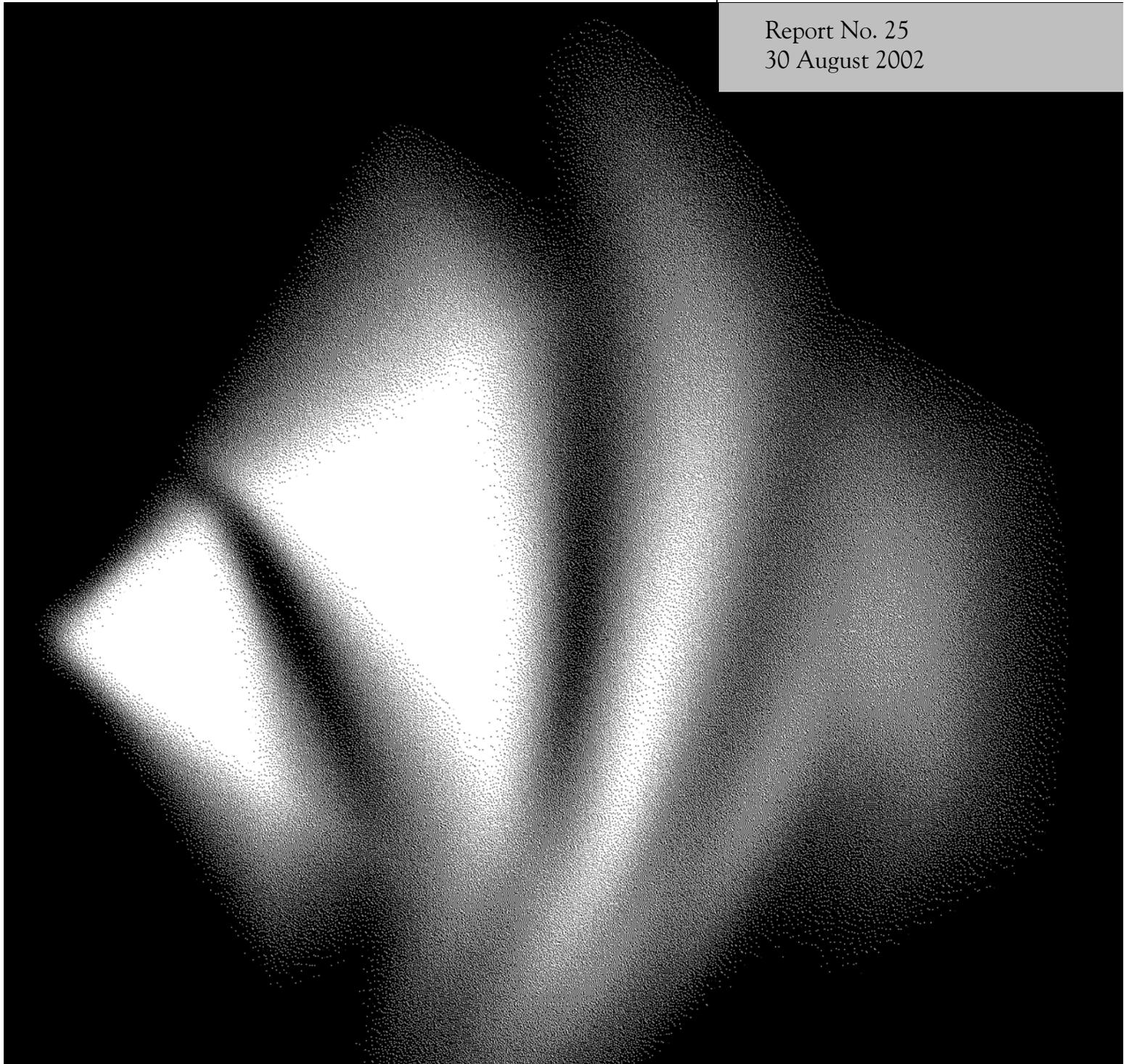




Review of Automotive Assistance

Inquiry Report

Report No. 25
30 August 2002



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The Productivity Commission

The Productivity Commission, an independent Commonwealth agency, is the Government's principal review and advisory body on microeconomic policy and regulation. It conducts public inquiries and research into a broad range of economic and social issues affecting the welfare of Australians.

The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the wellbeing of the community as a whole.

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2 September 2002

The Honourable Peter Costello MP
Treasurer
Parliament House
Canberra ACT 2600

Dear Treasurer

In accordance with Section 11 of the *Productivity Commission Act 1998*, we have pleasure in submitting to you the Commission's report on the *Review of Automotive Assistance*.

Yours sincerely

Gary Banks
Chairman

Philip Weickhardt
Associate Commissioner

Terms of reference

I, PETER COSTELLO, Treasurer, pursuant to Parts 2 and 3 of the *Productivity Commission Act 1998*, refer post 2005 assistance arrangements for the automotive manufacturing sector to the Commission for inquiry and the provision of an information report. The Commission is to report its findings within six months of receipt of this reference and may hold hearings for the purpose of the inquiry.

Background

1. The Government's post 2000 assistance arrangements for the automotive manufacturing sector consist of:
 - the Automotive Competitiveness and Investment Scheme;
 - passenger motor vehicle tariffs frozen at 15 percent before stepping down to 10 percent on 1 January 2005;
 - tariffs on four-wheel-drives and light commercial vehicles at 5 percent; and
 - the Automotive Market Access and Development Scheme (which expires in June 2002 and has been the subject of a separate evaluation).
2. In addition, a number of other initiatives also impact on the sector, including:
 - the introduction of the New Tax System;
 - preferential treatment for vehicle supplied by local producers under the Commonwealth vehicle fleet arrangements;
 - the new Specialist and Enthusiast Vehicle Scheme to regulate the supply of vehicles to the domestic market under concessional arrangements;
 - the Government's environmental and road safety initiatives such as the National Average Fuel Consumption Target of 15 percent fuel efficiency improvement over business as usual by 2010, and the international harmonisation of the Australian Design Rules; and
 - Australia's commitment under APEC to achieve free and open trade and investment by 2010 and its obligations in respect of WTO (subsidies) and our broader trade liberalisation objectives.
3. There are currently four vehicle assemblers supported by a supply chain comprising some 200 component producers, service providers and toolers. Together the vehicle assemblers produce some 350,000 vehicles a year of which around 30 percent are exported. Aggregate exports by the sector reached a record level of \$4.65 billion in 2000-01. This is an increase of 83 percent since 1997-98. The size of the domestic market has fluctuated between 750,000 and

800,000 vehicle sales per annum since 1998. Competitiveness has been boosted by the depreciation of the local currency in recent years. However, by international standards, Australia is a small, mature and diverse market; for many firms, pursuing growth to achieve scale economy is a major priority. Global integration, including exports, is paramount to the future of the sector. The majority of firms in the sector are subsidiaries of overseas owned corporations, with investment decisions and the identification of potential export markets made on the basis of their global operations (rather than simply in the interest of maximising returns on their Australian operations).

4. The Government is committed to a viable automotive manufacturing sector and the supply of competitively priced, quality vehicles to Australian consumers. The sector has long lead times for model planning and investment, and uncertainty about post 2005 arrangements could impede investment decisions. The Government is therefore keen to have a timely inquiry into the post 2005 assistance arrangements for the sector.

Scope of the Inquiry

5. Drawing on the Background, the Commission should, in consultation with a cross section of the sector and bearing in mind the Government's desire:
 - for an internationally competitive and globally integrated automotive manufacturing sector; and
 - to improve the overall economic performance of the Australian economy.

Evaluation of Current Arrangements

- Evaluate key outcomes of the Automotive Competitiveness and Investment Scheme and reform of automotive tariffs, including an assessment of the impacts on each of the four categories of participants in the scheme.
- Comment on the inter-dependence between the vehicle assemblers and component producers of the sector, and the sustainability of one segment if the number of firms in the other segment were to decrease.

Assessment of Long Term Viability and Opportunities

- Identify and analyse major impediments to the long term viability of the sector, including obstacles and restrictions on firms' export plans; competition for investment in the global industry; state and local taxes; industrial relations issues; and other hindrances on both the demand and supply sides of the economy.

-
- Identify the strengths, weaknesses and opportunities for the sector.
 - Recognising the importance of scale economy, identify policy options that are consistent with the Government's international obligations, such as those under the WTO and APEC, which would assist the sector to achieve long term sustainability, including through enhanced global integration.
 - Analyse the short and long term implications of each policy option, including under present arrangements, for the structure, performance and competitiveness of the sector, employment, regional Australia, consumers, resource allocation and growth prospects generally.
 - Examine the impact on the sector of changes in road safety and environmental requirements.
 - Report on progress in the trade liberalisation of the automotive sector in existing and prospective export markets for Australia.

Consideration by the Government

6. The Government will consider the findings of the Commission and will announce its response as soon as possible after receiving the Commission report.

