
8 Trade and economic effects: merchandise

Reduced barriers to merchandise trade as a result of bilateral and regional trade agreements (BRTAs) can influence both trade and economic welfare. These impacts are assessed in this chapter. (The potential impacts from reductions in barriers to services trade and investment are assessed in chapter 9.)

The Commission's approach has been to make use of a number of models, along with information provided by participants, to illustrate the likely direction of change in, and relative magnitude of, trade flows and income brought about by different types of BRTAs.

The analysis presented takes an 'economywide' view of the potential impact of BRTAs and, in doing so, takes into account changes in the make-up of an economy and the use of resources by different sectors brought about as businesses respond to changes in the commercial environment. In the first instance, the analysis presented examines the 'outer-envelope' of the potential impacts of particular agreement scenarios — assuming full take-up of trade liberalisation benefits. However, where evidence exists, sensitivity tests are used to examine the implications of a partial achievement of liberalisation potential.

The chapter also considers empirical studies of the potential impact BRTA formation on merchandise trade and reports new analysis undertaken by the Commission in this area. The trade agreements analysed include those of which Australia is a member or which are likely to influence Australia's trade flows.

Section 8.1 highlights some key impacts that economic theory suggests may result from reductions in trade barriers, with section 8.2 detailing the potential impacts on Australia from BRTAs derived from economic models. Section 8.3 assesses the broader economic impacts that arise from changes brought about by BRTAs. Section 8.4 examines observed changes in trade flows to analyse what has actually occurred after the establishment of BRTAs, and identifies why the observed gains may not be the same as those identified in *ex ante* assessments.

8.1 Some theory on impacts

There are a number of means by which liberalising trade policies can enhance economic performance. International trade allows countries to specialise production in their areas of relative strength and to exchange this output for products which other countries can supply at lower cost than can be produced at home. Trade enables access to a wider range of goods and services. Access to foreign products can help diffuse innovations and new production technologies. Liberal trade policies increase effective market size, which allows producers to reap ‘economies of scale’ and, thus, lower production costs. And openness to trade can provide a source of additional competition to keep local prices in check and domestic producers ‘on their toes’.

Importantly, the benefits of trade liberalisation come from enhanced opportunities to import as well as from enhanced opportunities for export. For example, as well as the direct benefits for consumers and commercial users of imports, the enhanced competition from imports can promote more efficient production by local firms.

It should also be recognised that, while increased export opportunities provide direct benefits for exporting industries, the net gains to a country are typically a small share of the gross gains for those sectors. This is because expansion in one sector typically draws resources away from other activities in the economy over the longer term. This process can be seen at present in relation to the mining sector, where increased export revenue has put upward pressure on the Australian dollar and the expansion in mining has seen labour drawn from other industries. Such pressures are likely to reduce the competitiveness and, over the longer term, the output of other sectors in the economy, although the net effect of such resource allocation changes would normally be expected to be positive.

The removal of trade barriers on a most-favoured-nation (MFN) basis is widely understood to afford the greatest potential benefit from international trade liberalisation, in part because prices for goods from all possible sources are likely to be lower than otherwise, increasing competitive pressures within markets.

Most BRTAs also remove tariff and other restrictions, but do so on a preferential basis for partners of an agreement, typically through the lowering of bilateral tariffs but also through the relaxation of tariff quotas (particularly in the area of agricultural products). In this situation, depending on the level of competition in the partner market, and the degree of product differentiation in those goods provided preferential access, it is possible that the price effects will be limited (Chang and Winters 2002; Feenstra 1989). Such limited price ‘pass through’ is more likely to

occur if a bilateral preferential agreement is negotiated with a small country in which there is limited competition in the supply of differentiated products.

Reductions in tariff and other border measures on a preferential basis can both increase trade between agreement members and decrease trade between members and non-members. These impacts are termed:

- *trade creation* — where, due to reduced barriers, there is an increase in trade flows between countries; and
- *trade diversion* — where, due to reduced barriers being offered to one (or more) countries, goods imported from lower-cost suppliers are displaced by goods from higher-cost suppliers due to these suppliers facing lower barriers.

To the extent that trade diversion occurs, it erodes the potential gains from measures seeking to increase trade openness within economies. Whether or not trade diversion is likely to be significant depends on the difference between preferential and non-preferential tariffs. On this, some participants have suggested the scope for diversion is now fairly limited. For Australia, Lloyd has argued that the issue of trade diversion is not significant on the basis of Australia's relatively low tariff barriers, and an increasing number of agreements:

The first reason is that, as the number of trading preferential partners with whom we trade in the market for any importable expands as the number of agreements expands, the possibilities of (harmful or beneficial) trade diversion diminish. ...

The second reason is Australia's MFN barriers to imports of goods has been greatly reduced in the last twenty years ... (sub. 3, p. 3)

Despite the decline in tariff rates globally, it is the case that there remain pockets of high tariff barriers across countries and in certain product categories, and that some potential agreement partners to Australia still maintain relatively high average tariffs. Trade diversion therefore potentially remains a practical issue.

Ultimately, it is an empirical matter whether trade agreements act to increase trade overall and whether such increases flow on to raise incomes of partner countries. These issues are examined in the following sections with respect to merchandise trade, which accounts for nearly half of the transactions between countries (chapter 3).

8.2 What other studies have said

Two broad approaches have been used to assess the likely impact of BRTAs on both trade flows and economic wellbeing:

- the *ex ante* approach, which attempts to estimate the likely changes in trade flows holding all else constant (done through computable general equilibrium modelling); and
- the *ex post* approach, which attempts to estimate from observed changes in trade flows the impact of trade agreements after controlling for changes in other variables that also influence trade flows (done through econometric analysis).

The first of these is associated with modelling of the potential gains that may be achieved through entering into an agreement. This approach has been used in Australia in undertaking ‘feasibility’ studies of prospective agreements. The second of these is used to shed light on the impact of previously formed agreements, most typically on merchandise trade flows. This section presents some results from applications of each approach.

Feasibility studies of Australian agreements

In order to assess the potential gains from BRTAs, the Australian Government has commissioned a number quantitative modelling analyses. Typically, these analyses, which form a key part of feasibility studies, have estimated an outer envelope of possible gains for Australia and the partner country from bilateral tariff and other concessions through the reduction of tariffs to zero between partners (box 8.1). These studies have in all cases estimated positive trade and economic benefits from a prospective agreement.

Feasibility studies usually work under the assumption that (preferential) tariff levels will be reduced to zero and that the application of rules of origin have no impact on industry costs or production technology. Such an approach can be useful to determine the direction of change, and rank potential trade policy alternatives (such as unilateral non-preferential reform and bilateral concessions). However, for the assessment of individual agreements, a more realistic set of assumptions is needed if the aim is to provide an estimate of the gains from that agreement upon implementation. This point was stressed by a number of participants during meetings and submissions and is explored further in chapter 15.

Box 8.1 Feasibility studies of Australian agreements

A number of studies have been conducted of prospective BRTAs to estimate the impacts of reduced barriers to trade in merchandise, services and investment. A number of the feasibility studies have assumed full reduction of tariffs on trade between partners to zero with no carve outs or phasing in periods, with similar assumptions made for the liberalisation of services trade and investment. However, some feasibility studies have sought to model more gradual trade and investment liberalisation and carve outs. A number of the studies also assume that investment and productivity are responsive to changes in competitiveness.

