring and diversification, or switch to activities in other sectors.

Policy reform can lead to positive industry adjustment. This is evident in countries that have undergone agriculture sector deregulation and industry restructuring, namely New Zealand and Australia. Consequently, the agricultural adjustment experiences of New Zealand's agriculture sector and Australia's dairy industry may provide some useful insights into the future policy reform direction for agricultural industries that are recipients of protection and subsidies.

benefits of global agricultural trade liberalisation

The global agriculture sector has retained more resources than would otherwise have prevailed in the absence of high rates of assistance, primarily because trade barriers and subsidies for agriculture tend to be higher than assistance provided to other sectors. As such, agricultural trade liberalisation presents the greatest potential for realising the economic benefits from opening up markets for merchandise products.

Additional benefits are likely to flow from liberalising barriers to trade in other merchandise products, typically manufactured goods. Nonagricultural market access (NAMA) liberalisation has an important role in partially offsetting losses borne in regions dependent on low international food prices or preferential access to agricultural markets. Agricultural trade liberalisation, in conjunction with NAMA liberalisation, would offer significant scope for many rural workers in developing countries to take up employment opportunities in labour intensive manufacturing activities.

WTO member countries, including Australia, stand to gain significantly from liberalising global merchandise trade. This is reflected in the estimated potential benefits from such an outcome. Two illustrative scenarios are analysed, with the aim of providing broad insights into the prospective changes in agricultural trade, and highlighting the scope for expansion in Australia's exports of key agricultural commodities, and the gross value of agricultural production.

description of illustrative trade reform scenarios

In the two scenarios described in table 1, it is assumed that the specified illustrative merchandise trade reform will be gradually implemented over a five year period, for both developed and developing countries, commencing in 2007.

Scenario 1 aims to provide insights into the maximum potential benefits of merchandise trade reform. Scenario 2 demonstrates that a 50 per cent cut is unlikely to guarantee substantial trade expansion. Trade negotiations under the WTO are based on reductions to bound tariffs and subsidies (maximum levels that member countries agree not to exceed). Actual applied levels cannot exceed the bound levels. This distinction between bound and applied levels is crucial to analysing trade policy reform, because many countries maintain applied tariffs and subsidies – for key agricultural industries – beneath the bound levels that they commit to under the WTO.

The extent of trade reform under scenario 2 depends on the depth of the cut to scheduled bindings, and whether such reductions lower applied tariffs and subsidies. When reform is undertaken in scenario 2, applied tariffs and subsidies would only be lowered when reductions in bindings eliminate the gap between bound and applied levels, otherwise known as ‘binding overhang’. In these cases, applied tariffs and subsidies would be reduced to the level of the new bindings. Conversely, negotiated cuts that do not remove the ‘binding overhang’ will not allow additional trade to occur.

key scenario assumptions

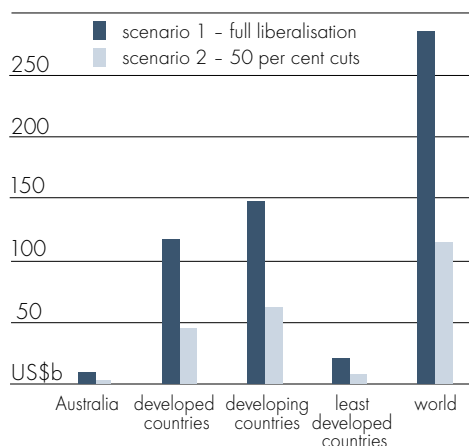
| | scenario 1 | scenario 2 |
|-------------------------------|------------|------------|
| agriculture sector | | |
| tariffs | | |
| - applied | eliminate | |
| - bound | | 50% cut |
| trade distorting support | | |
| - applied | eliminate | |
| - bound | | 50% cut |
| export subsidies | | |
| - applied | eliminate | |
| - bound | | 50% cut |
| nonagricultural sector | | |
| tariffs | | |
| - applied | eliminate | |
| - bound | | 50% cut |

quantitative analysis of scenarios

ABARE’s global trade and environment model (GTEM) is used to analyse the two scenarios. GTEM is a dynamic computable general equilibrium model of the world economy and is based on the GTAP version 6 database (Global Trade Analysis Project model). It captures inter-sectoral effects and links regions through trade and investment, making it a suitable tool to analyse the effects of trade reform. Detailed information on GTEM is available on ABARE’s website (www.abareconomics.com).