PETER COSTELLO

[Received 21 March 2002]

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OVERVIEW

Key points

- In recent years, the automotive industry has transformed itself to become a major exporter and innovator. It has also greatly improved its productivity and the quality of its products. But it can do more to become truly internationally competitive.
- This transformation has been influenced by reductions in tariffs, which have exposed the industry to increased international competition and also reduced costs for consumers and increased their vehicle choices.
- ACIS support and a lower \$A have both been important in helping the industry adjust to lower tariffs.
- The industry has developed some key strengths, including its ability to respond quickly, innovatively and cost effectively to small volume market opportunities.
- A serious weakness is the adversarial workplace culture that continues to be evident in some parts of the industry. This has restricted the industry's capacity to implement just-in-time and other best practice processes essential to its long term viability. While regulatory changes may help, better communication and greater cooperation between firms, their employees and unions is the key to improved workplace and industrial relations outcomes.
- Although assistance to the automotive industry will decline again in 2005, it will still be well above that for most other Australian industries. Further assistance reductions would benefit consumers and keep pressure on the industry to continue to improve its performance, as well as being consistent with Australia's APEC commitments.
- To meet the twin objectives of establishing a clear path to lower assistance and giving the industry time to adjust, a decade of policy certainty is desirable.
- Of the tariff options, there would be advantages in providing for a pause at 10 per cent from 2005, before reducing to 5 per cent in January 2010 and keeping this rate until 2015. This should be supported by retaining ACIS as a transitional mechanism, largely in its current form, until the end of 2010.
- These options do not envisage changes to government purchasing preferences for locally made vehicles or to the penalty tariff on used cars. The potential benefits of such changes at this time, appear not to warrant the additional uncertainty that would be created for the industry.
- Continued actions by government to improve access to overseas markets and to advance microeconomic reform are important for the industry's long term future.
- The Commission's options have been designed to minimise the potential for disruptive change to the industry. Nevertheless, diverse pressures for adjustment will remain. As for other industries, any pronounced or regionally concentrated adjustment could warrant specific measures to assist affected employees or regions.

Overview

What is the inquiry about?

The automotive industry is one of Australia's major manufacturing industries. It has significant linkages to other parts of the economy. It is also an industry that has undergone a major transformation in recent years — from being oriented almost exclusively to supplying the domestic market, to relying increasingly on exports to secure its future (see box 1).

While many factors have contributed to the ongoing productivity and quality improvements that have supported this transformation, reductions in the previously very high levels of government support for the industry, and changes to the nature of that support, have clearly played a part. The Government is now seeking advice from the Commission on options for assistance to the industry after 2005, when key elements of the current assistance arrangements are due to terminate.

What are the government's objectives for the automotive industry?

The Government has expressed its desire for a viable, internationally competitive and globally integrated automotive manufacturing sector. It has also signalled its commitment to ensuring that Australian consumers have access to competitively priced, quality vehicles and to promoting a strong Australian economy. The implication is that policies that would help to improve the automotive industry's viability should not be detrimental to the longer term interests of the community as a whole.

What is a 'viable', 'internationally competitive', automotive industry?

Many in the industry sought to define 'viability' as the capacity to compete internationally with comparable assistance to that provided to overseas competitors.

However, there are cogent reasons why basing future assistance policy for the industry on this concept of viability would not be in Australia's interests. As discussed below, such an approach could, in practice, amount to indefinite preferential treatment for the automotive industry over other activities. As past

experience indicates, this would weaken the incentives for the industry to improve its performance and detract from the welfare of the community more generally. Consistent with the thrust of Australia's broader industry policy, genuine viability ultimately implies a capacity to compete successfully in the domestic and overseas markets without industry-specific government support.

There are good prospects of achieving a viable industry in Australia

A number of factors suggest that Australia can develop an automotive industry able to compete successfully in global markets on its own merits.

The industry has a number of strengths

Increasing exposure to international competition has seen the industry develop some important strengths:

- strong product development capabilities, supported by access to a pool of creative and skilled staff, and reinforced by increasing clustering of vehicle and component activity;
- a capacity to identify small volume market opportunities and to respond to them quickly, innovatively, flexibly and cost effectively;
- a strong customer focus and willingness to spend time and resources in nurturing relationships with potential customers; and
- extensive linkages with major global vehicle and component producers.

More broadly, the industry's productivity and quality performance — once a major weakness — is rapidly becoming an asset. Amongst other things, it has allowed some Australian firms to compete successfully with overseas affiliates for the right to supply globally 'homogeneous' products, such as the Toyota Camry, to particular export markets.

These strengths will help automotive firms to realise new market opportunities. Many of these opportunities are likely to arise in export markets and involve small volume 'niche' business that would be unattractive to larger, less flexible, suppliers. But there will also be opportunities in the domestic market arising from the scope to engineer new vehicle models from core 'platforms' and to source more components and tooling requirements locally.

Box 1 A snapshot of the Australian automotive industry and market

- There are four vehicle producers — Holden, Ford, Toyota and Mitsubishi — all of which are subsidiaries of major overseas producers. They produce five passenger vehicle models (and derivatives of those models) at four plants in Melbourne and Adelaide, augmenting this range with vehicles sourced from affiliates overseas. (These latter vehicles collectively account for over 30 per cent of total vehicle imports.)
- More than 200 firms produce automotive components for use as both original equipment in new vehicles and for the replacement market. While many of these firms are located in Melbourne and Adelaide, significant component production also occurs in Sydney and in a number of major regional centres, including Geelong, Ballarat, Albury Wodonga, Taree, Launceston and Toowoomba. There are also several hundred, mainly small, firms around Australia producing replacement components and accessories exclusively for the 'aftermarket'.
- Around 500 small firms provide specialised tooling to vehicle and component producers. Most of these are located in Victoria, with the remainder in New South Wales and South Australia. Vehicle and component producers also have some in-house tooling capacity, but this is mainly used for maintenance and repair.
- Several firms provide specialist automotive engineering, design, testing and customising services, although much of this activity is undertaken in-house by vehicle and component producers.
- Turnover for the industry as a whole is around \$17 billion a year. Employment is around 54 000 — some 17 000 in vehicle assembly, nearly 30 000 in component production and the rest in tooling and automotive service provision. The industry accounts for some 6 per cent of value added and employment in the manufacturing sector and around 0.6 per cent of value added and employment in the economy as a whole. Its significance to the South Australian and Victorian economies, and to cities and regions within them, is greater again.
- The local vehicle market has been growing steadily over the last decade. However, much of this growth has been for smaller passenger and all-terrain/four-wheel-drive vehicles that are currently supplied wholly from imports.
- Most locally produced vehicles are large models, with three-quarters of domestic sales made to fleet customers. Domestic demand for large vehicles has stagnated in recent years, contributing to a decline in the industry's share of the local passenger vehicle market from 80 per cent in the late 1980s to some 40 per cent.
- The industry has offset the impacts of this fall in market share by increasing exports. Exports, which now account for more than 30 per cent of production compared to less than 10 per cent a decade ago, were valued at just under \$5 billion in 2001. Major export markets include the Middle East, the USA, New Zealand and Korea.
- Export growth has been supported by major new investment and spending on R&D, both for product and process development. R&D as a proportion of the industry's sales is more than double the average for the manufacturing sector as a whole.

There is scope to address some of the industry's weaknesses

While the industry still has some significant weaknesses — particularly in relation to workplace arrangements and low production volumes — it sees considerable scope to address these. Such action could greatly enhance the industry's competitiveness and future prospects.

Achieving best practice workplace and industrial relations outcomes would greatly enhance the industry's competitiveness

More productive workplace arrangements have contributed significantly to the automotive industry's improved performance over the last decade. Institutional reforms such as the introduction of enterprise bargaining, more emphasis by firms on effective management and communication with their employees, and greater acceptance by employees of the need for change, have all played a part in delivering better workplace outcomes.

However, the overly adversarial workplace culture that persists in some parts of the industry continues to frustrate the achievement of win-win outcomes. Thus all parties recognise that this is an area where significant further improvement is necessary if the industry is to prosper.

A focus for recent concern has been industrial disputation in some key suppliers to the vehicle producers. As these disputes have highlighted, the just-in-time and lean manufacturing techniques that have been embraced by the industry worldwide mean that stoppages in strategic parts of the supply chain can quickly cause costly disruption across the whole industry.

Such disputes also call into question Australia's reliability as an export supplier and create pressure to adopt more conservative and therefore more costly inventory holding practices. Further, they reduce the viability of sole supplier arrangements that might otherwise help the industry to reduce costs through greater realisation of economies of scale.

But recent industrial disputes are just one manifestation of the more deep-seated weaknesses in this area of the industry's operations. For instance:

- Notwithstanding recent improvements, inflexibilities continue to detract from performance in many Australian automotive workplaces. Restrictions on the deployment of labour within plants, constraints on the most efficient shift patterns and often severe limitations on the use of short term or contract labour to cater for fluctuations in demand, are examples of such inflexibility.

-
- The skills and knowledge of some of those involved in managing workplace arrangements, or negotiating on behalf of employees, fall well short of what is required for best practice performance.

Better workplace and industrial relations outcomes would provide a significant boost to the industry's productivity, as well as helping to reassure overseas customers that it can reliably service export contracts. This would in turn enhance firms' ability to secure necessary investment capital from parent companies. Not surprisingly, therefore, most participants in the inquiry considered that workplace improvement is a high priority for the industry.

However, significant improvements in these areas are unlikely to be achieved without attitudinal and behavioural change. There is no place for the win-lose mentality that continues to pervade workplace negotiations in some parts of the industry. Similarly, there is an urgent need for better communication between managers and their employees and representatives. Without effective and ongoing dialogue between these parties, the cooperative relationship necessary to deliver best practice outcomes is unlikely to emerge.

The clear implication is that in the workplace and industrial relations area, it is largely up to the industry to get its house in order. Nevertheless, governments have a significant role to play in ensuring that the underlying regulatory frameworks are appropriate.

There are opportunities to increase production volumes

Production volumes in the Australian industry are low by world standards and the high concentration of domestic vehicle output in one market segment (see box 1) leaves the industry exposed to changes in consumer sentiment. Also, the industry's capacity to increase output through exports is limited by an array of trade and other barriers in overseas markets and by the global sourcing policies of parent companies. Being competitive in relation to price, quality and reliability of supply is not always sufficient to secure export business, at least in the short to medium term.

But there is still considerable scope to increase production volumes:

- Anticipated growth in exports, greater standardisation of components across vehicle models and further 'platform engineering' of basic vehicle types to produce a wider range of models, will enable firms to reap greater economies of scale. Apart from reducing costs, the resultant increases in production volumes should help to address the concern expressed by the industry that its critical mass is only just sufficient to justify the retention of major component production facilities and the associated research infrastructure in Australia.