The studies available within this framework include:

- ASEAN–Australia–New Zealand Free Trade Area — for which it was estimated that an agreement could raise the GDP of Australia and New Zealand by around 0.3 per cent 10 years after the agreement came into effect (CIE 2000).
- Australia–China Free Trade Agreement — for which it was estimated that an agreement could increase Australia’s GDP by around 0.7 per cent 10 years after implementation (CIE 2008b).
- Australia–US Free Trade Agreement — for which it was estimated that an agreement could increase Australia’s GDP by 0.4 per cent 10 years after the agreement came into effect (CIE 2001,2004a).
- Thailand–Australia Free Trade Agreement — for which it was estimated that an agreement could increase Australia’s GDP by 0.021 per cent 10 years out if the agreement went ahead (CIE 2004b).
- Australia–Japan Free Trade Agreement — for which it was estimated that an agreement could increase Australia’s GDP by 0.6 per cent higher 10 years out than it would otherwise be (CIE 2005a).
- Australia–India Free Trade Agreement — for which it was estimated that an agreement could increase Australia’s GDP by 0.2 per cent after 10 years than it would otherwise be (CIE 2008a).
- Australia–Indonesia trade and investment agreement — for which it was estimated that an agreement could increase Australia’s GDP by around 0.02 per cent 10 years after the agreement came into effect (CIE 2009).

With regard to the Australia–US agreement, a second modelling study of aspects of the actual agreement text was undertaken within a similar framework to the initial feasibility studies. This study estimated an increase in Australia’s GDP of 0.7 per cent 10 years after the agreement came into effect, approximately two thirds of which was due to the projected effects of investment liberalisation (CIE 2004a). The CIE, which has conducted the vast majority of the Australian Government’s feasibility studies, noted in its submission that it has undertaken significant model development over the last decade and that the results between feasibility studies were not directly comparable.

Other studies of Australian agreements

Along with those feasibility studies commissioned by the Australia Government, a number of other studies have examined both existing and prospective BRTAs. These studies vary from those used in feasibility studies and enforce stricter assumptions about the likelihood of barrier reductions.

In relation to the AUSFTA, two studies came up with differing levels of benefits by relaxing the assumptions of the feasibility studies. Due to rules of origin, the impact of intellectual property provisions and also a different approach to investment liberalisation, Dee (2004) found that the gains from the AUSFTA were likely to be significantly lower — 0.01 per cent increase in real GDP. Looking only at goods and services, ACIL (2003) concluded that instead of positive benefits, Australia could be worse off as a result of the agreement, due to carve outs, implementation periods and other factors.

Following the publication of the ACIL (2003) study, the CIE published an analysis of the differences between the ACIL results and those in the CIE study. Among other things, the CIE identified ACIL's use of a less elastic demand for Australian exports as a primary driver of the difference between the results (CIE 2004c).

Such differences in the results highlight that *ex ante* studies are highly dependant on the specification of the model and the appropriateness of the underpinning scenarios. This strengthens the case for the oversight of modelling by independent parties and the inclusion of clear and transparent methodology and sensitivity analysis (chapter 15).

Ex post analyses

The literature contains numerous international *ex post* analyses of the impacts on trade flows brought about from BRTAs. While not seeking to be comprehensive, this section details some results obtained by such studies.

Heydon and Woolcock (2009) detail a number of findings from existing literature on the impact of BRTAs on trade flows. They conclude that:

Overall, the findings of *ex post* studies produce a fairly mixed picture, indicating that some PTAs boosted intra-bloc trade significantly, whereas others did not. There is some evidence that external trade is smaller than it might otherwise have been in at least some of the groupings, but the picture is mixed enough so that it is not possible to conclude whether trade diversion has been a major problem. In addition, these studies do not reach any definitive answer on the welfare impact of PTAs. Most of the studies using growth regressions suggest that PTAs have had little impact on economic growth. (p. 221)

A similar picture was painted by Adams et al. (2003), De Rosa (2007) and Cipollina and Salvatici (2010), who all found that the majority of previous studies estimated almost all BRTAs to be net trade creating rather than net trade diverting.

The World Bank (2005) suggested the trade creating results of BRTAs were less clear. In an analysis of 17 research studies covering over 250 estimates of the overall impact of agreements on intra- and extra-member trade, the authors found that ‘... although agreements typically have a positive impact on intra-regional trade, their overall impact is uncertain. Actual experience reinforces that there can be no presumption that a preferential trade agreement will be trade creating’ (p. 63).

This suggests that, as was seen in the *ex ante* results presented previously, characteristics of BRTAs themselves and the composition of the membership have confounding influences on potential outcomes. This has been highlighted by a number of studies which have found differing impacts from open regional to closed regional to preferential bilateral agreements (see for example Bayoumi and Eichengreen 1995; Carrere 2002; Coulibaly 2007, 2009; Sova and Sova 2009; Armstrong and Drysdale 2010).

Despite the uncertain outcomes from a broad examination of BRTAs, some common elements have emerged. Where tariff levels are high, and concessions significant, the potential for trade diversion is also greatest. When agreements are struck between existing trading partners, trade creation is more likely (Heydon and Woolcock 2009). Further, a number of studies have consistently suggested that agreements based on open regionalism, such as ASEAN, are more likely to be trade creating for flows between members, and between members and non-members, compared to more preferential agreements such as NAFTA (Carrere 2002; Romalis 2005; Coulibaly 2007, 2009; Armstrong and Drysdale 2010).

8.3 Modelling the potential impact of reductions in barriers to merchandise trade

For Australia, the type, detail and significance of the trading partner(s) of the BRTAs to which it is a member differ significantly. For example, Australia has a number of preferential bilateral trade agreements between economies of different sizes — such as Chile, Singapore, Thailand, and the United States. It is also a member of two regional agreements, APEC and AANZFTA. Australia also has a long standing bilateral agreement with New Zealand — the ANZCERTA — which aims at economic integration between the two economies.

Given the diversity of Australia’s agreements and divergent views about likely effects, the approach adopted by the Commission is to explore specific

characteristics of BRTAs through different trade scenarios in order to assess the potential effects from pursuing different forms of agreements. To do so, the Commission has modelled a range of scenarios involving reductions in tariffs using the *Global Trade and Analysis Project* (GTAP) model (box 8.2).

Box 8.2 Using GTAP to model changes in trade flows

The GTAP model is a computable general equilibrium (CGE) model which has been used extensively in assessing the impact of changes in trade policy settings on global trade, production and consumption. The GTAP model is a multi-region and multi-sectoral general equilibrium model.

For the purposes of the scenarios, the GTAP database has been aggregated into 20 individual national economies and 5 multi-country, regional groups. There are 57 industry sectors in each country group. Policy changes or 'shocks' are applied to the model, with effects determined by the linkages between industries and regions, assumptions about the economic behaviour of firms and households, and resource constraints.

In the modelling, a longer-term perspective is adopted. Under this approach, it is assumed that labour is mobile between industries in each region and that it responds to changes in the relative competitiveness of industries. Aggregate labour endowments are assumed fixed (that is, not affected, in the longer run, by tariff policy changes).

It is also assumed that capital stocks by region and industry adjust in order to equilibrate rates of return on capital to their long-run steady-state value. Under this assumption, reductions in tariffs would be expected to initially raise average returns to capital, ultimately leading to a higher capital stock and output potential. Capital would also be reallocated between regional industries according to the relative loss in the competitiveness of those activities.

The results represent the potential changes given the assumptions of the model and estimated tariff barriers prevailing in 2004, the latest year for which comprehensive model data are available. Full details of the Commission's GTAP modelling are provided in a supplement to the report.

The following tariff concession scenarios were examined:

- the reduction of bilateral tariffs to zero between Australia and a small country to illustrate the potential effects on trade flows when two relatively small economies conclude a bilateral preferential trade agreement (scenario T1);
- the reduction of bilateral tariffs to zero between Australia and a large country to illustrate the potential effects on trade flows when a relatively small economy concludes a preferential trade agreement with a relatively large economy (scenario T2);

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- the reduction of tariffs on a most favoured nation basis between APEC members to illustrate the potential impact of coordinated unilateral non-discriminatory trade liberalisation between regional economies (scenario T4); and
 - the establishment of a series of bilateral preferential trade agreements between Australia's four major North Asian and North American trading partners, with and without Australia's involvement, to illustrate the potential effects of being 'left behind' or abstaining from involvement in future agreements (scenarios R1 to R4).