The GTEM simulation results are expressed, unless otherwise stated, as deviations from the corresponding levels in the ‘reference case’, where current policies are maintained. Simulation results are reported for 2020. Additionally, in reporting the simulation results, values are expressed in 2006 US dollars.

fig C change in agricultural exports, 2020



simulation results

The estimated changes in agricultural exports under each of the scenarios, relative to the reference case, are shown in figure C.

scenario 1 – multilateral merchandise trade liberalisation

In this scenario, Australian agricultural exports are estimated to expand by US\$9 billion in 2020, relative to the reference case (figure C). In addition, world agricultural trade is estimated to increase by US\$286 billion in 2020, relative to the reference case. Nearly 60 per cent of this total gain would accrue to developing countries. Agricultural exports from Brazil and Argentina together are estimated to account for an eighth of the total gain. Together, agricultural exports from the United States and Canada account for nearly half of the estimated rise in total agricultural exports from developed countries.

scenario 2 – multilateral cuts to bound merchandise tariffs and subsidies

When bound merchandise tariffs and subsidies are cut by 50 per cent, it is estimated that Australian agricultural exports would rise by just US\$3 billion in 2020, relative to the reference case (figure C). For the world overall, the estimated expansion in agricultural exports is only US\$115 billion in 2020, relative to the reference case. That is, the potential benefits attainable under scenario 2 are estimated to be less than half of the benefits under scenario 1 where barriers to merchandise trade are eliminated globally. This can be attributed to the presence of ‘binding overhang’ that results in minimal cuts to applied tariffs and subsidies.

benefits of adding nonagricultural trade liberalisation to reform package

- » Extending trade liberalisation to the nonagricultural sector (excluding the services sector) would provide for flow-on benefits to the agriculture sector. In fact, with wider coverage of sectors in trade liberalisation, the estimated resulting increase in global agricultural trade (US\$286 billion) would be 12 per cent greater than the expansion under agricultural trade liberalisation alone (US\$255 billion) (table 2).
- » Liberalisation of agricultural tariffs and subsidies with full merchandise trade liberalisation would yield an estimated 24 per cent of the US\$1.17 trillion boost to world merchandise exports (table 2). This is significant, given that the share of agricultural products in world merchandise exports is currently less than 9 per cent.

2 change in exports with trade liberalisation, 2020

| | agricultural | merchandise |
|---|--------------|-------------|
| | US\$b | US\$b |
| agricultural trade liberalisation alone | 255 | ne |
| merchandise trade liberalisation | 286 | 1 171 |

ne Not estimated.

benefits for major Australian agricultural industries

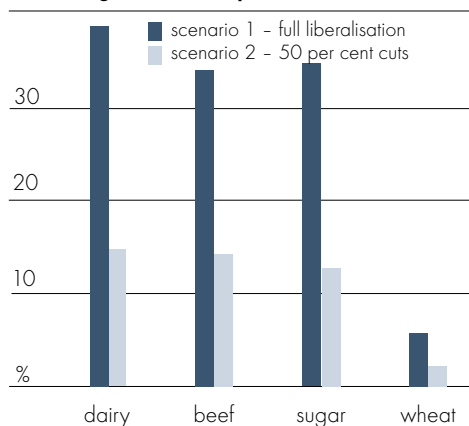
change in agricultural exports

Most of the estimated expansion in the value of Australian agricultural exports occurs in industries such as dairy products, beef, sugar and wheat. The estimated effects on major Australian agricultural exports under each of the scenarios, relative to the reference case, are shown in figure D.