-
- Through multilateral forums such as the WTO and APEC, and possibly regional trade agreements, there is scope for the government to secure better access to overseas markets for Australia's automotive exporters.

The industry has adjusted well to previous reductions in assistance

The automotive industry benefits from a range of government assistance measures (see box 2) that collectively provide it with more support than nearly all other manufacturing activities in Australia. By way of illustration, even when the tariff on passenger vehicles and components falls from 15 to 10 per cent in 2005, assistance to the industry's valued added — the 'effective rate of protection' — will still be around 20 per cent, or more than four times the projected average for the manufacturing sector.

Box 2 Government support for the Australian automotive industry

Government assistance for the Australian automotive industry is delivered in a variety of ways, including through:

- a tariff of 15 per cent on imported passenger vehicles and components, which will fall to 10 per cent in 2005;
- a tariff of 5 per cent on light commercial and 4WD vehicles and components;
- the Automotive Competitiveness and Investment Scheme (ACIS) which will provide subsidies of \$2.8 billion to the industry over the period 2001 to 2005;
- prohibitive tariffs on imports of second hand vehicles (other than for specialist use); and
- government purchasing preferences for vehicles manufactured or imported by the local vehicle producers.

The industry also has access to a range of generally available support measures such as R&D grants and tax concessions, TRADEX (which refunds tariff duty paid on inputs for exported products) and funding for specific 'strategic' investments via the Strategic Investment Coordination (SIC) program. And it receives a range of ad hoc support from State Governments via payroll tax concessions, grants, and low interest loans. The most recent example was the assistance package — reportedly worth \$50 million — provided to Mitsubishi by the South Australian Government. (This was on top of funding worth \$35 million from the Commonwealth.)

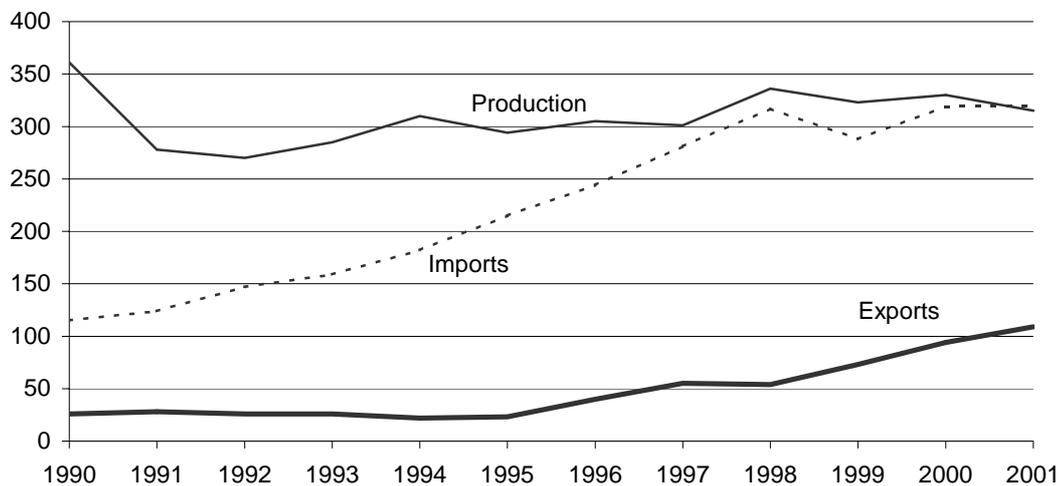
That said, the level of government support for the industry is much lower than in the past. Indeed, the 10 per cent tariff to apply from 2005 would have seemed highly improbable when the Button Car Plan was conceived in the mid 1980s. These reductions in assistance have provided significant benefits to consumers and businesses. Not only have vehicles become more affordable, but the choice of

vehicles is now much wider. There are currently around 250 vehicle models sold in Australia, compared to just 70 when the program of assistance reductions commenced.

Reductions in assistance, along with general pressures driving change in the global industry (see box 3), have required substantial adjustments in the industry. At the start of the Button Plan, there were five vehicle manufacturers operating eight plants and producing 13 vehicle models. Today, the remaining four manufacturers operate four plants and produce five models. Over the same period, the number of significant original equipment component producers and raw material suppliers has fallen from around 500 to a little over 200, and total employment in the industry has declined by more than 20 000.

The productivity improvements and cost savings resulting from this rationalisation have allowed the industry to offset the impacts of a declining share of the domestic vehicle market through strong export growth (see figure 1). The ability of firms and their employees to make these major adjustments, and the scope to address some remaining weaknesses, suggests that, in the future, the industry should be able to operate without special government support.

Figure 1 Production, exports and imports of passenger motor vehicles
‘000 units



Data source: AAI (2002).

But the industry's future cannot be guaranteed

While initiatives and policies to improve the industry's competitiveness will greatly enhance its future prospects, they cannot guarantee its future.

The industry faces a range of potential threats. For example:

- Many firms would become less competitive if there were a significant rise in the value of the Australian dollar.
- Prospective changes in fleet purchasing practices may reduce demand for locally produced vehicles.
- Economic downturns, political instability or unrest in major export markets — which in the case of vehicles are highly concentrated — could similarly reduce demand for the industry's products.

While Australian and other governments may well succeed in their efforts to reduce barriers to trade in automotive products, some of Australia's trading partners might increase protection or other assistance in an attempt to attract or retain automotive investment.

Moreover, as noted, the industry's future, including its export potential, is heavily dependent on the sourcing policies of the major global automotive manufacturers represented in Australia. Production and investment decisions affecting their Australian subsidiaries will be based on what is best for the global entity, which may not align with the interests of the local arm. This introduces an element of uncertainty about the future of the local industry — uncertainty that is reinforced by broader changes occurring in the global industry (see box 3).

There should be limits on the duration of special support for the industry

Costs are imposed on others in the community

Tariff protection means that vehicle prices in Australia are higher than would otherwise be the case. For example, for an imported vehicle with a customs value of \$10 000, the current tariff of 15 per cent adds an initial margin of \$1500, inflated further by GST and stamp duty charged on the tariff-inclusive price. Higher import prices in turn allow local producers to charge higher prices for their vehicles without losing market share. Apart from penalising consumers, this tariff impost raises the costs of many businesses and thereby reduces their competitiveness.

Some automotive firms indicated that if tariff assistance were instead delivered through an 'equivalent' production subsidy, the cost to taxpayers would currently be some \$360 million a year (and \$240 million a year when the tariff falls from 15 per cent to 10 per cent in 2005). Using the Commission's standard methodology for calculating such subsidy equivalents, the costs would be \$840 million and

\$560 million a year, respectively. This support is on top of the explicit subsidies provided to the industry through ACIS, which currently represent a cost to revenue of nearly \$600 million a year, and funding from generally available government programs currently worth some \$120 million a year. Thus, the total annual transfer from the community to the industry is at least \$1 billion a year, or some \$2800 a vehicle.

Box 3 Some pressures for change in the global automotive industry

Global excess capacity of the order of 30 per cent, low profitability and a range of other pressures are driving changes to the structure of the industry, including:

- consolidation through mergers and take-overs associated with globalisation of production. The latter is seeing firms increasingly perform different facets of their operations (such as engineering, design, research and development, and production) at different international locations;
- progressive shifting of responsibility for design, product development and production down the supply chain. Hence, vehicle producers are increasingly becoming final assemblers, connecting major sub-assemblies, or modules, supplied by the larger component producers; and
- increased direct investment in manufacturing capacity in emerging markets. This is partly being driven by just-in-time production requirements and market considerations, but it is also a way round the high trade barriers applying in many countries.

Technological developments, often in anticipation of increasingly stringent environmental standards, will also have a pervasive impact on the future development of the industry. Greater use of lightweight metals, drive-by-wire rather than hydraulic systems, and electric (and eventually fuel cells) rather than petrol or diesel engines, are among the changes likely to emerge over the next decade and beyond.

The policy calculus is more complex than in the past

These costs notwithstanding, the future policy calculus is more complicated and involves finer judgements than when assistance to the industry was higher.

Previously high assistance led to significant distortions in resource allocation across the economy. Hence, reducing assistance offered the prospect of a significant net gain to the community — an outcome reflected in quantitative modelling undertaken at the time. These so called ‘static resource allocation’ gains were judged to greatly outweigh the accompanying adjustment costs — particularly given the opportunity for the industry to mitigate adjustment pressures through

improvements in productivity and quality. Thus, the appropriate direction of assistance policy was clear.

But with assistance to the industry now much lower, the allocative gains likely to ensue from further reductions in government support are much smaller. Indeed, the quantitative modelling undertaken for this inquiry suggests that these gains could even be outweighed by small, but adverse, shifts in the aggregate price of Australia's exports relative to its imports. (While negative 'terms of trade' effects were evident in past modelling of assistance reductions for the industry, their effects were swamped by much larger resource allocation gains.)

With the static resource allocation and terms of trade effects now being both relatively small and largely offsetting, 'dynamic' considerations that are not encapsulated in quantitative modelling assume much greater importance in formulating future assistance policy. They include:

- 'spillover' benefits associated with automotive production;
- the impacts of assistance on Australia's attractiveness as an investment location;
- the scope for reduced government support to encourage further productivity gains, product improvement and price reductions; and
- adjustment costs ensuing from assistance reductions.

But the arguments to suspend assistance reform are not compelling

The first two of these dynamic considerations underpinned the position of virtually all industry participants (and some State Governments) that further assistance reductions should be suspended. Specifically, they argued that:

- process and skills development in the automotive sector provides significant and valuable spillover benefits for other parts of the economy which might be put at risk if the industry's assistance is reduced prematurely; and
- further unilateral reductions in Australia's automotive tariffs after 2005 could put at risk access to globally mobile capital necessary to secure firms' long term futures.

