AUSTRALIA'S APEC AGENDA—IMPLICATIONS FOR AUSTRALIA AND CHINA

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Trade between two countries can be impeded by a variety of constraints. Some are the consequences of government policy; for example, border barriers to trade. Others include internal constraints, such as local business practices in the importing country. These too may be the consequence of deliberate policy choices. They may also reflect features of local markets and the stage of development of the importing country, including the depth of its institutions which reduce transactions costs. This chapter considers both types of impediments. The focus is on the economic relationship between Australia and China, and Australia’s APEC agenda is examined to determine how it might affect some of these impediments.

An APEC member’s commitments are codified in its Individual Action Plan (IAP). The IAPs were first released at the Manila meetings of APEC in 1996 and further developed—to involve a greater degree of standardisation in the format—during the Vancouver meetings in 1997.

All the IAPs are organised under 15 headings: tariffs, non-tariff measures, services, investment, standards and conformance, customs procedures, intellectual property rights, competition policy, government procurement, deregulation, rules of origin, dispute mediation, mobility of business people, implementation of Uruguay Round outcomes and information gathering and analysis.

Some features of the IAP for Australia are examined in the next section. We identify its implications for the reduction of Australian tariffs. We then review some aspects of Australia’s proposals for the early voluntary sector liberalisation process, and its implications for bilateral trade. Later, the role of government in reducing the costs of doing business between Australia and China is considered and the issue of whether the Australian IAP makes a contribution to reducing those costs is discussed.
LIBERALISATION

Our main focus in this section is on the implications of Australia's commitments on tariffs for the bilateral relationship. Towards the end of this section, however, we also offer some brief remarks on other aspects of the IAP relatively important to China.

TARIFFS

The features of Australia's tariff commitments in its IAP are:

- commitments on tariffs are only made up to the year 2000, rather than 2010 which is the target date for developed countries in the APEC process;
- the exceptions are the sensitive sectors of passenger motor vehicles (PMV) and textiles, clothing and footwear (TCF), where commitments are made to 2005;
- the general commitment is for tariffs in the range of 0 to 5 per cent by 1997 and a review by 2000 or earlier;
- PMV tariffs are to fall from 22.5 per cent (15 per cent for parts) in 1997 to 10 per cent in 2005 and a review of post-2005 tariffs in 2005;
- TCF tariffs are to fall from an average of 34 per cent in 1997 to 17.5 per cent in 2005 with a review of post-2005 tariffs in 2005;
- other specific provisions are listed for sugar, vegetables and cheese.

The tariff policies on PMV and TCF were announced in 1997. They represent a retreat from earlier Australian commitments to programs of steady reductions in tariffs. The average tariff applied to PMV is to fall to 15 per cent in 2000, where it will remain until 2005, after which it will drop to 10 per cent. Similarly, while the average tariff on TCF products will fall to 25 per cent in 2000, it will stay at that level until 2005, when it will drop to 17.5 per cent.

These 'pauses' in the schedules of tariff reductions between 2000 and 2005 were contrary to the advice of the Productivity Commission. The Commission argued that a schedule of regular cuts is preferred to a relatively long period of no change. It proposed a series of reductions in tariff rates to 5 per cent by mid-2008.2

Furthermore, the pause and the manner in which it was decided is likely to make it more difficult in the process of reviewing tariffs beyond 2005 to commit to further schedules of reductions. By adopting a 'pragmatic' position, the government has increased the expectation of future rewards to political activity by the interest groups who stand to gain from a pause.

There is some evidence, however, that the broad commitments to APEC were important in leading to commitments by Australia to cut tariffs in 2005. The risk was that without commitments, the schedules might have been open-ended, finishing with a simple commitment to later reviews rather than a tariff cut in 2005.
Our particular interest here is the impact of the Australian tariff commitments and of these commitments on trade with China.

We summarise those effects by calculating Australia's average tariff as perceived by each APEC member. This average is calculated by weighting the Australian tariff in each commodity group (at the 6 digit HS tariff classification) by the value share of imports from a country in that group. The results, obtained from the APEC Impediments Measurement System (AIMS), are reported in Table 4.1. The 1997 column refers to current most-favoured nation tariff rates (preferential rates are not taken into account) and that for 2005 assumes that all the listed IAP commitments on tariffs are implemented. Weights used to calculate the average in both columns are the shares in total imports from the source country of each commodity group in 1996.