The **dairy** industry is expected to experience the largest increase in exports. Under scenario 1, the value of dairy exports is estimated to expand by 39 per cent in 2020, relative to the reference case. Scenario 2 generates a smaller change in trade, increasing the value of exports by 15 per cent in 2020, relative to the reference case (figure D).

Global merchandise trade liberalisation in scenario 1 would also contribute to increased exports of **beef**, with the estimated expansion in the value of trade being 34 per cent in 2020, relative to the reference case. Under scenario 2, the value of beef exports rises by

fig D **change in value of Australian agricultural exports, 2020**



14 per cent in 2020, relative to the reference case (figure D).

Similarly, comprehensive merchandise trade reform would boost the value of **sugar** and **wheat** exports by around 35 per cent and 6 per cent in 2020 respectively, relative to the reference case. On the other hand, the expansion in the value of exports under scenario 2 is much more muted – estimated to be 13 per cent and 2 per cent in 2020 respectively, relative to the reference case (figure D).

While the value of Australian exports of dairy products, beef, sugar and wheat is estimated to increase under both scenarios, the boost to exports under scenario 2 is less than half of the expansion in exports under scenario 1, because of the tariff ‘binding overhang’ in several key markets for major Australian agricultural exports (figure E).

tariff ‘binding overhang’ in some of Australia’s markets

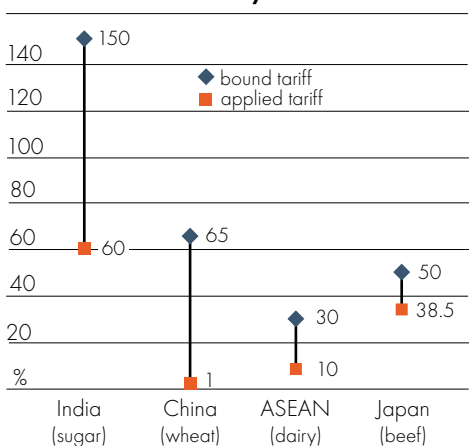
India accounts for 14 per cent of world sugar consumption and has an applied tariff on sugar of 60 per cent. However, the scope for additional trade in sugar is limited because India has a bound tariff of 150 per cent. This tariff would need to be reduced by over 60 per cent before there was any growth in Indian sugar imports.

China has a bound tariff on wheat of 65 per cent, and an import tariff quota with an in-quota tariff of 1 per cent. China’s imports of wheat under the tariff quota are well within the specified limit because quota administration regulations allow state trading enterprises to control 90 per cent of the quota. Hence, a cut to China’s bound tariff on wheat would need to be accompanied by reform of tariff quota administration.

Increased consumption of cheddar cheese, butter and milk powder in **ASEAN** member countries is expected to be a driver of future export potential for Australian dairy products. The ASEAN trade weighted bound tariff on dairy products is 30 per cent, but the trade weighted applied tariff is only 10 per cent. This indicates that sizable cuts to bindings would be required to provide additional access to the growing ASEAN market.

Japan accounts for only 2 per cent of global beef consumption, but imports nearly 58 per cent of its domestic consumption of beef. The bound tariff on beef is 50 per cent, while the applied tariff is 38.5 per cent (when the ‘snapback’ safeguard mechanism is not in effect). This means that a bound tariff cut in excess of 23 per cent would be required to expand beef exports from Australia. In recent years, beef import volumes in Japan have declined in response to import bans and food safety concerns associated with discoveries of BSE (bovine spongiform encephalitis).