Industry participants went on to contend that, following the reduction in the passenger vehicle tariff to 10 per cent in 2005, any further reductions should be contingent on various conditions being met — most notably, 'matching' declines in government support for the automotive industry in other countries, or indeed complete removal of that support.

However, in the Commission's view, spillovers and 'investment competition' considerations do not provide sufficient grounds for what, in practice, could amount to indefinite preferential treatment for the automotive sector over other Australian industries.

Spillovers are best supported through generally available measures

While there can be no dispute that the automotive industry generates significant spillovers, quantifying their precise extent is well nigh impossible. Moreover, there are various generally available measures designed to support spillover benefits generated by this and other industries — for example, R&D grants and tax concessions. Such measures are already accessed by some automotive firms and, in the absence of industry specific support through ACIS in particular, could provide a more widespread source of assistance for spillover-generating activities in the sector.

This is not to deny that there may be inadequacies in these generally available support measures. But if this is the case, the best approach is to address those inadequacies (see later), not single out particular industries for special compensatory measures.

There are better ways to encourage global investment in the industry

In drawing the link between levels of assistance and the industry's capacity to attract mobile investment capital, industry participants emphasised that global automotive producers have choices about where to invest.

However, it would be easy to overstate the likely importance of Australia's assistance regime to the investment calculus. In particular, without a sound business case, no amount of assistance will attract investment. Thus, the commercial imperatives for vehicle producers to establish production facilities in major and growing markets, and for key component suppliers to locate adjacent to their customers, will be paramount in determining where investments are made. So will access to a skilled and productive workforce and a stable industrial relations environment that ensures reliability of supply.

This is not to deny the significance of the general policy environment. Experience across a range of industries indicates that investment tends to be attracted to those countries with: open economies; political, economic and social stability; competitive taxation regimes; robust institutional and regulatory environments; good quality economic and social infrastructure; and a flexible and well educated

workforce. Against many of these benchmarks, Australia currently rates highly — although further reform will be important to retain this ranking in the future.

In particular situations, more selective government assistance may well be a contributing factor in attracting footloose capital (or sustaining investment in the automotive or other industries).

But whether the pay-backs for Australia of explicitly seeking to ‘buy’ such investment are likely to outweigh the costs is problematic. In particular, there is a risk that at least some of the assistance will support soundly-based investments that would have occurred anyway, or attract capital away from other Australian firms rather than augmenting the nation’s capital stock. Indications that the two major automotive producing States have engaged in bidding wars to attract/retain particular component production activities exemplify the risks of this sort of approach.

This in turn suggests that there are better ways to improve Australia’s attractiveness as an investment location. In an automotive context, avoidance of damaging production stoppages — a potentially significant deterrent to foreign investment — would be a case in point.

Moreover, if Australian governments wish to provide explicit assistance to attract footloose capital, there is no apparent reason why the automotive industry should be treated differently from other industries. As noted, the automotive industry along with some other industries has been a beneficiary of funding under the generally available Strategic Investment Coordination program.

Linking support for the industry to assistance policies in other countries would have other costs and problems

At a broad level, the benefits of reciprocal action on assistance policy cannot be disputed. Collective action to reduce trade barriers will generally augment the gains accruing to countries from unilateral reforms.

But this does not mean that countries should forgo domestic reforms that would be of benefit to them, even if others do not act in a corresponding fashion. In effect, such an approach would sideline the range of domestic considerations — including the costs imposed on consumers and other domestic industries — that are relevant to Australia’s decision on whether to further reduce automotive assistance after 2005.

Nor does it mean that Australia should try to use its automotive assistance as a lever to secure better access to overseas markets. For good reasons, WTO rules

effectively prohibit countries from negotiating product-specific deals limited to individual trading partners. Hence, the use of any bargaining coin attaching to Australia's automotive assistance would be largely confined to WTO negotiations and the current exploration of a number of bilateral free trade agreements covering all trade. Given that the Australian vehicle market is small and our (applied) automotive tariffs are already relatively low, the value of any bargaining coin attaching to those tariffs would be limited.

Moreover, a policy of linking assistance for the industry to assistance policies in other countries could potentially reduce pressure for further trade liberalisation in the region, including within APEC. And, at a practical level, there would be numerous difficulties in implementing benchmarks to determine when the time was ripe for Australia to reduce its automotive assistance. This is particularly the case as some industry participants sought to add various domestic policy requirements to the pre-conditions for further assistance reductions.

Indeed, if transparency in assistance policy setting were not to be compromised, such an approach could effectively require a standing review of the industry and its assistance regime. This would introduce a source of new uncertainty for the industry, consumers and the wider community.

Assistance reductions would add pressure for further productivity improvements

As the industry has acknowledged, reductions in assistance — though not welcomed — can spur productivity improvement. Higher productivity growth can:

- help firms cope with the additional competitive pressures associated with lower assistance;
- enhance the industry's longer term capacity to attract capital and its competitiveness more generally; and
- increase the industry's contribution to the economy and community well-being.

The role of assistance reductions in stimulating productivity improvement can, of course, be overstated. In the competitive environment in which the automotive industry now operates, firms are under ongoing commercial pressure to improve their productivity and quality performance. Moreover, past responses to reductions in government support may well mean that many of the readily accessible gains have been realised.

But, as noted earlier, improving workplace flexibility and avoiding industrial stoppages would offer the prospect of significant additional productivity gains. In this context, further reductions in assistance have a role to play in reinforcing

existing incentives for firms, their employees and the unions to work together for the good of the industry. Conversely, a policy of what could amount to indefinite preferment for the industry could send the opposite signal.

Further reductions in assistance after 2005 are warranted

In summary, assistance provided to the automotive industry in 2005, while historically low, will still be well above that available to most other Australian industries. The Commission considers that there is a strong case for reducing that assistance:

- There can be no national benefit in making our policy regime hostage to what other countries do. Australia must determine its policies on the basis of what is in its best interests.
- Features such as spillovers and firms' need to access global investment capital are not unique. Where such features warrant support, this would preferably be provided through generally available measures designed explicitly for this purpose, rather than through blunt, industry specific, instruments such as tariffs.
- There would be specific benefits from further assistance reductions:
 - lower prices for consumers and businesses; and
 - greater pressure for improvements in workplace productivity and other aspects of the industry's operations.

Further assistance reductions would also signal Australia's commitment to APEC and support other trade liberalisation initiatives (see below).

The current assistance regime was intended to be transitional

In reaching this conclusion, the Commission has also been mindful of the fact that the current assistance arrangements were designed to facilitate the industry's transition towards the Government's longer term objective of an internationally competitive and globally integrated automotive manufacturing sector in Australia (see box 4). Indeed, the legislation accompanying ACIS explicitly casts the scheme in this role. To move away from this transitional objective through suspending further tariff reductions for an indefinite period would be a counterproductive change to a policy approach which has brought significant benefits to both the industry and the wider community over the last decade and a half.

Thus, just as when the current arrangements were formulated, the key question for the post 2005 regime should be by how much and over what time frame assistance is reduced, not whether it should be reduced.

Box 4 Some transitional features of the current assistance regime

Like previous assistance packages for the industry, the current regime is intended to be transitional. In particular, through ACIS (and the preceding Export Facilitation Scheme), the regime has sought to induce changes in the industry that will help it to compete without special treatment in the longer term. For example, a significant part of ACIS funding is allocated on the basis of firms' investment and R&D performance.

At the same time, the arrangements have attempted to provide the industry with breathing space to make required changes to its operations:

- The tariff pause at 15 per cent until 2005 has helped to sustain domestic production of large vehicles and thereby put some brake on the growth in vehicle imports that was inevitable following the cessation of uneconomic small car production in Australia. In so doing, it has helped to sustain demand for supplier industries.
- Subsidies available through ACIS have effectively lowered the industry's costs and hence reinforced the protective impact of the tariff in the domestic market, as well as making Australian exports more cost competitive.

A prominent theme in submissions from the industry was that ACIS has already been very helpful in a transitional context, especially in securing the go ahead from parent companies for some major new investments and in supporting higher levels of R&D.

Key considerations impinging on the rate and pace of future assistance reductions

Adjustment issues are integral to the policy calculus

While parts of the Australian automotive industry are performing strongly in global markets, there are still significant changes required if the industry as a whole is to become competitive without substantial government support. Some of these will involve changes to the composition and structure of production, some will require a rebalancing of output between domestic and export markets, and some will require changes in the industry's operating practices.

Clearly, it is important that assistance arrangements provide incentives for better performance and do not frustrate necessary change. For example, assistance measures which helped to sustain a fragmented, low scale, manufacturing base are likely to be counterproductive.

But, just as importantly, the assistance regime should provide the industry with sufficient time to make the further changes necessary to secure its longer term future. Notwithstanding the already long period of support for the industry, reducing

remaining assistance too quickly after 2005 could put at risk production that would have become internationally competitive in the longer term under a more gradual transition process. Given the industry's size and linkages with the rest of the economy, the costs to the community from 'over-shooting' could be substantial.

Australia's international obligations are also relevant

Australia has been an active participant in international institutions that seek to liberalise world trade, such as the WTO and APEC. This reflects the fact that Australia has much to gain from more liberal global trade in goods and services.

Of particular relevance in this regard is APEC's Bogor Agreement to pursue 'free and open' trade and investment in the region by 2010 by developed countries and 2020 by developing countries. While the agreement is not a binding treaty, meaning that there is some uncertainty about how the liberalisation process will proceed, it is clearly in Australia's interests that the intent of this agreement be adhered to.

As recognised in the Commission's terms of reference, it is important that Australia acts in accordance with its international obligations. Indeed, as a prime mover in the formation of APEC, and a lead advocate for reform in that forum, Australia's commitment to the APEC goal of free and open trade in the region is likely to play a role in conditioning the commitment of others. Hence, it would be undesirable for Australia to signal an intention *not* to meet that goal unless there were overwhelming domestic benefits from doing so.