The results illustrate the relative magnitude of the potential impacts, all else unchanged. They are 'outer-envelope' effects — that is, they are based on the best-case scenario. To the extent that items are excluded, or tariff levels are not brought down to zero, the estimated changes in trade flows and production would not be as large. Further, the estimates abstract from other 'real world' aspects of agreements such as rules of origin (RoO) and trade facilitation measures that may be included in an agreement, along with impacts driven by businesses such as the limited uptake of preferences and limited price pass through of tariff concessions. The Commission modelled these aspects separately in order to consider their potential effects as well.

The results from the modelling contrast 'what is' in the modelling base year to 'what would be' at some future point in time, after the full effects of the reduced barriers have worked through the economy.¹ The modelling also adopts a longer-run perspective, in which the initial impacts of policies have time to work through the economy and for fixed capital to adjust. In relation to such an economic environment for modelling impacts, the Rural Industries Research and Development Corporation noted:

... when gauging the impact of the trade liberalisation, it is perhaps more prudent to focus on the impacts over the longer term (say 10–15 years post liberalisation). That way the policy changes will have worked their way through the economy and any changes to GDP (etc) will have settled down to a constant deviation from baseline. (sub. 10, p. 23)

It should be noted that the modelling of merchandise does not account for other influences which may also impact on trade flows and incomes from observed changes in trade policy (box 8.3). However, the Commission considers that the simulation results provide sufficiently meaningful insights into the potential impacts of trade liberalisation scenarios to be of use for the purposes of this study.

¹ In order to gain a longer-term perspective of the potential impacts of reduced barriers on trade flows, the model was calibrated so that capital stocks adjust in order to equilibrate the expected and actual rates of return on capital.

Box 8.3 **Other factors that could influence merchandise trade**

While GTAP modelling of the impact of reduced tariff barriers is useful in ascertaining the key implications from BRTAs, it does not capture all impacts. In particular, the modelling does not assess the implications of reduced services barriers and those related to investment (these issues are dealt with in chapter 9) and the flow-on these may have to the flows of goods trade. Thus, results centre on the likely impact of reduced barriers on goods trade and, as such, only yield a partial view of the likely impacts of BRTAs more generally.

Other aspects, such as changes in the trading relationship between member and non-member firms, are also not captured. For example, the Australian Dairy Industry Council suggested that simply the existence of preferential access to one market had the potential to impact prices received from third party buyers:

... the creation of new profitable market outlets in countries such as the US can have the effect of firming up Australia's negotiating position with buyers in third country markets. The increased flexibility in Australia's trading options can lead third country buyers to seek to lock in improved long term relationships with Australian suppliers. (sub. 38, p. 5)

Thus, even if new preferential market access provisions were not accessed by Australian producers, they may be of use to shore up buyers in existing markets. The existence of alternative markets also reduced the supply risk for Australian Dairy producers who are heavily exposed to international markets. These and other possible indirect benefits, such as resultant investments that embody improved technology that drive increased productivity within the sector, are not captured in the modelling.

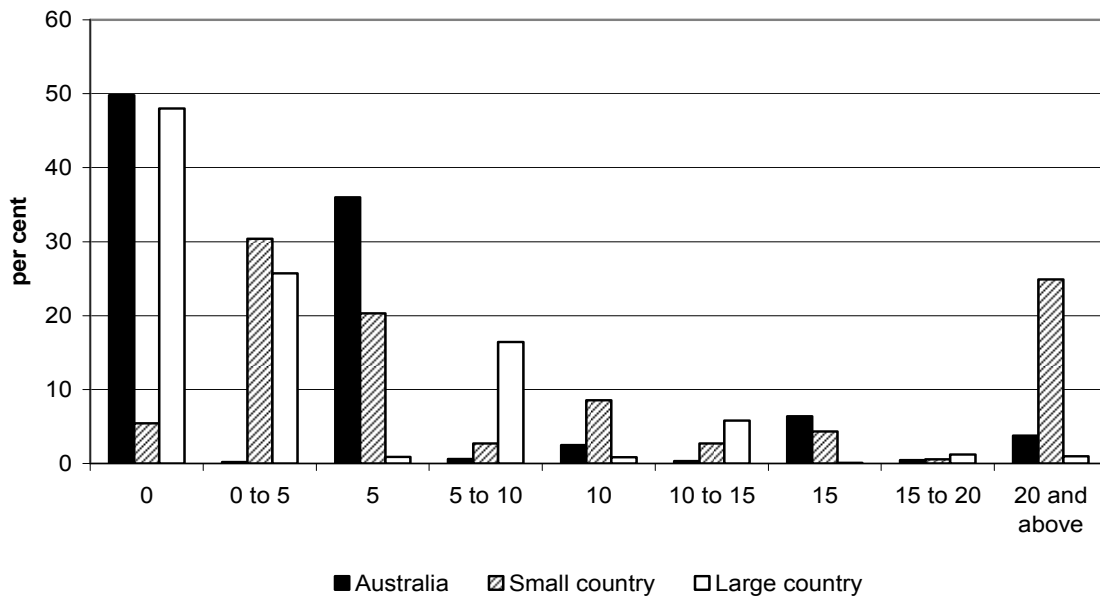
Further, the results obtained depend on the assumptions of the model and the assumptions that underpin the scenarios examined. The GTAP model, as with other CGE models, is based on a stylised representation of the world economy and allows the impact of particular issues to be examined in isolation. Thus, many of the real world confounding factors are not included, such as non-fixed employment, non-uniform factor prices and impediments to capital mobility, so observed outcomes can vary significantly from the projections generated by this type of stylised model.

Preferential bilateral tariff reductions

The estimated weighted average tariff rates in 2004 for Australia, the small and large country were 3, 8 and 2 per cent respectively.² The distribution of items attracting low and high tariff levels also differed (figure 8.1), with the small country having a greater proportion of high (above 15 per cent) tariff items. Because of the differences in economic size of the respective economies and differences in tariff regimes, the potential impact of bilateral tariff reductions on the respective economies also differs.

² The simulations were based on tariff and economic data for a selected small country, and a selected large country with which Australia has a significant trading relationship. The Commission emphasises that the tariff profiles and results are illustrative only.

Figure 8.1 Illustrative MFN tariff rate profiles, 2004^a



^a Ad valorem tariffs only at the HS6 subheading level.

Source: Based on WTO Tariff Analysis Online Database.

With a bilateral elimination of tariffs between Australia and the small country examined, bilateral trade flows are projected to increase significantly (table 8.1). However, as economic activity is redirected towards bilateral trade between partners, trade with other countries is projected to decline. As the small country is a relatively small trading partner to Australia, and as trade flows to other markets are

Table 8.1 Estimated potential impacts on trade flows — Australia and a small country (scenario T1)^a

Per cent

	<i>Australia</i>				<i>Small country</i>			
	<i>Change in bilateral trade flows</i>		<i>Change in total trade flows</i>		<i>Change in bilateral trade flows</i>		<i>Change in total trade flows</i>	
	<i>Imports</i>	<i>Exports</i>	<i>Imports</i>	<i>Exports</i>	<i>Imports</i>	<i>Exports</i>	<i>Imports</i>	<i>Exports</i>
Australia	–	–	–	–	31.14	38.20	0.88	0.96
Partner	38.20	31.14	0.89	0.74	–	–	–	–
Rest of world	-0.49	-0.34	-0.47	-0.33	-0.01	-0.09	-0.01	-0.08
Total	–	–	0.42	0.41	–	–	0.87	0.88

^a Simulations do not represent an analysis of existing agreements.