Australia's IAP commitments will lead to significant reductions in Australia's average tariff, from 4.3 per cent in 1997 to 3.5 per cent in 2005—a reduction of 19 per cent in the average tariff. It also leads to a significant reduction in tariffs applied to imports from non-APEC members.

The average tariff applied by Australia to imports from China in 1997 was 12.2 per cent, over 2.5 times the APEC average. In 2005, the average tariff applied by Australia to imports from China was 7.4 per cent, now about twice the APEC average.

The high average tariff applied to imports from China reflects the high share of textiles, clothing and footwear in Australia's imports from China (Findlay and Song 1996). As China continues to grow over the next decade, the share of these products in China's exports might be expected to decline and therefore the extent of the impediments applying to Australia's imports from China would also decline. Further work on modelling bilateral trade flows as China grows could be used to capture these effects.

The average tariff rate by country in 1997 is plotted against each country's GDP per capita (Figure 4.1). A simple regression line is fitted to these data. When a dummy variable is added to the equation to test China's outlier position, the regression line becomes horizontal and the China dummy is highly significant. Apparently the composition of China's trade with Australia is driving China to an outlier position.

The IAP commitments will have the effect of the reducing the extent of this impact on China of Australia's tariff structure. Completing those commitments will therefore make an important contribution to an even closer economic relationship between the two economies.

OTHER LIBERALISATION COMMITMENTS

Other elements of Australia's IAP may attract particular interest from China in terms of its access to Australian markets. These include
APEC AND LIBERALISATION OF THE CHINESE ECONOMY

- the phasing out of bounties on ship building which will facilitate market access to Australia by suppliers in Northeast Asia, to which China may be a contributor
- the removal of investment restrictions in the hotels, restaurants, travel agencies, tour operators and tourist guide services, which may be important for Chinese firms aiming to serve the market for Chinese travellers in Australia (and which facilitates Australian exports of those services to China)
- the commitment to review cabotage policy applied to shipping by 2000, the result of which may be more opportunities for Chinese shipping companies

Table 4.1 Australia’s import weighted average tariffs\(^a\) by source

<table>
<thead>
<tr>
<th>Trading partner</th>
<th>1997 weighted average tariff</th>
<th>2005 weighted average tariff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>4.3</td>
<td>3.5</td>
</tr>
<tr>
<td>APEC members</td>
<td>4.5</td>
<td>3.6</td>
</tr>
<tr>
<td>non-APEC members</td>
<td>4.1</td>
<td>3.4</td>
</tr>
<tr>
<td>Brunei</td>
<td>22.7</td>
<td>11.7</td>
</tr>
<tr>
<td>Canada</td>
<td>2.3</td>
<td>2.2</td>
</tr>
<tr>
<td>Chile</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>China</td>
<td>12.2</td>
<td>7.4</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>4.3</td>
<td>3.0</td>
</tr>
<tr>
<td>Indonesia</td>
<td>3.2</td>
<td>2.3</td>
</tr>
<tr>
<td>Japan</td>
<td>5.4</td>
<td>4.4</td>
</tr>
<tr>
<td>Korea</td>
<td>7.0</td>
<td>4.8</td>
</tr>
<tr>
<td>Mexico</td>
<td>3.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Malaysia</td>
<td>3.4</td>
<td>3.2</td>
</tr>
<tr>
<td>New Zealand(^b)</td>
<td>4.8</td>
<td>3.8</td>
</tr>
<tr>
<td>PNG</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Philippines</td>
<td>6.0</td>
<td>5.5</td>
</tr>
<tr>
<td>Singapore</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Thailand</td>
<td>4.5</td>
<td>3.6</td>
</tr>
<tr>
<td>Chinese Taipei</td>
<td>4.1</td>
<td>3.6</td>
</tr>
<tr>
<td>United States</td>
<td>3.3</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Notes:  
\(^a\) Tariffs included in the calculations are most-favoured nation tariff rates. Import values used as weights are those for 1996. The same weights are used for 1997 and 2005.  
\(^b\) Tariffs on imports from New Zealand are also calculated at most-favoured nation rates. The New Zealand number therefore refers to tariffs that would have been imposed on imports from New Zealand had preferences not applied.