Transitional policies must still take account of broader community interests

A competitive and globally integrated automotive industry in Australia would provide very significant benefits — not only for those in the industry, but also for other industries, automotive producing regions and the wider community.

However, the formulation of policies designed to facilitate the industry's transition to this end point must take account of the wider impacts. The fact that assistance is transitional in nature does not diminish the costs imposed on vehicle consumers, other industries and the rest of the community. Just as the benefits of facilitating transition in the automotive industry will flow through the economy, so too will the costs of supporting that transitional process. Hence, the challenge for policy makers is to find the 'sweet-spot' which balances these interests to produce the best result for the community as a whole.

What are the options for the tariff and ACIS after 2005?

Establishing a clear policy path is essential

The industry has emphasised the need for the post 2005 assistance regime to establish a clear policy path for at least five years and preferably for 10 years. Given the long planning and investment horizons in this industry, the Commission considers this to be a reasonable expectation. The range of broader pressures and uncertainties facing the industry — particularly in relation to technological change and future environmental policies — are already very considerable. Providing a clear and extended path for assistance policy would serve to reduce one source of uncertainty. Without clear policy directions, desirable investment that would help to secure the industry's future could be put at risk.

Accordingly, in formulating the assistance options outlined below, the Commission has sought to establish an assistance regime for the industry for a full decade after 2005. That regime includes provision for an extension to ACIS as transitional support linked to further tariff reform.

A 'guaranteed' assistance regime of this duration would be viewed by many as generous. Other industries — including some with similar planning and investment horizons to the automotive industry — face the possibility of losing their 5 per cent tariff protection before 2015 as part of Australia's APEC commitment.

In the Commission's view, the decade after 2005 should therefore be the last period of preferment for the automotive industry. Moreover, there should be an expectation that a tariff/ACIS package of the sort outlined below would represent the totality of special government support for the industry over this period.

A tariff of 5 per cent should be the target

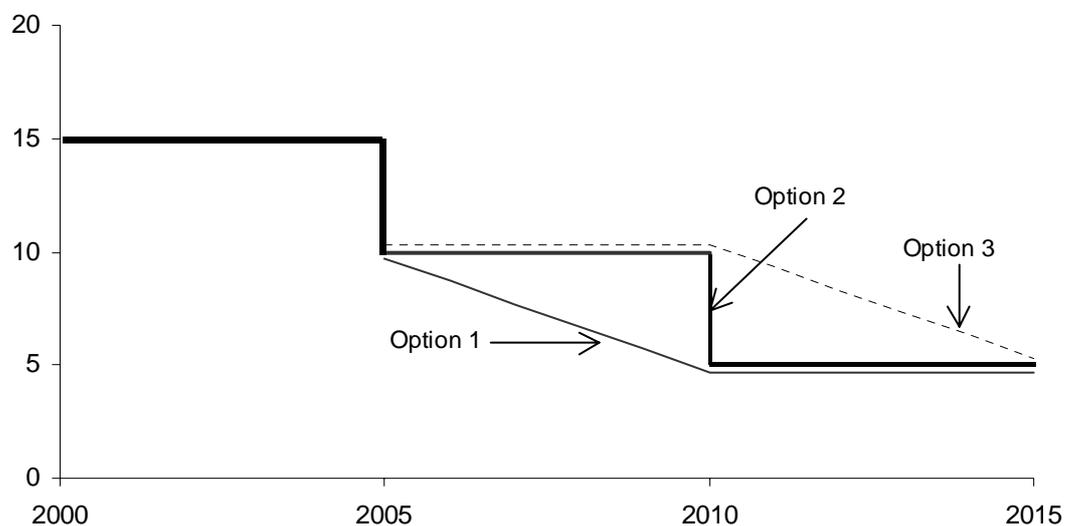
With the tariff on passenger vehicles and components to fall to 10 per cent in 2005, the disparity with the general tariff rate (and that for light commercial and 4WD vehicles) will be reduced to 5 percentage points. Reducing passenger vehicle tariffs to this general rate over a period that gives firms adequate time to make the necessary adjustments to their operations should be a key element of the post 2005 assistance package for the industry. In the Commission's view, this transition period could not reasonably extend beyond 2015.

After considering a range of possible transition paths, the Commission has settled on the following three options:

1. Reduce the tariff by 1 percentage point a year, commencing in 2006, so as to achieve a rate of 5 per cent in 2010, with no further reductions before 2015.
2. Leave the tariff at 10 per cent until 2010 and then reduce it in one step to 5 per cent, with no further reductions before 2015.
3. Leave the tariff at 10 per cent until 2010 and then reduce it by 1 percentage point a year so as to achieve the rate of 5 per cent in 2015.

These options are depicted in figure 2.

Figure 2 Post 2005 tariff options
per cent



Tariff option 2 would provide for the best balance between competing interests

In comparing the merits of these three tariff paths (and the supporting ACIS options outlined below), there are trade-offs in the extent to which each would create credible incentives for improved performance and facilitate necessary change in the industry, while minimising unnecessary adjustment costs. That said, in all of these areas, the differences in impact of the three options are likely to be quite small.

Option 3 would provide the industry with the most breathing space, but in so doing it would:

- somewhat delay the pressure for performance improvement in the industry;
- involve the greatest delay in the benefit to consumers from the 5 percentage point tariff reduction; and
- be arguably the least APEC compatible of the three options.

Also, the Commission is not convinced that the industry needs another 10 years after 2005 to prepare itself to operate at the general tariff rate of 5 per cent.

Both options 1 and 2 would provide consumers with the full benefit of the 5 percentage point tariff reduction by 2010. And both would convey similar signals about Australia's commitment to reduce automotive assistance in line with the APEC goal.

However, there is some risk that initiating further tariff reductions immediately after the step down in the tariff to 10 per cent could adversely impact on investment commitments predicated on a more delayed transition to a lower tariff environment.

Hence, the Commission's judgement is that tariff option 2 — a pause at 10 per cent with a reduction to 5 per cent in 2010, but with no further reductions before 2015 — would provide the best balance between the competing considerations outlined above.

There is a role for a further period of transitional ACIS support

Withdrawal of ACIS support when the current scheme expires at the end of 2005 would carry downside risks. It is clear that many parts of the industry are still some way from being truly internationally competitive. Hence, an immediate withdrawal of ACIS, in combination with further tariff reductions, could be sufficient to precipitate the exit of firms from the industry that would have become internationally competitive under more accommodating transitional arrangements. Consistent with the current assistance package, the Commission sees a continuation of ACIS after 2005 as a means of facilitating a reduction in the tariff to 5 per cent.

Major changes to the basic ACIS framework would not be desirable

As a transitional mechanism, the Commission does not see a strong case for overhauling the design of ACIS or extending eligibility for funding under the scheme more widely. Such design changes — particularly to a scheme that has only been in operation for two years — could have some undesirable consequences (see box 5). Not the least of these would be greater uncertainty for firms about the levels of support they would receive.

Box 5 Some problems that would accompany a revamp of ACIS

Participants suggested a range of changes to the parameters of ACIS including to:

- allocate all, or most, funding on the basis of firms' spending on R&D and investment. (Currently, the majority of funding for vehicle producers is allocated on the basis of production levels);
- make eligibility for ACIS funding conditional on the achievement of particular outcomes — for example, better workplace and industrial relations performance; and
- extend eligibility for funding to: those small component producers and toolers who currently fall below the minimum production thresholds; raw material suppliers making products specifically for the automotive industry; and firms supplying replacement components and accessories.

Some of these suggested changes would clearly be inappropriate. For example, while improving workplace outcomes in the industry is a high priority, making ACIS support conditional on the achievement of particular workplace targets would be a blunt, administratively difficult and potentially counterproductive way of pursuing this goal.

That said, there is logic to some of the other proposals. For example, it is far from clear that the activities of some firms that are ineligible for ACIS support are any less important to the industry's future viability than those of firms which are able to access the scheme.

Many also see benefits in tying support more heavily to spending on R&D, both to encourage necessary innovation in the industry, and to prevent government support from simply adding to firms' 'bottom lines'. However, given that ACIS duty credits are effectively a cash subsidy which firms can use as they please, the basis on which credits are earned may not greatly affect spending decisions. Thus, there is evidence that production-based ACIS credits are being used to support vehicle producers' R&D. For much the same reason, whatever the basis for earning credits, a portion of ACIS funding will inevitably flow to firms' shareholders and other stakeholders, including employees and customers.

Moreover, foreshadowing changes to a scheme that has been in operation for less than two years would introduce undesirable uncertainty about firms' future entitlements. As noted in the text, there is already widespread concern about uncertainty arising from the modulation arrangements used to adjust firms' entitlements so as to keep total ACIS expenditures within the funding cap set by the Government. Any benefits arising from changes to the basic scheme design or eligibility criteria are unlikely to be sufficient to warrant such added uncertainty.

Some of the proposed changes would also increase the complexity of the scheme and be difficult to administer.

Retention of the uncapped funding pool would provide some additional adjustment insurance

There are currently two ACIS funding pools — the major pool providing support to all segments of the industry with funding capped at \$2 billion for the period 2001 to 2005, and an uncapped pool providing additional support to vehicle producers.

This latter pool — which is anticipated to be worth around \$840 million over the five years of the current scheme — is effectively a continuation of a longstanding arrangement previously known as the Duty Free Allowance (DFA). In essence, it provides for duty free entry for vehicle and component imports worth up to 15 per cent of the value of a vehicle assembler's sales in the domestic market.