Source: Commission estimates.

reduced, Australia's overall export and import trade flows are only projected to increase around 0.4 per cent with the full implementation of the tariff reductions. For Australia, this represents an increase in trade value of nearly US\$1 billion.

As would be expected, the direction of possible effects of bilateral tariff reductions between Australia and the large country examined is similar but, as this country is assumed to be a larger trading partner and larger economy relative to Australia, the estimated impact on trade flows for Australia are commensurately larger (table 8.2). Again, some trade diversion occurs, and is projected to offset close to half the increase in bilateral imports and exports. Also, despite the large country representing a larger trading partner, the overall increase in Australia's trade flows is small, at around 1 per cent for both imports and exports.

Table 8.2 Estimated potential impacts on trade flows — Australia and a large country (scenario T2)^a
Per cent

	<i>Australia</i>				<i>Large country</i>			
	<i>Change in bilateral trade flows</i>		<i>Change in total trade flows</i>		<i>Change in bilateral trade flows</i>		<i>Change in total trade flows</i>	
	<i>Imports</i>	<i>Exports</i>	<i>Imports</i>	<i>Exports</i>	<i>Imports</i>	<i>Exports</i>	<i>Imports</i>	<i>Exports</i>
Australia	–	–	–	–	14.50	18.06	0.26	0.13
Partner	18.06	14.50	1.97	2.33	–	–	–	–
Rest of world	-1.14	-1.44	-0.99	-1.17	-0.08	-0.01	0.26	-0.01
Total	–	–	0.97	1.16	–	–	0.18	0.12

^a Simulations do not represent an analysis of existing agreements.

Source: Commission estimates.

A number of preferential bilateral agreements go beyond simply reducing barriers such as tariffs and quotas and also seek to facilitate trade in goods and to lower the costs of trading, including through streamlined customs procedures, mutual recognition of commercial documentation and mutual recognition of product standards. Such lower costs, regardless of where they occur in the supply and distribution chain, is analogous to a reduction in the costs of transportation of merchandise trade.

In some instances, it is possible that preferential tariff reductions may have a limited impact on trade flows as producers seek to pocket some of the concession rather than reduce their prices. At the extreme, a preferential bilateral trade agreement could in theory yield no direct increase in trade flows were buyers in the importing country to experience no reduction in the prices of goods from the partner country.

However, this is unlikely to be the case as in most markets there would be sufficient competition to see some pass through in practice.

Modelling the impacts of improved trade facilitation, either preferentially or non-preferentially, as part of the large country agreement, suggests that these measures have the potential to further increase trade flows. The results suggest that the greater the non-preferential nature of the change, the larger the impact (table 8.3). For example, for Australia, non-preferential improvements lead to a 4-times greater increase in exports, and a 3-times greater increase in import flows.

Table 8.3 Stylised effects from enhanced trade facilitation
Per cent

	<i>Australia</i>		<i>World</i>
	<i>Exports</i>	<i>Imports</i>	<i>Total trade</i>
Australia–large country preferential basis (F1)	0.168	0.200	0.003
Australia–large country non-preferential basis (F2)	0.709	0.576	0.181

^a Simulations do not represent an analysis of existing agreements.

Source: Commission estimates.

Other important determinants of the potential impacts of agreements are the extent to which preferences are taken up by businesses and areas excluded from tariff concessions. The decision to make use of a preference is a commercial one — that is, businesses balance the gains against the costs of trading under an agreement (such as RoO). For Australian agreements, evidence suggests that preference utilisation rates by firms exporting to Australia for agreements which offer an average margin of preference in the order of 5 per cent are relatively significant, ranging from 70 to 100 per cent. However, where the margin of preference is lower, such as the Singapore–Australia Free Trade Agreement (weighted average tariffs fell by 0.8 per cent — see chapter 6), uptake of preferences is considerably lower and in the order of 30 per cent (Pomfret, Kaufmann and Findlay 2010).

In the Australia–large country simulation, sensitivity testing involving limited preference uptake and exclusions result in tariff reductions in the order of 50 to 60 per cent of those possible, which scales back the projected changes in total exports and imports by around 25 per cent. (Simulation S5, table 8.6)

Non-preferential tariff reduction by a large regional trading group

Apart from preferential bilateral agreements, other possibilities for trade liberalisation are possible from BRTAs. Examples exist of agreements where liberalisation commitments (non-binding or otherwise) are made on a non-preferential basis, such as the APEC agreement and the United States–Vietnam trade agreement. For this study, the APEC countries were used to examine the potential impacts from non-preferential trade liberalisation by a large regional group. APEC countries, collectively, account for approximately 40 per cent of world trade. Average tariff levels across APEC members were 3 per cent in the reference year for this study (2004), with significant variation in tariff levels between members. The non-preferential liberalisation of all tariff barriers by this group of countries therefore has the potential to significantly impact on Australian and world trade flows (table 8.4).

Table 8.4 Estimated changes in bilateral trade flows from hypothetical APEC unilateral liberalisation of tariffs to zero (scenario T4)^a

\$US million (2004)

<i>Imports → Exports ↓</i>	<i>Australia</i>	<i>China</i>	<i>Japan</i>	<i>USA</i>	<i>European Union</i>	<i>Rest of APEC</i>	<i>Rest of world</i>	<i>Total</i>
Australia	–	2 074	2 829	640	-203	1 236	-183	6 363
China	3 238	–	11 428	24 454	13 913	37 888	6 053	96 974
Japan	913	17 352	–	139	-1 200	24 713	-891	41 026
USA	1 269	8 608	8 864	–	17 116	-4 914	8 817	39 760
European Union	506	12 922	2 856	-5 107	–	27 479	-9 712	28 944
Rest of APEC	1 612	48 135	13 148	19 447	18 749	–	14 372	115 463
Rest of world	-142	3 121	78	-1 627	-4 661	9 823	–	6 592
Total	7 396	92 212	39 203	37 946	43 714	96 225	18 456	335 152

^a Simulations do not represent an analysis of existing agreements.

Source: Commission estimates.

Under this scenario, the increase in world trade is projected to be over 3 per cent. Given the non-preferential nature of barrier reductions, no trade diversion is projected. Nevertheless, some reallocation of trade between countries is likely as changes in relative competitiveness is projected to occur. For Australia, overall trade flows (imports and exports) are projected to increase by over US\$13.8 billion, representing a 6 per cent increase in total trade.

Non-involvement in preferential bilateral agreements of major trading partners

While the above approaches have focussed on the possible positive effects of reducing barriers to trade, BRTAs can also be used as a defensive trade strategy — that is, they can be used to maintain existing levels of market access. Thus, Australia's non-involvement in BRTAs is likely to be costly as Australia would suffer from trade diversionary impacts of other BRTAs.

A study by the CIE (2007) examined the potential effects for Australian agriculture exports if the United States were to ratify a preferential trade agreement with Korea and Australia was not able to negotiate a similar agreement with Korea. The study projected a 12.4 per cent drop in Australian agricultural food exports to Korea and a decrease of 0.06 per cent in Australian agricultural output overall in 2030, compared with Australian agricultural output that would be projected if the Korea–United States trade agreement was not ratified. However, the CIE study did not provide the projected economywide effects of the modelled scenarios, noting that:

... whether or not such an FTA is in Australia's national interest would mean appraising all other economic effects on other sectors as well as other considerations such as the impact on Australia's multilateral trading stance. (p. 21)

In order to help assess the economywide impacts of Australia's non-involvement in BRTAs, the Commission has modelled tariff reduction scenarios where Australia was either involved with preferential agreements with four major North Asian and North American trading partners (with and without them also having bilateral agreements with each other), and Australia's non-involvement. The modelling explored the 'outer-envelope' effects of these scenarios.