Source: APEC Impediments Measurement System (AIMS), compiled by Malcolm Bosworth and Gerard Durand at the Australia–Japan Research Centre at the Australian National University for the Pacific Economic Cooperation Council (PECC).
the alignment of Australia’s non-preferential rules of origin with harmonised rules when adopted by the World Trade Organization (WTO), which removes some of the uncertainties associated with anti-dumping issues and with labelling of goods, in particular when origin of goods has to be defined.

In other cases, commitments in Australia’s IAPs will have greater effects on China’s purchases from Australia. For example, the commitment in Australia’s IAP to remove export licensing arrangements on exports of natural gas, coal, mineral sands, bauxite and alumina, will add to the security of supply in trades in which China may become a more important buyer.

**EARLY VOLUNTARY SECTOR LIBERALISATION**

The tariff rate data illustrate the concentration of Australia’s most sensitive sectors in its trade with other APEC members. The APEC process, including the implementation of IAPs by other members, creates opportunities to deal with these sectors (although defining the counterfactual and thereby specifying APEC’s contribution to that outcome is difficult). Furthermore, these data highlight the importance of APEC continuing to deal with the sensitive sectors, not only in Australia but in all member countries: it is important for the Australia-China

**Figure 4.1** The relationship between Australia's average tariff rates and per capita GDP of APEC member economies (with a dummy variable for China), 1997
relationship that sensitive sectors not be backloaded in any concerted efforts at liberalisation in APEC.

The priorities for liberalisation are being discussed in APEC in the process of determining sectors for early voluntary sector liberalisation (EVSL).

Australia's nominations taken up in the EVSL process were energy products, chemicals and food. Chemicals was also nominated by China (whose other nomination was toys—textiles and clothing was not included in this process). Chemicals was a first tier EVSL sector and food was located in the second tier. We illustrate some of the issues and opportunities involved by reference to the food sector.³

**FOOD**

The food sector as defined for the purpose of the EVSL discussions included some parts of non-grain crops, beverages and tobacco and some other food products. Milk products, meat and livestock, grain crops and processed rice were not included. Fish and fish products are covered by a separate EVSL discussion in the first tier.

The Productivity Commission reports that the original specification of the food sector for EVSL discussion would lead to a loss of real income in a number of APEC economies.⁴ This is due to incomplete coverage of the definition of the sector. The Commission simulates an extension of the coverage of this sector and shows that if the coverage is broad enough then all economies can gain from its liberalisation. According to the Commission's modelling work, however, China gains at all levels of coverage.

China also gains from the fish and fish products proposal. This proposal was designed to deal with tariffs and non-tariff measures, to remove subsidies and to harmonise sanitary and phytosanitary measures.

Supply security. The Commission's assessment of the benefits of early liberalisation of the food sector focuses on the efficiency gains from the reallocation of resources. Policymakers in China have been concerned not only with efficiency of resource use but also with the security of supply of food from world markets. Recent research, however, suggests the value of a new perspective on the supply security issues.

There is a common belief in China that the overall food sector will follow the path of grain trade and face an increasing volume of net imports in China. But we observe strong export growth in some food products which might be explained by the consistency between the factor intensities in the production of those items and China's factor endowments. Food products are heterogenous in terms of their factor intensity. In other words, rapid export growth of those items may be consistent with China's comparative advantage within the agriculture sector.
A shift in the focus of policy towards the efficiency objective might therefore lead to the growth of exports of some foods as well as imports of others.

An important question exists: who will feed China? One response has been that China will feed itself through trade; for example, the export of labour-intensive manufactured products which will finance the imports of grain. From that perspective, China has strong interests in seeing developed economies dealing with sensitive sectors like textiles and clothing. This is significant in the bilateral relationship since Australia at the same time is seeking access to China's grain markets.

There is another way in which China can feed itself and that is through the exchange of 'food for food'. Sources of export income to finance grain imports might emerge, not only from the other export sectors of the economy, but also from within the food sector itself.