fig E **tariff ‘binding overhang’ in some of Australia’s key markets**



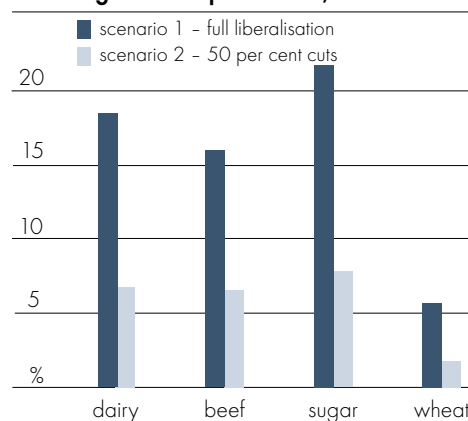
lopathy or 'mad cow' disease) in the United States and Canada, and FMD (foot and mouth disease) in south America. If these countries achieve disease-free status, there may be greater potential for increased global trade in beef.

change in gross value of agricultural production

Under scenario 1, there is also a substantial increase in the gross value of production of major Australian agricultural industries, such as dairy products, beef, sugar and wheat (figure F).

In the event of global merchandise trade liberalisation, the gross value of dairy production is estimated to rise by 19 per cent in 2020, of beef by 16 per cent, of sugar by 22 per cent, and of wheat by 6 per cent, relative to the reference case. Under scenario 2, the estimated increase in 2020 is much lower than under the first scenario. Again, this reflects the tariff 'binding overhang' in several key markets for major Australian agricultural exports. Relative to the reference case, the expansion in the gross value of production is estimated to be 7 per cent for dairy products, 7 per cent for beef, 8 per cent for sugar and 2 per cent for wheat (figure F).

fig F **change in value of Australian agricultural production, 2020**



concluding remarks

Among a range of policy implications that can be drawn from the simulation results, several are worth highlighting.

- » First, with prospective gains in the order of US\$286 billion at stake, all that remains is for the political will to be found to initiate merchandise trade liberalisation.
- » Second, the analysis suggests that, because of 'binding overhang', the benefits conferred by a negotiated 50 per cent cut to bindings would pale in comparison with the benefits from freeing global merchandise trade.
- » Third, the findings support the expectation that developing countries would be among the major beneficiaries of merchandise trade liberalisation – that is, nearly 60 per cent of the total US\$286 billion gain would accrue to developing countries.

It is important to recognise that the analysis is illustrative, and the magnitudes of the benefits realised under the scenarios should be interpreted as only a broad indication of the expected effects of global merchandise trade liberalisation on the agriculture sector. For example, the scenarios do not incorporate changes to tariff quota administration regulations, or any total factor productivity gains associated with domestic and trade policy reforms.

references

- Bertini, C., Schumacher, A. and Thompson, R. 2006, *Modernizing America's Food and Farm Policy: Vision for a New Direction*, Chicago Council on Global Affairs, Illinois.
- Congressional Research Service 2006, *Trade Promotion Authority (TPA): Issues, Options, and Prospects for Renewal*, Washington DC, December.
- McDonald, D., Nair, R., Podbury, T., Sheldrick, B., Gunasekera, D. and Fisher, B.S. 2006, *US Agriculture without Farm Support*, ABARE Research Report 06.10, Canberra, September.
- Nair, R., Chester, C., McDonald, D., Podbury, T., Gunasekera, D. and Fisher, B.S. 2005, *Timing of the US Farm Bill and WTO Negotiations - A Unique Opportunity*, ABARE eReport 05.11, Canberra, November.
- Thompson, R. 2005, 'Essentials for the 2007 farm bill in a global context', *Cordell Hull Institute Trade Policy Analyses*, vol. 7, no. 6, July.
- US Department of Agriculture 2007, *Title 1: Commodity Programs*, USDA 2007 Farm Bill Proposals, Washington DC (www.usda.gov/documents/07title1.doc).
- WTO (World Trade Organisation) 2006a, Trade Negotiations Committee meeting on 24 July 2006, Geneva.
- 2006b, Trade Negotiations Committee meeting on 16 November 2006, Geneva.
- 2006c, General Council meetings on 14 and 15 December 2006, Geneva.
- 2007, General Council meeting on 7 February 2007, Geneva.