Overall, the modelling suggests that Australia's involvement in a series of agreements with four of its major partners has the potential to increase Australia's trade. Reflecting the intensity of Australia's trade with the region and overlap with APEC membership, the projected increases are of a similar order to those under the APEC scenario presented above.

The potential impact on Australia of being excluded, or choosing not to engage, depends on the actions taken unilaterally. Without any reform (trade or otherwise), the modelling suggests that Australian trade could fall as a result of our major trading partners establishing preferential bilateral agreements amongst themselves. That is, the trade diversionary impacts of these agreements could have a negative impact on Australia.

These results, however, are sensitive to the ability of Australia's export sector to take advantage of the potential new opportunities created by the economic growth of our trading partners. If supply constraints are relaxed on some of our major

export items, then potential trade flows could increase when Australia is not involved in the preferential agreements. Further, Australia would be able to capture net increases in trade flows if it also undertook unilateral tariff elimination (although the increases would be less than those experienced were it also directly involved in the preferential arrangements).

Impacts of rules of origin

As discussed in chapter 6, in order for countries to establish preferential access to their market under a trade agreement, there is a need to differentiate imports produced in a partner country from those which may originate in a non-partner country and be ‘transhipped’ within the preferential trade area. The common approach for this has been to adopt various RoO.

RoO vary in complexity and composition between agreements. As a number of study participants indicated and as reflected in chapter 7, both the combination of different RoO for different agreements, and the variation in complexity, can create a compliance cost for businesses seeking to take advantage of the reduced barriers under a preferential trade agreement. For Mexico, for example, Cadot et al. (2002) estimated that compliance costs related to NAFTA RoO were in the order of 2 per cent of the value of Mexican exports to the US.

Further, RoO typically seek to ensure that only products that have undergone a ‘substantial transformation’ in a member country can be considered as goods originating from that country and thus access the preferential arrangements. However, as the notion of substantial transformation is subjective and as RoO themselves form part of the negotiations, there is potential for them to overshoot the level required purely to avoid trade deflection, it is possible that the RoO in agreements will differ from the production processes that already exist (Portugal-Perez 2009). If a RoO requires greater transformation than already occurs, producers would need to increase the content of locally (or regionally) sourced inputs in order to satisfy the RoO. As this represents a change from current production processes, it will increase the supply costs of accessing the preferential market (otherwise producers would already have changed the input mix to take advantage of any cost saving). In this respect, one participant has suggested the costs are potentially significant for some products and shipments:

Various estimates suggest that the costs of compliance with rules of origin may be as much as 8% of the value of a shipment ... (John Ravenhill, sub. 36, p. 2)

This finding was supported by Cadot et al. (2005) in relation to product specific rules for the Pan–European agreements, with the majority of the cost comprised of administration costs. On the other hand, the Commission previously found

additional costs associated with RoO could fall in the range of 1.5 per cent to 6 per cent of the value of shipment depending on the good and overall shipment value (PC 2004). Other estimates are also within this range, with Carrere and de Melo (2004) estimating that costs for firms complying with NAFTA RoO being around 6 per cent higher than similar firms exporting under MFN tariff regimes.

When RoO alter production costs they have been argued to provide an alternative form of protection. For example, as put by the Australian Industry Group:

There is evidence that some provisions in FTAs have increased barriers to trade, for example rules regarding the Change of Tariff Classification (CTC). ... In practice, the effect of these provisions [on Cotton] is that you can only access the preferential tariff treatment under AUSFTA if you sew your fabric together using cotton yarn made in Australia, which we no longer produce. (sub. 7, pp. 6–7)

This point was echoed in a study conducted by the Asian Development Bank:

Rules of origin are supposed to be technical and neutral rules to determine the country of origin of goods. However, rules of origin are frequently used as a trade policy instrument in some importing countries in the form of preferential trade agreements and arrangements, such as GSP and FTAs. In order to protect national interest rules of origin tend to differ from one FTA to another, reflecting different trade patterns and structures on a bilateral basis. (Ujiiie 2006, p. 3)

Given the impacts identified above, RoO can have two different effects on the cost of exporting under a preferential trading agreement:

- they create a compliance cost of businesses seeking to access the preferential conditions by seeking documentation so that the importing country can verify origin; and
- if a particular RoO does not match current production processes (input mix or composition of final output), there is an incentive for producers to shift to alternative higher-cost production techniques to access the tariff preference.

The incentive under the second effect depends on the relative cost of the change to production processes, and the potential gains — the margin of preference.

In principle, changes in RoO for existing agreements provide the potential for some analysis of their impact on trade flows, and as such, provide evidence as to whether different RoO types differ in possible impacts. Such a change has occurred in the ANZCERTA agreement and potentially provides an opportunity for analysis (Peter Lloyd, sub. 3). However, given a number of confounding factors and timeframes, little can be drawn from this change.³

In order to examine the effects on trade flows and industry production, RoO which were assumed to impose compliance costs and increase the cost of production were modelled for both the Australia–small country and Australia–large country trade agreement scenarios (see box 8.4 for modelling approach).

Box 8.4 Modelling RoO in GTAP

Two different aspects of RoO were modelled using GTAP.

First, RoO were assumed to alter the costs of trading goods due to increased compliance costs.

Second, RoO were assumed to alter production costs by providing an incentive for exporters to increase the use of locally sourced, higher cost, inputs in order to satisfy the RoO. This was modelled by increasing the price of exports to the partner country in line with the increase in costs faced by producers and exporters. This creates a rent that is allocated back to the exporting industry. Although the additional costs accrue to producers who export to the partner country, this level of targeting is not practicable in the current version of GTAP. By allocating the rent to the industry, the price-raising effect of the RoO is kept within the industry and not redistributed to the economy as a whole. The rent is assumed to be dissipated by using more expensive local products. This is represented by a productivity decrease that affects the part of industry output that is affected by the RoO — typically a small part of an industry's output.

In its submission on the Draft Report, the CIE suggested that it was inappropriate to apply a uniform RoO compliance cost across all merchandise sectors. It also noted that the difference between the preferential and MFN tariffs would determine whether RoO compliance costs are likely to be applicable (sub. DR75, p. 14).

The Commission's modelling of the impacts of RoO — part of the sensitivity testing of the scenarios in which Australia removes bilateral tariffs preferentially — ensured that the impacts of RoO were modelled only for those industries where the difference between the MFN and preferential rate was greater than 9.5 per cent. The Commission's sensitivity testing also only applied RoO-induced compliance costs for those manufactured goods with an MFN rate greater than 9.5 per cent, rather than on a uniform basis. While recognising that a greater level of disaggregation could allow more detailed results, the level of detail available in GTAP is considered sufficient for the purposes of examining the potential economywide effects of RoO.

³ Since the change in RoO, New Zealand exports to Australia have increased, while Australian exports to New Zealand have decreased. The greatest change in trade flows have occurred for tariff items attracting a zero MFN rate — where it is unlikely that RoO are binding. It could, however, be argued that the new RoO prevented an analogous increase in trade from New Zealand to Australia for those items under preference. But as trade patterns reverse for Australian exports to New Zealand, it is not possible to conclude whether or not this is the case.

As the impact of RoO under the second scenario is constrained by the MFN tariff which applies, increased production costs were modelled only for those manufactured goods which attract MFN tariffs of 9.5 per cent or greater. In this case, it was assumed that the cost of exported goods would increase by 5 per cent.

Australian exporters to the small country face tariffs above 9.5 per cent for seven commodities, while small country exporters to Australia face tariffs above 9.5 per cent for three commodities. The rates faced by Australia are larger than those faced by the small country. For the Australia–large country scenario, only one Australian and two large country commodities were affected.

For Australia, the RoO as modelled have the potential to reduce bilateral import and export flows by close to 8 per cent for the small country bilateral agreement, and close to 5 per cent for the large country agreement (table 8.5).