This argument applies to food produced at the farm level, for example the export of fruit and vegetables concurrent with the import of grains. The argument also applies at the level of manufactured products, which are also covered by the EVSL process. This point can be illustrated by reference to the trade in manufactured food products between Australia and China. 5

Australia's net export ratios 6 in bilateral trade with China in the manufactured food product sector in 1996 are shown in Figure 4.2. Australia has high ratios for meat products (not shown here) but also for animal feed, wine, beer, sugar products, dairy products and fish products. China, on the other hand, is a large net exporter to Australia of processed fruit and vegetables, bakery products and spirits. Even within this small group of products, there are substantial differences in the patterns of trade in the bilateral relationship. These data also illustrate the scope for China to gain from the liberalisation of this sector in other economies to which China does or might export these products.

Economic and technical cooperation. As Elek and Soesastro point out in Chapter 10, a feature of the EVSL process was to note that liberalisation is linked to economic and technical cooperation, which can improve the productivity of resources employed in the sectors exposed to increased international competition.

The food products sector in China receives a relatively high level of protection. The simple average tariff rate for this sector is nearly 32 per cent, about twice the average for all manufactured product imports into China. In fact, all the rates for this sector are above the average for the rest of manufacturing except that for animal feed. Yet in trade with Australia, it is clear that some of these sectors have the potential for a high degree of international competitiveness. The distribution of tariff rates between sub-sectors (showing the simple average for each sub-sector and the high and low rates within that sub-sector) highlights the degree of variation in this sector and also the high rates on average (Figure 4.3). Relatively high rates are shown for beverages, dairy products, vegetables, and grain mill products (some rates may be redundant). 7
In Australia, the food sector is relatively lightly protected. The average tariff rate is just over 2 per cent (within a range of 0 to 7 per cent). In addition to removing the remaining tariffs, there are other ways in which Australia can contribute to growth in trade in this sector between the two economies, and to China’s export performance in third country markets.

There is substantial scope for Australian contributions to economic and technical cooperation programs in each of these sectors as liberalisation occurs. These activities might include the transfer (on a commercial basis) of processing technologies, of experience of food product marketing, of systems of logistics (transport, storage, warehousing) required, and of systems of standards and labelling. These transfers would be facilitated by policy action to develop relevant policy environments, for example, commitments on the protection of intellectual property and the terms and conditions of foreign ownership of Chinese enterprises. The program might also include the mobilisation of funding for the development of appropriate rural infrastructure that removes impediments to the deeper relationships which are valuable between grower and food product processors (for example, the links between potato growers and fast food retailers). All these developments would facilitate a reorientation to international competitiveness in the food sector in China.8

TRADE FACILITATION

Other important areas in the IAP are commitments which affect the costs to firms within countries doing business with each other. These include commitments on standards and conformance and on dispute settlement.
Australia has made a number of commitments on standards and conformance which may remove some impediments to Australia-China trade—for example, in automotive parts, food and food products, electrical and electronic equipment, and telecommunications equipment, all of which are likely to become increasingly important export items for China.

Standards and conformance are examples of a set of trade facilitation matters. Trade will be facilitated if there are efficient systems for writing contracts between exporters and importers, for organisation of financial flows alongside the flows of goods and services, and for resolving disputes between exporters and importers. These matters have been important in the China-Australia relationship, reflecting China's stage of development and its transition to a market economy. One example where these issues arise is in the trade of wool between Australia and China.

The wool trade has been a theme in the discussions with China about market access issues and about China's accession to the WTO. Our interest here is in the trade facilitation issues associated with the wool trade. The bilateral experience in this market demonstrates the scope for international cooperation to facilitate trade, the relevance of some Australian IAP commitments in that context and also the value of private sector initiatives in dealing with facilitation issues.

While the wool trade is not an issue of China's market access to Australia—rather the reverse—a high proportion of wool exported from Australia is re-exported from China in processed forms. The management of the raw material component of these series of linkages is therefore critical to China's competitiveness.

**Figure 4.3** China's food sector import tariffs, 1997

![Graph showing China's food sector import tariffs, 1997](image)

**Source:** APEC Impediments Measurement System (AIMS), compiled by Malcolm Bosworth and Gerard Durand at the Australia-Japan Research Centre for the Pacific Economic Cooperation Council (PECC).
in other markets, including Australia's own market for textiles and clothing which was the focus of discussion in the liberalisation section of this paper. We argued in an earlier paper that the experience of the wool trade illustrates the importance of

- the transparency and conformance of standards, or their recognition, across countries (this applies not just to the products being traded but also to contractual arrangements such as letters of credit)
- innovative financial systems, which can redistribute risks associated with international transactions
- ways of resolving disputes.

