
2 Current assistance to the industry

To be able to model the effects of changes in assistance, a detailed understanding of how assistance arrangements operate is required. In this chapter, the current arrangements — how they are implemented and the levels of support — are outlined. The focus is on those measures that are explicitly referred to in the task requested of the Commission (appendix A), namely:

- tariffs
- two budgetary measures — the Automotive Competitiveness and Investment Scheme (ACIS) and the proposed Green Car Innovation Fund (GCIF).

Other policies that assist the automotive industry in Australia (box 2.1) are also outlined briefly, but were not modelled in this study.

2.1 Tariff assistance

A 10 per cent Most-Favoured-Nation (MFN) tariff currently applies to most imports of new cars and related automotive components into Australia.¹ Under current plans, this rate is due to fall to 5 per cent on 1 January 2010. (This will equate to the general tariff rate that, since 1996, has already applied to most other manufactured imports.) Currently, a 5 per cent tariff is applied to light commercial and 4WD vehicles and related components. This is not scheduled to change.

Tariffs lower than the MFN rate apply to imports from some countries under preferential trade agreements (PTAs). Australia has entered into four bilateral trade agreements — with New Zealand, Singapore, the United States and Thailand — and several other concessional arrangements are in place.² Although tariffs still apply to some automotive imports from these countries (but not to those from New Zealand,

¹ The MFN rate applies to imports from all World Trade Organization (WTO) member countries for which no preferential agreement exists. The MFN rate varies from zero to 10 per cent, depending on the product involved.

² For example, Canada and Australia grant each other preferential tariffs on a limited range of products under the Canada–Australia Trade Agreement, which was established in 1960 and amended in 1973 (DFAT 2007). Australia also has preferential agreements under Generalised System of Preferences arrangements, as well as with countries of the South Pacific and Papua New Guinea.

Papua New Guinea and Singapore), they are typically less than the MFN rate (table 2.1).³

Box 2.1 Policies that assist the Australian automotive industry

The automotive industry in Australia benefits from a range of policy measures, in addition to tariffs and ACIS (and, by 2011, the GCIF).

Industry-specific initiatives

- Tariff of \$12 000 on imports of second-hand vehicles (other than for specialist use), which effectively precludes competition from this source.
- Purchasing preferences (of some governments and statutory bodies) for vehicles manufactured or imported by local vehicle producers. These effectively provide a subsidy to companies with a local presence.
- The fringe benefits tax concession on private use of company cars, which is seen as especially important to local manufacturers, given their reliance on fleet sales.
- Ad hoc support by State/Territory and Australian Governments, such as through payroll tax concessions, grants and low-interest loans, often to attract new investment, to prevent a threatened plant closure or to provide support for adjustment following a closure.
- AutoCRC (the Cooperative Research Centre for Advanced Automotive Technology). Created in December 2005, it is partly funded by the Australian Government, and involves nine car assemblers and component manufacturers, two State Governments and ten research institutions. It aims to deliver 'smarter, safer, cleaner manufacturing and vehicle technologies'.

General policies

- The Export Market Development Grants Scheme, which provides taxable grants to reimburse up to 50 per cent of designated export promotion expenses (focusing on small and medium enterprises).
- TRADEX, which provides upfront exemptions from customs duty and GST on imported goods that are intended for direct export or are used in the manufacture of exported goods.
- R&D grants and tax concessions — including the 125 per cent R&D concession, the Premium 175 per cent tax concession, and the R&D tax offset (which is available to companies with an annual turnover of less than \$5 million).

Sources: AutoCRC (2008); PC (2002, 2008a).

³ Australia is also currently considering or negotiating PTAs with India, Korea, Indonesia, Malaysia, China, Japan, ASEAN (Association of Southeast Asian Nations) and the Gulf Cooperation Council (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates). On 27 May 2008, the Australian Government announced that it had concluded PTA negotiations with Chile. The agreement is expected to be formally signed in late July 2008 and take effect on 1 January 2009 (Crean 2008).

Given these PTAs, the actual nominal tariff on automotive products — as represented by a trade-weighted average (box 2.2) — is lower than 10 per cent. Preferential arrangements may not necessarily reduce the level of assistance provided to the Australian industry, however, particularly if they result in so-called ‘trade diversion’ rather than ‘trade creation’ (box 2.3).