Table 8.5 Effects from stylised RoO scenarios^a

Per cent change from 'outer-envelope' scenarios

	<i>Australia–small country stylised bilateral agreement (scenario S1)</i>		<i>Australia–large country stylised bilateral agreement (scenario S2)</i>	
	<i>Australia</i>	<i>Small country</i>	<i>Australia</i>	<i>Large country</i>
Imports	-7.60	-6.43	-4.77	-2.65
Exports	-8.32	-6.21	-5.46	-2.24

^a Simulations do not represent an analysis of existing agreements.

Source: Commission estimates.

8.4 Broader economic impacts of changes in trade flows

As highlighted above, BRTAs can have significant impacts on changes in trade flows, although the level and nature of potential impacts are sensitive to the features of agreements. In the course of this study, a number of views have been advanced concerning the potential benefits of agreements. For example the Business Council of Australia (sub. 41, p. 1) contends Australia's agreements could have delivered broad economic benefits, whereas opposing views have been put forward by groups such as the Australian Chamber of Commerce and Industry (sub. DR87, p. 9) and others. Elek, for example, contended that '...individual PTAs have no more than a marginal economywide effect. (sub. DR74, p. 2)

In order to gain an insight into the impacts changes in trade flows have on economic welfare, the Commission adapted the GTAP model to evaluate changes in

Gross National Product (GNP) (box 8.5) that resulted from the simulations presented in section 8.3.

Box 8.5 Assessing economic welfare effects of policy changes

Changes in trade flows are brought about from changes in production by different sectors of the economy, and thus reflect changes in the relative use of resources. These changes in production occur in response to changes in prices received for the goods and services sold — those with improved price outlooks expand production, those with deteriorated outlooks reduce production. As different industries yield different returns, with some being able to gain greater returns from the resources used than others, the change in production has implications for welfare.

One indicator of changes in welfare, although not complete, is the estimated change in GNP. GNP provides a measure of the income received by residents from supplying labour and capital within the economy and abroad. It is calculated as the sum of the market value of all goods and services produced in one year within the economy (GDP) and the net income received from capital and labour employed abroad.

As such, changes in GNP in response to a policy change, such as changes in tariffs and other trade barriers, provides a measure of changes in incomes for residents of a country. Thus it gives an indication of how much better or worse off a country is due to changes in trade policy.

At the global level, estimated changes in income (GNP) are equal to changes in the value of production (GDP), because both measures represent the returns to all factors of production at the global level.

The results indicate that the greatest impact is likely to arise from broadly based arrangements that apply tariff reductions on a non-preferential basis (table 8.6). The scale of potential impacts declines as the scope of tariff reduction is narrowed, to the situation where they are applied between specific bilateral trading partners. The impacts of measures that have the effect of distorting trade, such as production-altering RoO, also decrease the potential gain in the simulations. Similarly, the limited uptake of available preferences limits the potential gains from preferential agreements. Conversely, those which increase trade, such as trade facilitation, increase the potential gain.

As note earlier, in some instances, it is possible that preferential tariff reductions may have a limited impact on trade flows as producers seek to pocket some of the concessions (rather than reduce their prices). In the case where Australian exporters are able to expropriate all the tariff revenues formerly levied by the partner country, and the revenues exceed those captured by the partner country's exporters (due to relatively lower tariffs in Australia), Australia gains (this occurs in the Australia–small country simulation: S2). In the reverse case, Australia is made worse off — this occurs in the Australia–large country scenario (simulation S4).

Table 8.6 ‘Outer-envelope’ aggregate effects of tariff reductions^a
Per cent change

Simulation	Australia			World	
	GNP	Exports	Imports	GDP	Total trade
T1 Stylised preferential bilateral reduction between Australia and a small country	0.045	0.394	0.471	0.002	0.011
S1 with compliance cost and production distorting RoO	0.044	0.361	0.435	0.002	0.010
S2 with no price pass through	0.001	-0.013	0.007	0.000	0.000
T2 Stylised preferential bilateral reduction between Australia and a large country	0.097	0.967	1.151	0.001	0.023
S3 with compliance cost and production distorting RoO	0.092	0.914	1.096	0.001	0.022
F1 with bilateral trade facilitation	0.062	0.168	0.200	0.001	0.003
F2 with non-preferential trade facilitation	0.351	0.709	0.576	0.078	0.181
S4 with no price pass through	-0.004	0.051	-0.029	0.000	0.000
S5 with limited preference uptake	0.071	0.728	0.850	0.001	0.018
T4 Stylised non-preferential reductions between APEC members	0.782	5.972	6.342	0.532	3.427

^a Simulations do not represent an analysis of existing agreements. Further, estimates do not account for the effects of carve outs or timing in agreements, or other areas of liberalisation such as services and investment.

Source: Commission estimates.

While the benefits from individual non-preferential agreements outweigh individual preferential agreements, modelling results suggest that significant benefits are also possible from involvement in a number of preferential bilateral agreements. Australia’s involvement in a series of preferential bilateral agreements with four of its major trading partners can also yield significant benefits — in the order of an 0.8 per cent increase in GNP. However, such benefits are conditioned on partner countries’ non-involvement in other bilateral agreements. The benefits fall below those potentially achievable in the non-preferential setting of APEC if they were to also have preferential agreements which each other.

Further, there is a potential for trade diversion to impact negatively on Australia if other countries formed preferential bilateral agreements in Australia’s absence. Despite this, policy measures within Australia’s control have the potential to offset the effects of trade diversion. For example, the negative impact from four significant trading partners successfully completing ‘outer-envelope’ type agreements can be offset if constraints to exporting industries’ supply can be lessened. Further, Australia is able to still capture significant benefits in such a situation if instead it chose to unilaterally eliminate its tariffs.

Given the likely costs associated with preferential agreements (such as RoO), and the likely coverage and agreement utilisation, it is possible that unilateral liberalisation in such a situation would yield more significant benefits to Australia than its involvement with a series of overlapping preferential bilateral agreements. On the other hand, as noted earlier, the potential for significant trade diversionary effects of additional BRTAs is likely to decrease as the scope of trade links covered by Australia's BRTAs expands.

As elaborated on in the empirical supplements to the report, the probable effect of a BRTA depends largely on its design and membership. Section 8.5 details the results of the econometrics supplement which explores, in part, the links between the style of a BRTA and its effects on trade flows, both between members and between members and non-members.

8.5 Observed changes in trade flows

While *ex ante* analyses can be used to illustrate potential benefits of reductions in barriers to trade, the complexities of agreements and the 'real world' circumstances in which agreements operate can have confounding influences on trade and investment flows. Indeed, as illustrated above, some of the potential increases in trade flows resulting from reduced barriers can be offset or augmented by these other factors.

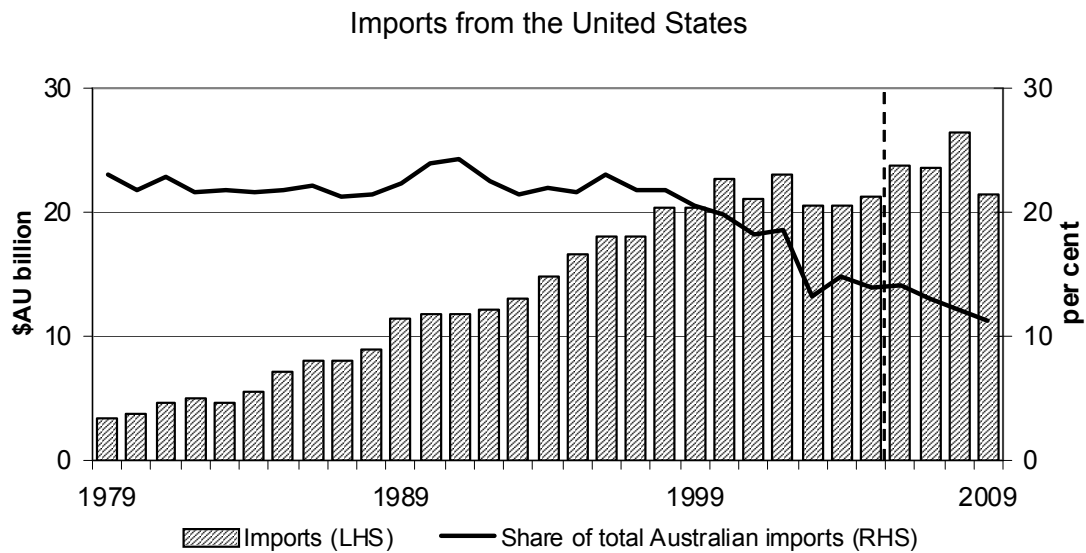
In order to overcome some of these uncertainties when using *ex ante* approaches to assessment, studies have examined, *ex post*, what has happened to trade and investment flows following the formation of an agreement, and to what extent these changes can be attributed to individual trade agreements.