The experiences also highlight the scope for private sector initiatives to deal with these issues. We also reported an important private sector initiative to raise finance to the trade in raw wool. This arrangement provided liquidity for Chinese buyers, and dealt with risks that might otherwise be present in the trade.

Australia's commitments in its IAP to develop bilateral mutual recognition arrangements on conformity assessment, to support the involvement of Australia's technical infrastructure bodies in the development of mutual recognition arrangements, as well as its indication of interest in dealing with dispute resolution systems in APEC, are all relevant to this set of issues.

But should governments be involved? Market processes are also capable of supplying trade facilitating services—such as product description systems, contract drafting, risk shifting instruments and even dispute resolution processes.

The role of government is important where market processes fail to provide sufficient quantities of these services. Examples of efficient forms of government action may be removing impediments to firms setting up to supply these services. This will be relevant if, for example, there are regulations applying to financial services markets or to private sector involvement in some infrastructure services. In that case, an efficient government response is to liberalise policy applying to these sectors.

Governments might also be involved in supporting the provision of services where actors in the market have incentives to free-ride. In that case, an innovation from which all will gain may not be provided.

Cooperation between governments is relevant where one can benefit from the policymaking experience of another, or where joint action is efficient. Australia's IAP commitments to transfer its experience on the development of competition policy and intellectual property legislation is relevant here.

The economic and technical cooperation program in APEC is a vehicle for organising this sort of cooperation. Elek and Soesastro (Chapter 10) discuss that program in more detail and also highlights the importance of making more progress in that area in APEC. The experience of issues in the wool trade recounted here illustrate one principle that might be applied in the development of economic
and technical cooperation programs—that is, their complementarity to private sector initiatives that deal with trade facilitation issues.

CONCLUSIONS

We have argued in this paper that the structure of Australian protection is highly biased against China. The average tariff rate faced by Chinese exporters to Australia is much higher than that faced by exporters from other APEC members. The rate will fall by 2005, creating scope for greater gains from trade between the two economies. But that higher degree of integration would have occurred even sooner if Australia had maintained its earlier commitments to a program of steady reductions in tariffs—on TCF products in particular. The tariff pause between 2000 and 2005 has slowed down the rate of integration. Also the commitments to tariff cuts in 2005 still leave China (apart from Brunei), on the basis of its current trade patterns, facing the highest average tariff into Australia. The rate facing China will still be about twice the APEC average. APEC commitments can constrain tariff rate setting processes in Australia and that pressure will be important to realise the potential that still exists in the bilateral relationship.

We examined some of the issues involved in the EVSL process in APEC by reference to the food sector, a second tier sector proposed by Australia. We noted that there is already substantial two-way trade in food products in the bilateral relationship. The data highlight the scope of gain from liberalisation in this sector and the scope for further mutual gain from economic and technical cooperation programs.

We have also stressed here the relevance of various components of the IAPs to trade facilitation. We illustrated the relevance of these issues by referring to experience in the bilateral trade between Australia and China in wool. We argued that efficient delivery systems of this raw material into the textile industry of China was critical for the international competitiveness of that sector. This includes its capacity to penetrate Australian markets.

We noted the value of private sector initiatives in dealing with issues which might otherwise impede trade. The example offered was the innovative arrangements developed by private sector banks to deal with risks in the wool trade. Implicit in this discussion was the value of the development of trading institutions in China. These include not only standards institutions but also those that supply financial instruments that deal with some of the risks in international trade. These developments in China are especially important since the financial market remains relatively closed.

We also discussed the scope for government to play a role in correcting failures in markets for trade facilitation services and the scope to support that
activity from within the APEC economic and technical cooperation program. The links to Australia’s IAP were noted.

In summary, implementation of the programs included in the Australia’s APEC agenda, according to APEC principles, will contribute to a more intense trading relationship between Australia and China. The program also has the potential to extend and accelerate commitments in some of the sensitive sectors in the bilateral relationship. This is partly because of the range of instruments that is available in the APEC process, in particular, the role of economic and technical cooperation programs. It also occurs because of the linkages in policymaking processes of issues in the sensitive sectors, for example food sector policy in China and textiles and clothing sector policy in Australia.