Table 2.1 Preferential and MFN tariff rates, automotive industry, 2005

Country		Cars ^a	Components	Others
No. of tariff lines		24	84	100
Canada	Minimum (%)	0	0	0
	Maximum (%)	0	10	10
MFN	Minimum (%)	5	0	0
	Maximum (%)	10	10	10
New Zealand, Papua New Guinea, Singapore	Minimum (%)	0	0	0
	Maximum (%)	0	0	0
Thailand	Minimum (%)	5	0	0
	Maximum (%)	10	10	10
United States	Minimum (%)	5	0	0
	Maximum (%)	10	10	10

^a ‘Cars’, ‘components’ and ‘others’ are the sectors as defined in the process of disaggregating the MMRF database (chapter 3). Australia does not import all automotive products from each country listed.

Source: Appendix C.

The net assistance provided to an industry can be measured by the net subsidy equivalent and effective rate of assistance, which account for the effects of all forms of assistance on the prices of an industry’s outputs, as well as the effects of assistance on the prices of an industry’s inputs (box 2.3). Effective rates provide an indication of the extent to which assistance allows an industry to attract and hold economic resources. Industries with relatively high effective rates of assistance are more likely, as a result of their assistance, to be able to attract resources away from those with lower rates (PC 2008a).

In 2006-07, the estimated effective rates of assistance *due to tariffs alone* were 4.2 per cent for car assemblers and 8.8 per cent for components manufacturers.

Box 2.2 Some tariff concepts

Ad valorem tariffs are applied as a percentage of the 'free on board' value of the imported good (such as 10 per cent).

Specific tariffs are applied as a given dollar amount per unit of the imported good to which they are applied (such as \$12 000 per car). A specific tariff on a good can be converted to an **ad valorem equivalent** by dividing the tariff revenue by the value of the imports concerned.

Trade-weighted average tariffs account for the fact that different tariff rates apply to:

- different goods produced by an industry
- goods imported from different countries.

They are calculated as the weighted sum of each import from each country, that is:

$$\frac{\sum_{i=1}^i \sum_{j=1}^j (M_{ij} \times \frac{t_{ij}}{100})}{\sum_{i=1}^i \sum_{j=1}^j M_{ij}} = t_w$$

where M_{ij} represents the value of imports M of product j from partner country i , and t_{ij} is the tariff rate applied to those imports. Thus, for example, a high tariff rate receives a low weight if few of the goods to which it is applied are actually imported.

Sources: Appendix D; PC (2008a).

2.2 Budgetary assistance

In addition to tariff protection, various forms of budgetary assistance are available to the automotive industry. Some of these are specific to it, while others are also available to other industries (box 2.1; PC 2007b, 2008a). Of those that target the automotive industry, ACIS and the recently-announced GCIF are briefly examined below, to provide an understanding of the approach taken to incorporating these measures in the modelling.

The Automotive Competitiveness and Investment Scheme

ACIS was introduced in 2001 as a transitional measure to help the automotive industry adjust to lower tariffs and to increased international competition, containing some elements of the earlier Export Facilitation Scheme and Duty Free Allowance (PC 2002). As noted in chapter 1, the transitional nature of the program was re-emphasised by the (then) Australian Government when it announced changes to assistance arrangements following the Commission's 2002 inquiry.

Box 2.3 **Estimating assistance to the car and components sectors**

Broadly speaking, effective rates of assistance (ERAs) are calculated as the net assistance provided to an industry divided by the industry's unassisted value-added. The Commission publishes assistance estimates for a range of industries, including motor vehicles and parts (MVP), annually in its *Trade & Assistance Review* publication.

For 2006-07, the MVP industry was estimated to have received a net subsidy equivalent of \$1.26 billion from the tariff and budgetary measures covered in the estimates. The accompanying ERA was 12.2 per cent (PC 2008a). For this study, the Commission has disaggregated these estimates into separate estimates for cars and components (and 'others'), in line with the scope of the automotive assistance arrangements being modelled.

Tariffs and tariff preferences

The estimates of tariff assistance are derived in part by assuming that MFN rates approximate the 'price wedge' created by tariffs. The estimates abstract from the effects of tariff concessions provided under preferential trade agreements (PTAs).

The tariff concessions provided under PTAs need not result in any significant impact on prices in the domestic market and, thus, on assistance provided by the general (MFN) tariff regime. This would be the case if automotive producers in the partner country effectively 'pocketed' the tariff concession, rather than reduced their prices below the prevailing (tariff-inflated) price of rival vehicles made elsewhere. For example, automotive imports from Thailand have grown significantly since the Thailand-Australia PTA took effect in 2005 (although it is understood that many of these are in the 'other' vehicles and components category that are outside the focus of the current study). While an empirical matter, in the car segment it appears plausible that the main effect of the agreement has been to induce a switch in the source of some imports, rather than induce significant reductions in the price of those imports. To the extent that this is so, the MFN rate would remain the most appropriate measure of the 'price wedge' created by automotive tariffs and these related concessions.