In undertaking *ex post* assessments, however, it is important to avoid drawing conclusions based on overly simplified analyses of changes in trade flows. For example, an examination the level of merchandise trade between Australia and the United States shows an upward trend in the value of exports to and, more so, imports from the United States after the AUSFTA entered into force (figure 8.2).

On the one hand, some might suggest that because imports from the United States increased more than exports to that country, this is evidence that Australia is worse off as a result of the agreement. However, as noted in section 8.1, Australia can benefit from enhanced import competition as much as from expanded exporting opportunities. Thus, an increase in net imports from the United States following the AUSFTA, even if it could be tied to the AUSFTA, would not constitute evidence that the agreement had worsened Australia's economic performance.

Figure 8.2 Bilateral merchandise trade: Australia and the US

1979 – 2009, gross trade flows, current AUD



Note: The dashed lines indicate the year in which AUSFTA entered into force.

Source: Commission estimates using UN Comtrade Data.

On the other hand, some might argue that the increase in trade flows (imports plus exports) with the United States following AUSFTA is evidence that the agreement has ‘worked’. However, to sustain this conclusion, it would first be necessary to take into account other factors, such as general growth in trade and economic conditions in Australia and the United States, that may have worked to increase the value of trade between the two countries independent of the AUSFTA.

Conversely, while the actual levels of imports and exports between Australia and the United States increased following the AUSFTA, the *share* of Australia's trade with the United States has fallen (the unbroken line in figure 8.2). Again though, this should not be interpreted as meaning that AUSFTA has failed to raise the value of trade above levels that would otherwise have prevailed.

Rather, when examining changes in observed trade flows, there is a need to isolate the myriad of other factors, such as changes in GDP and the broader economic environment in which countries trade, that bear materially on those flows. As put by Rural Industries Research and Development Corporation:

... it is likely that liberalisation conducted under PTAs increases bilateral trade — the trade figures seem to be moving in the right direction to support economic theory in that trade liberalisation increases/promotes trade. However, and without further rigorous econometric research, we cannot definitively say what the relationship is between bilateral trade liberalisation and trade flows. Exactly the same arguments can be made for FDI. (sub. 10, p. 21)

It should also be noted that changes in trade flows do not, of themselves, represent economic gains. As Dr David Robertson observed:

Measuring increases in bilateral trade flows over time may give satisfaction to governments, but with many variables affecting trade patterns, they tell us little about efficiency. (sub. 42, p. 14)

As such, the results from *ex post* studies of trade flows only paint a partial picture of the likely broad economic implications of BRTA formation.

For this study, the Commission has reviewed available *ex post* studies (section 8.2) and undertaken its own analysis of trade flows in order to examine the extent to which changes in flows are associated with the formation of selected BRTAs.

Assessing the impacts of BRTAs from observed changes in trade flows

In all *ex post* evaluations, there is difficulty in 'netting out' the effects that are solely attributable to the trade agreement(s) examined from those of other influences which may have occurred at the same time and influenced trade flows. Thus, interpretation of results in all instances cannot be made uniformly, even when comparing the results from different BRTAs from the same model. Ultimately, confidence that the results obtained relate directly and causally to the trade agreements examined rests on the confidence that the approach used has taken into account the confounding elements sufficiently so as to capture the effect of the BRTA.

Further, the time frames over which many agreements come into place makes short-term assessment of outcomes difficult. As noted by the Business Council of Australia:

Many changes arising from FTAs will also take several years to emerge as business adjusts to new trading rules and as barriers fall progressively. For example, access for beef under AUSFTA will take 18 years to eventuate. Some liberalisation commitments under AANZFTA are to be phased in over a 15 year period. (sub. 41, Attachment 1, p. 12)

The difficulties in isolating the impacts of BRTAs necessitate careful interpretation of results.

The Commission's empirical analysis of the impact of trade agreements

To further analyse the effects of trade agreements, the Commission undertook an econometric analysis of the impact that the formation of selected agreements had on levels of merchandise trade. Using a 'gravity model' of global merchandise trade, in which trade flows between countries are determined by their relative size and income levels, but offset by distances apart and other factors (Anderson 1979), the impact of a range of BRTAs was assessed. The study focused on the common change in trade flows for BRTA members that occurred post agreement establishment (see box 8.6).

Box 8.6 Econometric estimates of the impact of trade agreements on trade flows

Econometric modelling is useful in determining the link between the formation of trade agreements and observed changes in trade flows, while holding other factors which affect trade flows constant.

A gravity model of trade which relates the trade between two countries to their economic size and the distance between them was used to examine the effects of 27 trade agreements. The model was fitted using a Poisson estimator on a comprehensive sample of trade flows between 140 countries over the period 1970–2008. The model takes the broad form:

$$\text{Trade flows} = f(\text{GDP}, \text{time}, \text{bilateral fixed effects}, \text{BRTA})$$

In the gravity model, estimated trade flows between country *i* and country *j* in year *t* depend on the log of the sum of GDPs of each country, the log of the similarity of the size of each countries' economy and the relative incomes in each country. In addition, the common change in trade flows between members of various agreements and the common change in imports and exports between members and non-members as a result of the agreement were also estimated. Changes in trade flows were also estimated to be a function of time-specific effects and time-invariant asymmetric bilateral fixed effects to capture multilateral trade resistance between countries over the sample period.

(continued next page)

Box 8.6 (continued)

To examine the net effect of the trade agreements on regional and global goods trade, holding all other factors constant, the model estimates are re-weighted to take into account the relative size of the trade flows of the members to global trade flows.

Full details of the Commission's econometric modelling are provided in a supplement to the report.

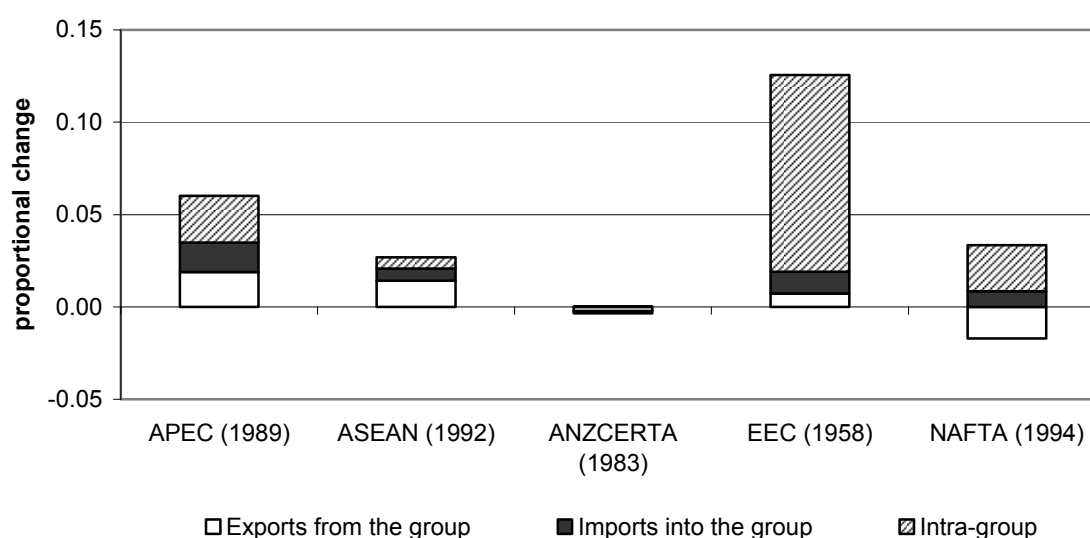
The three types of changes in trade flows that were examined were those that related to:

- intra-group trade, that is, trade between members;
- imports by members from non-members; and
- exports by members to non-members.