A final question of interest is the effect of these liberalisation and facilitation initiatives on the bilateral relationship. The bias in Australian trade policy against China suggests the gains from liberalisation will be substantial. The gains from the development of markets for trading services may also be large. One methodology for doing this work is to compare Australia’s trade relationship with China, and Australia’s other bilateral relationships. Through such comparison, the potential for trade between the two economies can be estimated. Comparisons of actual and potential trade will then give some idea, at least, of the quantity impacts of these impediments and the progress towards their reduction. This work could also identify the effects of an acceleration of liberalisation, according to APEC principles, in some sectors where there was a mutual interest and where simultaneous action was expected to facilitate the implementation of the policy change in each economy. This is a topic for further work.9

REFERENCES


NOTES

1 Ian Dickson was a co-author of an earlier version of this paper which contained a longer discussion of issues in the trade in raw wool and which was prepared for the meeting in Beijing, 7 October 1998 at the APEC Policy Research Centre, Chinese Academy of Social Sciences.
2 The Industry Commission considered a number of options. It argued that any advantages associated with a tariff pause outweighed the costs. It stressed the value of maintaining the momentum in a reform program and highlighted the credibility of its preferred option for Australia's trading partners in APEC. See Chapter 11 of Volume 1 of the Industry Commission report on The Textile Clothing and Footwear Industries.

3 We do not discuss the chemical sector in detail except to note the following. The Productivity Commission points out in its modelling work on EVSL ("APEC Early Voluntary Sector Liberalisation" a Staff Research Paper by Philippa Dee, Alexis Hardin and Michael Schuele, July 1998) that the chemicals proposal as defined involves the liberalisation of trade at the upstream end of the processing chain. The consequence is that inputs are cheaper for downstream processors and, depending on the extent of the assistance which they receive, the result can be a less efficient allocation of resources in the economy. For example, liberalising chemicals will encourage a transfer of resources into domestic textiles, clothing and other manufacturing which includes toys and sporting goods. Some of these sectors tend to be highly protected. The Commission’s estimates are that the losses for China from this reallocation of resources are significant.

4 See note 3.

5 The scope of this sector defined in terms of ISIC classifications is

3111-SLGHTRG,PREP,PRESERV MEAT
3112-MANUF OF DAIRY PRODUCTS
3113-CANNG,PRES FRUITS VEGS
3114-CAN,PRES,PRS OF FISH,CRUS
3115-MANUF VEG,ANL OILS + FATS
3116-GRAIN MILL PRODUCTS
3117-MANUF OF BAKERY PRODUCTS
3118-SUGAR FACTORIES REFINERS
3119-MANUF COCOA,CHOC+SUG CONF
3121-MANUF OF FOOD PRODS NEC
3122-MANUF OF PREPD ANL FEEDS
3131-DISTG,RECTG,BLENG SPIRITS
3132-WINE INDUSTRIES
3133-MALT LIQUORS AND MALT
3134-SFT DRNKS+CARB WTRS IND
3140-TOBACCO MANUFACTURES

6 The net export ratio is the ratio of the difference between exports and imports, and their sum.

7 If EVSL sectors were chosen for each economy according to those which are expected to lead to the greatest efficiency gains, then the top ten sectors
for China include (in ISIC categories) 3116, 3132, 3134, 3843 (motor vehicles), 3115, 3112, 3844 (motorcycles), 3131, 3140, and 3901 (jewellery). Thus, all but three of these are in the food sector. The same principles applied to Australia suggest a focus on textiles and clothing, rubber products and motor vehicles. Data are from PECC’s work in progress on the principles for selection of sectors for early liberalisation in APEC.

8 This set of activities in the food sector is included in the scope of a proposal being developed by one of the task forces of the APEC Business Advisory Council (ABAC) on the APEC Food System. The food sector is also the subject of a case study in a research project on impediments to trade and investment being undertaken by PECC on behalf of ABAC.

9 There is already some work applying gravity models to this question, see for example, Drysdale et al. 1997 and Drysdale, Huang and Kalirajan in Chapter 15, this volume. As well, Kaleeswaran Kalirajan in his MEc thesis at the University of Adelaide (‘Estimating the gravity equation using the stochastic frontier approach’) has developed a theoretical basis for using the gravity model and explaining why a stochastic frontier approach is an efficient way of estimating the relationships. These models could be applied to examine the Australia-China bilateral trade.