However, to the extent that concessions provided by PTAs result in a reduction in the prices of cars and related components in the Australian market, assistance to the automotive industry's outputs will be lower than that implied by the MFN rate. Equally though, to the extent that the price of components is lower, the penalties (or negative assistance) on car assemblers' inputs will also be lower than implied by the MFN rate. In these circumstances, use of the MFN rate could result in some overstatement of assistance to the components sector, and either some overstatement or understatement of assistance to assemblers, depending on trade patterns with the PTA partner countries and which automotive products have been subject to price reductions (and their relative magnitudes).

On the other hand, to the extent that PTAs afford Australian automotive producers preferential market access in partner countries, effective assistance to the Australian industry could be increased. In effect, Australian producers would obtain the benefit of assistance provided by a partner country's general automotive tariff regime for exports to that market. The actual assistance effects would depend on the extent of trade between partner countries and the margin of preference afforded by the PTA.

Box 2.3 (continued)

Budgetary and other assistance

As well as general tariff assistance, the estimates for the automotive industry cover support provided through ACIS, TRADEX, Export Market Development Grants, the R&D offset and tax concessions, the AutoCRC and some other, minor, items. The estimates omit assistance from several other sources, including State Government budgetary assistance and the potentially substantial assistance afforded by government purchasing preferences and the \$12 000 duty on imported second-hand vehicles.

Disaggregation procedure

The assistance estimates for MVP were disaggregated as follows:

- production, materials and value added estimates for cars and components were derived using material usage and value added shares from the modelling database
- ACIS shares from the modelling database were used to disaggregate ACIS between cars and components
- for non-ACIS budgetary assistance, given limited information about the industry incidence of these programs, production shares, as derived from the modelling database were used to allocate this assistance between cars and components
- tariff assistance estimates, as published in *Trade & Assistance Review*, were disaggregated according to the average tariff levels on inputs and outputs that are faced by both cars and component producers.

Assistance estimates for the combined automotive industry, 2006-07

	<i>Cars</i>	<i>Components</i>	<i>Automotive</i>
<i>Net Subsidy Equivalent</i>	\$m	\$m	\$m
Tariffs	148.0	373.3	521.3
ACIS	357.0	180.0	537.0
Other budgetary assistance	33.5	36.4	69.9
Total	538.5	589.7	1128.2
<i>Effective Rate of Assistance</i>	%	%	%
Tariffs	4.2	8.8	6.7
ACIS	10.1	4.3	6.9
Other budgetary assistance	0.9	0.9	0.9
Total	15.2	13.9	14.5

The estimated total net subsidy equivalent for the automotive industry of \$1.13 billion is equivalent to \$23 500 per worker, based on employment levels of 48 000 (based on employment data classified by ANZSIC codes drawn from ABS 2007a).

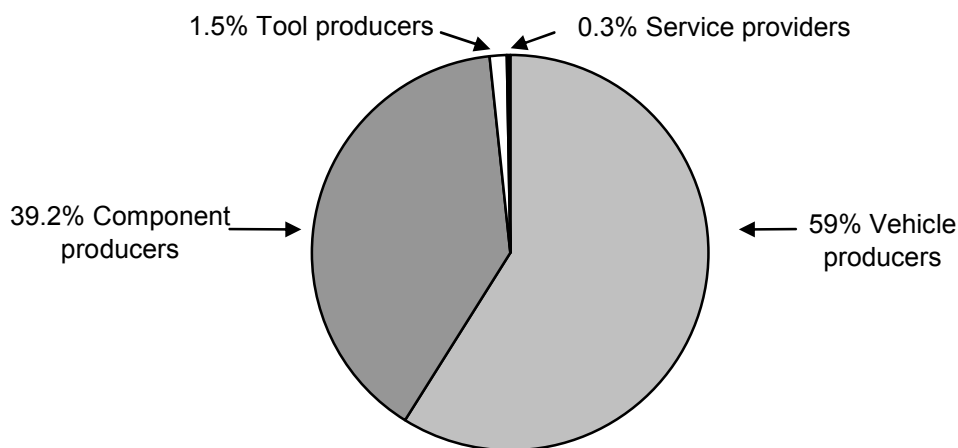
ACIS support is delivered through import duty credits funded by tariff revenue,⁴ and has been designed in three stages.