The DFA was introduced many years ago to compensate vehicle producers for the cost penalties entailed in meeting mandatory local content requirements. With the abolition of local content protection, its rationale has partly become to provide vehicle producers with a sector-specific, and more generous, alternative to the generally available Tariff Concession System. The latter provides for importation of business inputs not produced in Australia at a concessional 3 per cent duty rate.

Importantly, the linkage between uncapped ACIS funding and the tariff rate means that funding support will automatically decline as the tariff falls. In this context, retention of a separate uncapped funding pool could be used to provide an additional, self limiting, adjustment buffer, were capped ACIS funding terminated in say 2010.

However, consistent with the notion that in the longer term there is no reason for providing special treatment to this industry, the Commission would not envisage that this 'DFA' type assistance should continue beyond 2015, without a prior review. Moreover, given vehicle producers' access to the generally available TRADEX scheme and to funding from the capped ACIS pool based on export sales, requests from some producers to extend the uncapped 'DFA' arrangement to export sales would be difficult to justify.

A cap on funding for the main ACIS pool remains appropriate

Many firms called for the removal of the funding cap that currently applies to the main ACIS pool, claiming that the modulation arrangements necessary to keep expenditure within the cap are a significant source of uncertainty.

However, given the nature of the criteria used to allocate a significant part of this pool, removing the cap would set the pre-conditions for a possible funding blow out. Indeed, a greater than anticipated increase in eligible expenditure on investment

in R&D and plant and equipment in the component sector is the reason why modulation is already biting heavily into firms' entitlements.

But more importantly, it would be inappropriate to increase the quantum of assistance for the major component of a scheme designed to help the industry move to a situation where it can operate without special treatment. Thus, aside from the 'DFA' component, it is reasonable that there be a cap on the total amount of ACIS support.

Separate capped funding pools for vehicle producers and their suppliers would have advantages

The different bases on which vehicle producers and their suppliers earn capped credits under ACIS has led to a somewhat unanticipated distribution of capped funding under the scheme. Specifically, it is likely that component producers will receive a significantly higher share and vehicle producers a lower share than was projected when the funding criteria were established.

There are reasons why some of this funding shift may have been appropriate. In particular, increased outsourcing by the vehicle producers means that component suppliers are taking increasing responsibility for product development.

Equally, however, the possibility of future significant shifts in each segments' share of the capped pool would be another unneeded source of uncertainty. Moreover, it is one that could be readily addressed by creating separate capped funding pools for vehicle producers and their suppliers — each subject to their own modulation factors.

Significantly, both vehicle producers and their suppliers strongly support such a change although, not surprisingly, there are differences in view on the proportion of available funding that should be allocated to each pool. Given the desirability of a seamless transition to a new period of ACIS funding, the Commission sees considerable advantages in simply continuing the current funding shares that have emerged under the present scheme. This would equate to a 50:50 division.

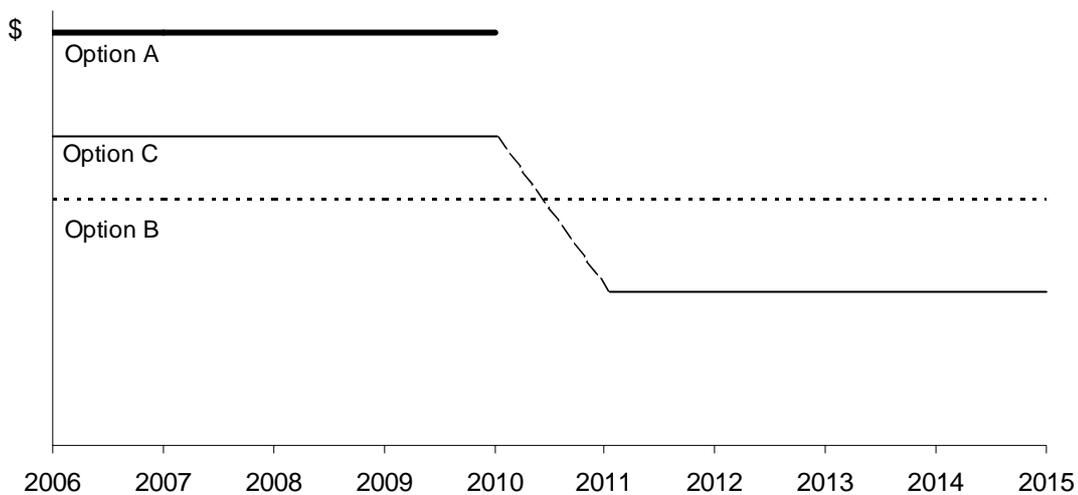
The Commission has identified three ACIS options

Against this backdrop, the Commission has settled on the following three options for extending ACIS support. Each would involve an equivalent funding commitment in *net present value terms*. But the time profile (see figure 3), and therefore the notional dollar amount of funding, would vary:

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- A. Up to \$2 billion in funding allocated equally across two separate capped pools — one for vehicle producers and one for their suppliers — provided over five years, ceasing in 2010.
 - B. Funding with an equivalent net present value to option A, allocated in the same way, provided over 10 years at a uniform rate, ceasing in 2015.
 - C. Funding with an equivalent net present value to option A, allocated in the same way, provided over 10 years ceasing in 2015, with funding for the second five-year period set at half that for the first five-year period.

All of these options would involve continuation of the existing additional uncapped support for vehicle producers', based on their domestic sales, until at least 2015 (see above). Also, the cap on funding to individual firms (5 per cent of sales) that applies under the current regime would be retained under each option.

Figure 3 The time profile of ACIS options*
year ending 31 December



* The net present value of funding for each of these options would be identical. The actual annual dollar amounts payable for each option would therefore depend on the period of funding and the discount rate applied.

The pros and cons of these three approaches are much the same as for the three tariff options:

- Options B and C involving ACIS support until the end of 2015 would provide the most extended cushion for adjustment pressures ensuing from a further reduction in the tariff. However, industry wide ACIS funding for a further

10 years would stretch the concept of a transitional measure. It might also be seen as unhelpful in an APEC context.

- Option A, which would see the bulk of ACIS support cease in 2010, would accord more closely with the transitional nature of such an instrument and as such would be more compatible with Australia's APEC commitments. Moreover, with the total net present value of funding the same, it would provide for a higher rate of support in the period immediately preceding the reduction in the tariff to 5 per cent under the Commission's preferred tariff option.

On balance, the Commission's preference is for option A funded at \$2 billion. This would maintain funding continuity with the current regime, in keeping with the Commission's concern to ensure that the adjustment task confronting the industry is manageable. Continuation of the 'DFA' component of funding support for vehicle producers beyond 2010 would provide additional transitional support. In particular, it would help to ameliorate concerns that a withdrawal of generalised ACIS support in conjunction with a reduction in the tariff to 5 per cent by 2010, would impose excessive adjustment pressures on the industry at that time.

Are other changes to the assistance regime warranted?

The \$12 000 tariff on imported second hand vehicles effectively removes any threat of competition for the local industry from such imports. The industry's concern that removing or reducing the tariff would result in significant damage to domestic production suggests that a substantial number of consumers, including those on lower incomes, are being denied the opportunity to purchase vehicles they would otherwise regard as representing good value for money.

However, making changes to the second hand tariff arrangements at this time would have the potential to introduce a destabilising influence into an otherwise structured assistance reduction program. That said, this is an issue which will clearly need to be revisited once that broader program has been completed.

For the same reason, the Commission considers that changes at this juncture to government purchasing preference arrangements would not be warranted. In any event, the cost to taxpayers of such support for the local industry does not appear to be great. Margins on government fleet business are very low, with most of the benefit to vehicle producers coming from the increased volumes that these sales provide.

The Commission also considers that:

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- the desirable goal of uniformity in tariffs for passenger vehicles and for light commercial and 4WD vehicles would be best achieved through the reduction in the former, rather than by a temporary increase in the latter; and
 - in the light of the industry's access to the services of Austrade and to general assistance programs designed to help exporters, the case for a successor to the industry specific Automotive Market Access and Development Strategy is not strong.

Greater transparency is called for

An aspect of the current assistance environment where change is clearly required is transparency. A number of firms in the industry have benefited from significant ad hoc support from either the Commonwealth or State Governments and sometimes both. Yet information on the nature and precise level of that support is at best limited.

Lack of transparency gives rise to uncertainty for all in the industry, as well as raising accountability concerns. Further, without transparency, there is no adequate basis to determine whether government support is assisting or hindering necessary adjustment in the industry or providing benefits to Australia as a whole. The previously noted concern that the South Australian and Victorian Governments have at times engaged in unproductive competition for particular automotive activities via offers of ad hoc assistance is indicative of the sort of behaviour that a lack of transparency can encourage or sustain.

In addressing this latter matter, a recent agreement between the New South Wales and Victorian Governments could provide the starting point for a generally applicable model to avoid costly investment bidding wars for automotive or other activity. At the very least, acceptance by governments of the need to make more information publicly available on ad hoc support provided to automotive (and other) firms would be an important first step in helping to assure the community that such support was appropriate.

What wider policy changes are required?

In facilitating the development of a competitive and globally integrated automotive industry, governments also have an important role to play in ensuring that the broader policy environment in which the industry operates is appropriate:

- As noted, recent disputation in the industry has been very costly to firms, employees and the wider community. Hence, workplace regulation that provides for an appropriate balance between the rights of employees to pursue their

interests through industrial action and the rights of those who are adversely affected by such action, will be particularly important for the industry's future.