In this way, both trade flows created by a BRTA, and those potentially diminished (through a change in focus or members or trade diversion influences), can be separately explored.

The estimated impact of selected agreements on world trade was found to be significant, with clear differences observed between different agreement types (figure 8.3). Regional agreements which covered a large proportion of world trade, and had a large membership base, had the largest estimated impact on world trade.

Figure 8.3 Estimated effects of selected BRTAs on global trade, 2008^a



^a The base used to compute the proportional change is the estimated trade levels in the absence of any BRTA.

Source: Commission estimates.

From the analysis, members of those agreements with a more ‘open’ preference structure were found to trade with non-members to a greater degree than other agreements. For example, for the APEC grouping of countries, while contention exists over the underlying cause of the estimated effect, trade within the group and between group members and the rest of the world was greater than it would otherwise have been. One interpretation of this is that, if the impacts on trade flows are driven by domestic policy decisions distinct from the members being involved in APEC, the improved trading is a result of domestic policies for which the member countries have undertaken similar reforms (those which have achieved a common effect). On the other hand, to the extent that the APEC process has played a facilitating role in reducing trade barriers, it suggests that agreements which favour a non-preferential approach, and which seek to establish a cooperative forum intended to facilitate economic integration, can have positive impacts on trade flows.

The ASEAN and EEC agreements also produce a net positive impact on all types of trade flows examined (within and external to agreement partners). For the ASEAN agreement, while it is preferential, the agreement explicitly allows for non-preferential reductions in tariffs by countries to act as preferential concessions, thereby allowing them preferential access to other member countries. In this sense, the agreement does not inhibit overall trade openness as it does not create external stakeholders to trade policy decisions to the same extent as other preferential agreements. For these and other reasons, Hill and Menon (2010) describe the ASEAN agreement as embodying the practice of ‘open regionalism’ (box 8.7). In contrast, while for the EEC, the same positive impact is observed, the result is dominated by the impact on trade between members. The likely driver of this result is the more closed nature of the agreement (the EEC is a customs union based on a common external tariff) and its larger regional grouping.

For NAFTA, while there are strong positive impacts on intra-group trade, this is partly offset by reductions in trade to non-member countries. The results suggests that the preferential nature of this agreement brings with it some costs. For NAFTA members, while the agreement has been net trade creating, it is also seen to ‘reshuffle’ a significant amount of trade between sources.

While the ANZCERTA agreement has had little impact on world trade flows, it was estimated to have a positive impact on intra-group trade. Despite this, it was also estimated to have a negative impact on Australia’s and New Zealand’s trade with the rest of the world. In this sense, the analysis suggests that the preferential nature of the agreement appears to have altered the focus of many exporters (and importers) in these economies to the smaller markets within the agreement, foregoing some of the potential gains that would have otherwise been expected from exploring trading opportunities in markets elsewhere.

Box 8.7 The ASEAN agreement

The ASEAN agreement came into effect in 1967 with the Bangkok Declaration. The agreement's aim is to foster economic growth, social progress, cultural development and regional peace and stability. The agreement also aims to promote assistance between members in these areas.

In 1992, members of ASEAN agreed on the ASEAN Free Trade Area which was embodied by the Common Effective Preferential Tariff (CEPT) scheme. Given the importance of non-member trade, and members desire to not have overly binding conditions enforced on them through the agreement, the scheme has several features which have led to it being considered as 'open' or 'preference light'. These include:

- a low value Regional Value Content RoO of 40 per cent;
- the explicit ability of members to offer tariff reductions on an MFN basis and qualify for preferential access to other member markets; and
- the exclusion of agricultural products (ASEAN 2010).

Given the conditions of the CEPT, the importance of non-member trade, and the focus on matters that extend past border barriers, the ASEAN agreement has been argued to represent an example of open regionalism (Hill and Menon 2010). During the period of the agreement, members MFN tariffs have been reduced significantly and, in practice, only around 10 per cent of member trade makes use of the concessional arrangements — notwithstanding the margin of preference remains significant on some products. The agreement also provides an ongoing forum for pursuing economic and regional development issues, including trade facilitation measures.

The CEPT was replaced in 2009 by the ASEAN Trade in Goods Agreement (ATIGA). Unlike the CEPT, ATIGA includes agriculture and given the extent of the tariff commitments in a range of areas, there is potential for ASEAN to become more 'closed' than under the CEPT. Despite this, the new agreement also contains the explicit provision of the CEPT. ATIGA also permits a choice of RoO: the original 40 per cent RVC rule or a CTC rule at the 4-digit level. The agreement therefore continues the potential for ASEAN to remain an example of an relatively preference light agreement.

8.6 Summing up

The quantitative analysis of this chapter suggests that while participation in BRTAs is likely to increase trade and raise activity levels, the extent of any changes would depend on the nature of specific agreements.

Preferential trade agreements are likely to increase trade flows between partner countries, but at some expense to trade with other trading partners. The analysis also indicates that this would be particularly so when remaining tariffs are high. Despite the potential for increased bilateral trade flows, once account is taken of the

offsetting effects of trade creation and trade diversion and the resource allocation effects associated with changes in trade, the resulting changes in economic activity and income are likely to be small. The use of RoO, which may distort production and restrict trading opportunities, also has the potential to erode the potential net gain from such agreements.

The modelling also indicates that Australia could be adversely affected by the formation of preferential agreements among our trading partners; that is, without Australia's inclusion. The ultimate impact on Australia, however, would depend on its own reform actions domestically (such as reduction of its tariffs to improve competitiveness) and adaptation by Australian exporters to take advantage of new opportunities created by growth amongst trading partners.

Non-preferential agreements and agreements loosely implemented on an 'open regionalism' model, like the ASEAN-CEPT, have the potential to provide broader-based reductions in barriers to trade and deliver greater economic gains both across member countries and globally. A greater positive impact on trade between members is also observed in the case of the European Union's customs union because of the more closed nature of the agreement and its large regional grouping. These observations are supported by *ex ante* modelling of hypothetical tariff reductions and *ex post* gravity modelling and other studies of agreements (including by the Commission).

FINDING 8.1

Based principally on various quantitative studies on the effects of BRTAs and other trade liberalisation scenarios:

- a) While bilateral tariff preferences between the members of a trade agreement can yield economic benefits to those countries, the net benefits are likely to be small. Greater net benefits are available through countries lowering their own trade barriers on a non-discriminatory, most-favoured-nation basis.*
- b) The potential impacts on Australia of being excluded from, or choosing not to engage in, preferential trading agreements among its trading partners depend partly on Australia's own policy actions and the market responsiveness of its exporters.*
- c) The application of rules of origin in preferential trade agreements can lead to additional administrative costs for importers and exporters of merchandise goods.*
- d) Non-discriminatory trade agreements are more likely to result in net trade creation and associated economic benefits than agreements with restrictive preference structures.*