- Stage 1 (1 January 2001 to 31 December 2005). Funding included capped credits totalling \$2 billion, as well as uncapped credits.
- Stage 2 (1 January 2006 to 31 December 2010). Funding includes capped credits totalling \$2 billion. Uncapped credits continue unchanged.
- Stage 3 (scheduled to begin on 1 January 2011 and end on 31 December 2015). Total capped credits worth \$1 billion, with annual funding to decline progressively over the period. Uncapped credits will continue unchanged. (AusIndustry 2008a)

The nature of the scheme means that the level of capped ACIS funding falls as tariffs fall.

ACIS credits are issued quarterly to registered motor vehicle assemblers, automotive component producers, automotive machine tool and tooling producers, and automotive service providers (figure 2.1; box 2.4).

Figure 2.1 Allocation of ACIS funding, 2007



Data source: AusIndustry, unpublished data.

Credits are tradeable and can be sold to any firm (in any industry) that has an interest in importing the eligible goods. Revenue from selling credits can be used

⁴ Credits are used to discharge customs duty paid on ‘eligible automotive products’ which include motor vehicles under Harmonised System (HS) subheadings 8702, 8703 and 8704 and any components or machinery that are used specifically in producing them (*Customs Tariff Act 1995* (Cwlth), Schedule 4, Item 41E).

for a range of purposes, including research and development (R&D), investment, export market development and training (PC 2002). In practice, credits are traded at a small discount. The Commission noted in its last automotive inquiry (PC 2002), for example, that many component producers sold their credits to vehicle importers at a price of around 95 to 98 cents in the dollar.

Box 2.4 How ACIS credits are distributed

Uncapped credits are distributed exclusively to car assemblers and are tied to production levels, according to the formula: $ACIS_{uncapped} = 0.15 \times P_{PMV} \times t_{PMV}$, where P_{PMV} is the ex-factory value of car production and t_{PMV} is the tariff rate on cars.

Capped credits are shared by all producer classes. A multi-step modulation process is used to ensure expenditure does not exceed the allocation. The first step distributes 55 per cent of credits to car assemblers and 45 per cent to the rest of the supply chain. Subsequent steps involve modulating the amounts within the two groups according to various rules (including that no individual assembler can receive credits exceeding 5 per cent of its value of production).

The capped entitlements of *car assemblers* are calculated as follows.

1. Production credits are equal to 10 per cent of the *value of production* of motor vehicles multiplied by the car tariff rate *plus* 25 per cent of the value of production of engines and engine components multiplied by the car tariff rate.
2. Investment credits are equal to:
 - (a) 10 per cent of the *value of investment* in approved plant and equipment used to produce motor vehicles, engines or engine components
 - (b) 25 per cent of the *value of investment* in approved plant and equipment in relation to the production of automotive components (other than engines and engine components), automotive machine tooling or automotive services
 - (c) 45 per cent of the *value of investment* in R&D for third parties in relation to production of automotive components (other than engines and engine components), automotive machine tooling or automotive services.

Automotive component producers, automotive machine tool and tooling producers and automotive service providers are entitled to:

1. 25 per cent of the *value of investment* in approved plant and equipment
2. 45 per cent of the *value of investment* in approved R&D.

Sources: AusIndustry (2008a, b).

Because some ACIS expenditure is allocated on an uncapped basis, it is possible for outlays to exceed tariff revenue. This could be the case if, for example, new PTAs, which reduced tariff revenue, were put in place while ACIS was still operating. If this occurred, the Government could either discontinue ACIS payments or distribute

the uncapped amounts as grants from budgetary funding sources other than tariff revenue.

The Commission (PC 2008a) estimated the total level of ACIS funding to be \$537 million in 2006-07. Assuming capped funding is distributed evenly over the five years of Stage 2, some \$400 million of capped credits and \$137 million in uncapped credits were allocated.

In 2006-07, the effective rate of assistance due to ACIS alone is estimated to be 10.1 per cent for car assemblers and 4.3 per cent for components manufacturers. (Combined with the assistance provided by tariffs, the estimated effective rate of assistance provided to the sectors was 14.1 and 13.1 per cent respectively.)

The Green Car Innovation Fund

The GCIF is due to start in 2011 and operate for five years. As proposed, it will involve the Australian Government investing one dollar for every three dollars invested by the industry, up to a value of \$500 million, thereby aiming to generate \$2 billion worth of R&D investment in green cars. In its 2008-09 Budget, the Australian Government allocated \$100 million of expenditure to the Fund for the 2011-12 financial year (Australian Government 2008b).

The Government has indicated that funding will be open to various technologies, and will not be allocated entirely to one vehicle model, company or technology (Australian Government 2008b; Carr 2008a). Because the Bracks Review has been asked to make recommendations on the most effective way to deliver funding under the GCIF, more specific details about the Fund are unavailable.