- Governments, in conjunction with the industry, also need to ensure that Australia's training infrastructure is sufficiently responsive and flexible to meet changing skill needs in the sector. A review of training advisory arrangements for the industry may be warranted.
- Further taxation and microeconomic reform would assist the industry to cope with lower levels of government support. Apparent inefficiencies in the provision of electricity may be one particular matter that needs to be addressed. If the luxury car tax is to be retained, there is a case for a significant increase in the threshold value that determines when it is applicable. And, there are strong arguments for abolishing the 3 per cent revenue duty imposed under the Tariff Concession System.
- There is a need to review the performance of Australia's general support measures for R&D. While any inadequacies in existing measures will have adverse impacts throughout the economy, the automotive industry's growing reliance on product and process development as a source of competitive advantage makes access to effective general support in this area a high priority. It would therefore be desirable if this review were conducted ahead of the cessation of ACIS support.
- Vehicle safety and emission standards and fuel quality standards must have proper regard to the interests of automotive firms competing in global automotive markets. And, fuel consumption targets must have regard to the level of improvement in the fuel efficiency of local vehicles that can be achieved without compromising the commercial viability of domestic production.
- In multilateral and other forums, Australian Governments should continue to pursue better access for automotive and other exporters to currently protected overseas markets.

There is reason for optimism about the industry's future

In formulating its post 2005 assistance options, the Commission has been concerned to avoid imposing excessive adjustment pressures on the industry and its employees. Thus, the Commission's expectation is that implementation of the sort of assistance reduction options it has outlined above would, at worst, slow the industry's future growth, rather than lead to a decline in overall output.

However, even in a growth environment, further reductions in employment in the industry are inevitable. This is because the productivity improvements that will be

necessary for the industry to compete successfully in the global market will require it to continue to use the skills of its workforce more effectively.

Moreover, irrespective of what assistance arrangements are in place after 2005, the possibility of potentially disruptive firm and regional level adjustments cannot be ruled out. Indeed, further rationalisation in the component sector in particular is required to facilitate greater realisation of economies of scale.

Were a vehicle manufacturer or one of the major component producers to exit, the knock-on effects for other producers as well for employees, their families and the regional economies concerned, would most likely be significant. In these circumstances, specific government responses could be required, with the range of options potentially including:

- firm-level labour market programs; and
- specific regional employment assistance.

That said, the Commission considers that the assistance options and broader policy changes proposed above would maximise the prospect of the industry making the adjustments that will be necessary for it to compete in global markets without special government support. This would be a highly desirable outcome for both firms and their employees and the community as a whole. For the latter, it would represent a welcome dividend for the decades of substantial support that it has provided to the industry.

Summary of findings

The following are the Commission's findings on the impacts of the current assistance regime for the Australian automotive industry, post 2005 assistance options for the industry, and other policy related matters impinging on the industry's future. Rationales for these findings can be found in the relevant chapters of the report.

THE IMPACTS OF AUTOMOTIVE ASSISTANCE (CHAPTER 9)

- *Reductions in assistance to date have contributed to the rationalisation of the automotive industry, encouraged a stronger focus on export markets and provided incentives for higher productivity. Consumers and business users have benefited significantly.*
- *The automotive industry continues to receive tariff protection above the average for manufacturing as a whole and significantly greater budgetary assistance than any other sector. This has benefited the industry, as well as some other related activities. But it also imposes costs on the wider community and, in particular, consumers and business users of vehicles.*
- *The rationale for ACIS is to provide transitional support in the context of trade liberalisation rather than to inhibit rationalisation that may be in the long term interests of the industry. To date, it appears that ACIS, which is widely supported by the industry, has generated additional investment in plant and equipment and R&D in a manner consistent with its objectives.*

CONSIDERATIONS BEARING ON FUTURE ASSISTANCE ARRANGEMENTS (CHAPTER 10)

- *Assistance to the industry is now much lower than in the past. As a consequence, the purely 'allocative' efficiency gains that would ensue from further assistance reductions are likely to be small and 'dynamic' and other considerations assume greater significance. Thus, the policy calculus is now more complicated.*
- *While the automotive industry has special features, these are not such as to warrant indefinite preferential treatment.*
- *Transitional costs are an important consideration in determining the path to a longer term goal of removing special support.*

POST 2005 TARIFF AND ACIS OPTIONS (CHAPTER 11)

- *A settled path for future automotive assistance policy would serve to reduce one source of uncertainty impacting on investment and production decisions in the industry. To this end, specification of a clearly defined assistance regime for the industry for the decade after 2005 is appropriate.*

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- *The Commission has identified three options for reducing tariffs on passenger vehicles and components to the current general rate:*
 1. *Reduce the tariff by 1 percentage point a year, commencing in 2006, so as to achieve a rate of 5 per cent in 2010, with no further reductions before 2015.*
 2. *Leave the tariff at 10 per cent until 2010 and then reduce it in one step to 5 per cent, with no further reductions before 2015.*
 3. *Leave the tariff at 10 per cent until 2010 and then reduce it by 1 percentage point a year so as to achieve the rate of 5 per cent in 2015.*

Of these options, the Commission's preference is for option 2.

- *The Commission sees a continuation of ACIS after 2005 as a means to facilitate a reduction in the tariff to 5 per cent. It has identified three ACIS options:*
 - A. *Up to \$2 billion in funding allocated equally across two separate capped pools — one for vehicle producers and one for their suppliers — provided over five years, ceasing in 2010.*
 - B. *Funding with an equivalent net present value to option A, allocated in the same way, provided over 10 years at a uniform rate, ceasing in 2015.*
 - C. *Funding with an equivalent net present value to option A, allocated in the same way, provided over 10 years ceasing in 2015, with funding for the second five-year period set at half that for the first five-year period.*

All of these options would involve continuation of the vehicle producers' uncapped production credits until 2015, at which time an assessment could be made about whether such payments should be terminated and the industry afforded access to the Tariff Concession System (if still relevant). Also, the overall cap on funding to individual firms (5 per cent of sales) that applies under the current regime would be retained.

Of these options, the Commission's preference is for option A funded at \$2 billion (excluding vehicle producers' uncapped production credits).

- *There are not sufficiently strong grounds to warrant modifying the design of ACIS with respect to its eligibility criteria or the basis for earning duty credits (including any linking of payments to the achievement of particular outcomes, such as environmental and industrial relations objectives).*

OTHER ASSISTANCE MATTERS (CHAPTER 12)

- *Removal of the \$12 000 tariff on second hand vehicles, and government preferences for vehicles manufactured or sold by the local vehicle producers, would appear at this stage not to be warranted when weighed against the possibility that such action could destabilise the structured plan for reductions in automotive assistance.*

-
- *The 3 per cent revenue duty imposed under the Tariff Concession System disadvantages Australian manufacturers — including automotive firms — and imposes unnecessary costs on their customers.*
 - *The automotive industry will continue to have access to the services of Austrade and to general assistance programs designed to help exporters. In this light, the case for a successor to the industry-specific Automotive Market Access and Development Strategy is not strong.*
 - *There is a need for more information to be made publicly available on ad hoc support provided to automotive (and other) firms. Greater transparency would help to assure the community that such support was appropriate. Moreover, there would be value in relevant jurisdictions developing protocols in this area to avoid costly interstate ‘bidding wars’.*

ADJUSTMENT ISSUES (CHAPTER 13)

- *Continuing adjustment in the Australian automotive industry is both inevitable and necessary. Such adjustment should be facilitated by significant recent improvements in the skills of the industry’s workforce and reduced regional dependence on the industry.*
- *The Commission’s preferred post 2005 assistance options have been designed with the intention of avoiding significant industry wide adjustment problems.*
- *Irrespective of what assistance arrangements are put in place after 2005, the possibility of potentially disruptive adjustment affecting individual firms and their employees and particular regions cannot be ruled out.*
- *The adjustment consequences of the exit of a vehicle producer would depend on a range of factors, including the exiting firm’s export volumes and the degree of leakage of its domestic sales to imports.*
- *Firm or region-specific adjustment assistance could be warranted if firm exits have the potential to cause major disruption. However, as well as facilitating necessary change, any such assistance should:*
 - *target individuals for whom adjustment pressures are most acute and who are unlikely to be able to cope without additional assistance;*
 - *be of limited duration so as to encourage transition;*
 - *be as simple as possible to administer; and*
 - *be compatible with general ‘safety net’ arrangements.*

- *While productivity in Australian automotive workplaces has increased considerably over the last decade and a half, significant further improvement is required if the industry is to become internationally competitive and not have to rely on special government support.*
- *There is agreement among firms, employees and their unions about the need for further workplace change and for a stable industrial relations environment to minimise production stoppages. Because the industry is heavily oriented to just-in-time production, such stoppages can impose significant costs on firms, their employees and the wider community.*
- *Responsibility for achieving better workplace outcomes lies largely with managers and employees within individual enterprises. Better communication and greater cooperation between the parties will be crucial in this regard.*
- *There is considerable scope for firms to improve their management and communication skills. Among other things, this would assist them to better convey to their employees and union representatives the relationship between workplace outcomes and the viability of the enterprise and the industry. Similarly, providing opportunities for those representing employees to improve their skills in assessing this sort of information would lead to more productive outcomes.*
- *While a single industry-wide union, enterprise unions or greater reliance on direct negotiation between firms and their employees would all be likely to generate greater coincidence of interest than the current multiplicity of largely occupation-based unions, it is ultimately up to employees to determine what representation arrangements best suit their needs.*
- *Workplace regulation has an important role in setting the framework for negotiations between firms and their employees and representatives, and in helping to provide for an appropriate balance in the bargaining power of the various parties. However, regulatory mechanisms cannot be a substitute for effective management of workplace issues.*
- *The imperative for the automotive and other industries to improve their international competitiveness through lean manufacturing processes should be an important consideration in the assessment of proposals to modify relevant aspects of Australia's workplace regulation. However, the specific proposals put forward by the industry to constrain further the rights of employees to take industrial action raise some complex issues and would have ramifications in other industries, making it difficult to assess their merit in this inquiry.*

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- *Current discussions between representatives of automotive firms and some unions could be helpful in progressing the employee entitlements issue and other workplace problems on which there is agreement that industry level actions are required.*
 - *Continuing gradual and predictable reductions in government support for the industry would help to maintain the pressure on managers and employees to improve workplace and industrial relations performance to international best practice levels.*