The Australian Government has also pledged to ‘purchase hybrid or other value-for-money, environmentally-friendly vehicles’ if produced in Australia (Carr 2008a). The combined funding and purchasing commitments appear directed at achieving both environmental and industry-development objectives. According to the Australian Government, for example, the GCIF:

... will encourage the development and manufacture of low-emission vehicles in Australia, promoting innovation and sustainability in the Australian automotive industry. (Australian Government 2008b, p. 22)

2.3 Other policies

As noted above (box 2.1), the automotive industry benefits from a range of industry-specific and general policies and initiatives, in addition to those outlined in

sections 2.1 and 2.2. Although the level of assistance that these policies provide cannot easily be quantified, some of them appear to afford substantial levels of additional assistance (box 2.5).

Box 2.5 Levels of assistance provided by other policy measures

It is not possible to quantify the assistance provided through some policies that affect the automotive industry, such as the prohibitive tariff on second-hand vehicles and government purchasing preferences. What follows is evidence of the value of assistance provided by some of the other measures outlined in box 2.1.

Industry-specific measures

- Funding of the AutoCRC includes \$38.4 million from the Australian Government, \$17.1 million from industry and \$12.5 million from universities and State Governments over seven years.
- The Australian Treasury (2007) estimated that about \$1.5 billion worth of claims for fringe benefits tax concessions on company cars were made in 2006-07. Domestic car producers — which rely largely on fleet sales — could benefit from this concession to the extent that it encourages the purchase of company cars.
- Over the years, substantial direct government expenditure has been allocated to ad hoc assistance measures. In May 2006, for example, the Australian Government announced that it would provide \$52.5 million to fund the design, engineering and manufacture of the next generation Ford Falcon and Territory vehicles in Victoria, and the design and engineering of a Ford light commercial vehicle. In October that year, the Australian Government announced it would provide \$6.7 million over four years (matched by the Victorian and South Australian Governments) to General Motors Holden, to introduce safety and fuel management improvements and to reduce greenhouse gas emissions on Commodores.

General policies

- In 2006-07, \$1.6 million was provided to the industry through the Export Markets Development Grants Scheme, while TRADEX provided \$46.9 million of assistance to exporting industries using motor vehicles and parts.
- In 2006-07, \$25.5 million worth of assistance was provided to the automotive industry through R&D grants and tax concessions. Of this, \$15.5 million was under the 125 per cent concession, \$7.5 million under the Premium 175 per cent tax concession, and \$2.5 million under the R&D tax offset. (A 'clawback' mechanism is in place to ensure that R&D that attracts ACIS (or other government income) does not also attract a tax concession above 100 per cent.)

Sources: Australian Treasury (2007); AutoCRC (2008); Howard (2006); Macfarlane (2006); PC (2002, 2008a); Toyota (2008).

In other cases, such as with the luxury car tax,⁵ the effect on domestic producers is more ambiguous. However, given that this tax applies to vehicles with a GST-inclusive value above \$57 123, it is more likely to be imposed on imported than on domestically-produced vehicles. On balance, therefore, it is plausible that it provides some additional assistance to domestic producers.

Some of the industry-specific and general policy measures potentially overlap or interact. For example, producers could seek to offset the effect of future reductions in ACIS by increasing their take-up of R&D concessions. The extent to which the R&D currently funded under ACIS would meet the narrower definition of R&D that applies under general concessions is unclear, however.

Likewise, the national Emissions Trading Scheme (ETS), due to start in 2010, will provide a mechanism to achieve cost-effective abatement across all sources of emissions, including from cars. It will do this without governments needing to determine which industry or production activities provide scope for such abatement, or to specify the means of abatement. In terms of potential greenhouse outcomes, the ETS will override any potential benefits of a GCIF (and do so in a more effective and less costly way). As the Commission noted in its submission to the Garnaut Climate Change Review:

... it is suggested that subsidies to assemble hybrid cars in Australia could reduce GHG [greenhouse gas] emissions as well as fostering domestic activity in the motor vehicle sector. While it is clearly appropriate to assess all costs and benefits of a policy initiative, with an effective ETS in place any climate change benefit of a subsidy for the production of hybrid cars would be illusory. The policy would therefore need to be justified on industry policy grounds. (PC 2008b, p. XIV)

⁵ The luxury car tax is imposed on cars with a GST-inclusive value above \$57 123. A plan to increase the tax rate from 25 to 33 per cent was announced in the 2008-09 Australian Government Budget (Australian Government 2008).