SKILLING AND TRAINING (CHAPTER 5)

- *There are emerging skill shortages in a number of areas of the automotive industry. However, identifying what specific responses may be required goes beyond this inquiry. Moreover, responsibility for addressing some of the underlying causes of these emerging shortages seemingly lies with the industry rather than governments.*
- *At a broader level, a key issue for the future is how to address limitations on the capacity of the education and training system to respond effectively and quickly to skilling issues confronting the industry.*
- *An external review of training advisory arrangements could be beneficial in helping to ensure that education and training arrangements continue to meet the needs of the industry efficiently.*

TAXATION (CHAPTER 6)

- *As a revenue raising instrument, the luxury car tax has deficiencies. If it is retained, the threshold for the tax (and the associated depreciation limit) would need to be raised to reflect previous price movements in the luxury vehicle market.*
- *As revenue raising instruments, payroll tax and stamp duty on vehicle sales and transfers also have deficiencies. However, a thorough assessment of the impact on community welfare of abolishing these more widely applicable taxes, or changing their design, would require a broadly based review, including an assessment of the implications of options for replacement of any revenue shortfalls.*

THE SUPPLY OF INFRASTRUCTURE SERVICES (CHAPTER 6)

- *Microeconomic reform in the transport sector has improved the efficiency and reliability of automotive supply chains. It has also facilitated the emergence of specialist transport suppliers which now play an important role in the just-in-time supply of components to vehicle producers and the distribution of finished vehicles.*

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- *Continuing inefficiencies in electricity supply arrangements are adversely affecting some automotive producers. The current review of energy markets commissioned by the Council of Australian Governments provides a forum to canvass the concerns raised in this inquiry in a broad context, drawing on the experiences of a range of industries.*

R&D SUPPORT MEASURES (CHAPTER 6)

- *It would be desirable to have an independent review of the performance of Australia's general support measures for R&D around 2005. Such a review should aim to ensure that there is appropriate general support available for R&D undertaken by Australian industries — including the automotive industry after the specific support provided through ACIS ceases.*

VEHICLE AND RELATED STANDARDS (CHAPTER 7)

- *Australia's emission and fuel standards, as well as the availability and price of higher octane fuel, are matters of considerable relevance to the future development of the Australian automotive industry. In particular, they are likely to influence incentives to develop more fuel efficient and environmentally friendly engine technologies. Hence, it is important that the industry is given appropriate opportunity to put its views to the forthcoming review of Australia's emission and fuel standards.*
- *The consultative processes of the National Road Transport Commission could provide an avenue for ensuring that significant inconsistencies and differences in standards for new vehicles and vehicles in use do not emerge.*
- *The introduction of specific standards for replacement components that are integral to vehicle safety or to a vehicle's environmental performance could benefit the community. However, the involvement of an independent body in the development of such standards would be important to ensure that they were not used to reduce appropriate competition from imports or from particular local suppliers.*
- *The application of 'proof-of-safety' requirements for new industrial chemicals which have been certified as safe in other developed countries, would only be warranted if the regulator concerned can demonstrate both that a particular chemical is 'high risk' and that specific circumstances in Australia make re-testing essential.*

FUEL CONSUMPTION TARGETS (CHAPTER 7)

- *The formulation of future fuel consumption targets should involve extensive consultation with the automotive industry to determine what improvements in the fuel efficiency of local vehicles can be achieved without significantly impacting on the industry's competitiveness.*

MARKET ACCESS (CHAPTER 8)

- *Some progress has been made in reducing trade barriers faced by Australia's automotive exporters. However, significant and widespread barriers remain.*
- *The use of incentives to attract automotive investment may be increasing. Such incentives are also likely to inhibit trade in automotive products.*
- *There are some significant non-government barriers to trade, including the global sourcing strategies of the major automotive producers and the 'understanding' that certain US vehicle producers have with the United Auto Workers to limit their importation of vehicles from overseas subsidiaries.*
- *WTO and APEC processes are likely to improve Australian automotive exporters' access to overseas markets and should continue to be the principal focus for Australia's trade negotiation efforts.*
- *While some potential bilateral free trade agreements that would yield net gains for Australia would also benefit the automotive industry, this will not always be the case. More generally, the bilateral approach has some risks and is not a panacea for Australia's market access problems.*



1 About the inquiry

1.1 What has the Commission been asked to do?

The automotive industry is one of Australia's major manufacturing industries. It has significant linkages to other parts of the economy. It has also undergone a major transformation in recent years — from being oriented almost exclusively to supplying the domestic market, to relying increasingly on exports to secure its viability.

While many factors have contributed to the ongoing productivity and quality improvements that have supported this transformation, reductions in previously very high government support for the industry, and changes to the nature of that support, have clearly played a part. The Government is seeking advice from the Commission on options for assistance to the industry after 2005, when certain elements of the current assistance arrangements are due to terminate.

The terms of reference are broad

In reporting on post 2005 assistance arrangements and related matters, the Commission is asked to have regard to the Government's commitment to a viable automotive manufacturing sector and the supply of competitively priced, quality vehicles to Australian consumers and its desire:

- for an internationally competitive and globally integrated automotive manufacturing sector; and
- to improve the overall economic performance of the Australian economy.

Among other things, the Commission is to:

- evaluate the outcomes of past reductions in automotive tariffs and of the Automotive Competitiveness and Investment Scheme;
- identify policy options for post 2005 assistance arrangements that are consistent with the Government's international obligations and which would help the sector achieve long term sustainability, including through greater global integration;
- analyse the short and long term implications of those options;

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- identify strengths, weaknesses and opportunities for the sector and impediments to its longer term viability;
 - comment on the interdependence between vehicle and component producers;
 - report on progress on automotive trade liberalisation in existing and prospective export markets for Australian producers; and
 - examine the impacts on the sector of changes in road safety and environmental requirements.

The full terms of reference are reproduced at the front of the report.

The Automotive Council has also been looking at some of these issues

As well as seeking advice on these matters from the Commission, the Government established an Automotive Council to provide an industry perspective on ‘pertinent issues concurrent with the [Commission’s] inquiry’ (Costello 2001a, p. 1). The Council, which superseded the Automotive Trade Council, is jointly chaired by the Minister for Industry, Tourism and Resources and the Minister for Trade. Its executive comprises representatives from each of the four Australian passenger vehicle producers, a vehicle importer, five major component producers, the Federal Chamber of Automotive Industries and the Federation of Automotive Products Manufacturers.

While there are no terms of reference for the Council’s activities, the Minister for Industry, Tourism and Resources (Macfarlane 2002a, p. 7) has indicated that its role will include:

- identifying impediments to future growth, and what government and industry together can do to remove these constraints; and
- assessing the strengths and weaknesses of the industry.

1.2 How has the Commission approached its task?

It has sought to improve overall community welfare

The ultimate objective of government intervention in the Australian economy should be to improve the welfare of the community as a whole. In the Commission’s view, it is important that this objective also underpins post 2005 assistance policy for the automotive industry.

As made explicit in the terms of reference, facilitating the development of an internationally competitive and globally integrated automotive industry in Australia is an important part of this. Such an industry would provide significant benefits — not only for those in the industry, but also for other industries, automotive producing regions and the wider community.

However, facilitating the development of the industry cannot be the only consideration. Assistance to the industry imposes costs on vehicle consumers, other industries and taxpayers. Just as the benefits of automotive activity flow through the economy, so too do the costs of supporting that activity. Hence, the challenge for policy makers is to find the ‘sweet-spot’ which balances these interests to produce the best result for the community as a whole.

It has provided opportunities for extensive public input

Given the short reporting period for the inquiry, the Commission took various steps to streamline and expedite its inquiry processes (see appendix A).

Nonetheless, these processes provided the opportunity for a wide range of interested parties to contribute to the Commission’s deliberations:

- At the outset of the inquiry, the Commission invited written submissions from interested parties on the matters under review. Prior to releasing a Position Paper (see below), it received more than 80 submissions from a broad cross section of industry, government and community interests, as well as from several organisations representing vehicle users.
- During March, April and May, the Commission met with all four vehicle producers, a range of component suppliers and vehicle importers, firms providing automotive tooling and design services, major industry associations, vehicle industry unions and various Commonwealth, State and Local Government organisations. While these meetings were mainly with firms and organisations located in or around capital cities, the Commission also visited component producers and councils in the regional centres of Albury Wodonga, Ballarat and Geelong.
- In June, the Commission released a Position Paper (PC 2002b) outlining its initial views and findings and setting out preliminary options for post 2005 assistance arrangements for the industry. To elicit views on the paper, the Commission held public hearings in Adelaide and Melbourne in July. Some 26 organisations and individuals participated in discussions at those hearings. The Commission also received a further 44 written submissions responding specifically to the preliminary findings and options in the Position Paper.

More details on inquiry processes are provided in appendix A, including a full list of those with whom the Commission met, those who made submissions and those who participated in the public hearings. The Commission wishes to thank all of the organisations and individuals who contributed to the inquiry.

It has drawn on other relevant analysis

In preparing this report, the Commission has relied heavily on the wealth of information and analysis provided to it through the avenues outlined above.

However, it has also had regard to a number of recent reports examining aspects of the industry's performance and future prospects.

Further, the Commission has had access to quantitative modelling projecting the impacts of various post 2005 assistance options on the industry and the wider community. In past inquiries, debate over the general efficacy of such modelling and the technical intricacies of competing models, served to detract from, rather than facilitate, an understanding of key policy issues. Hence, for this report, the Commission has drawn on a menu of modelling work, rather than relying on any particular model.

Most, though not all, of this modelling was made available for comparative assessment at a workshop organised by the Commission prior to the release of the Position Paper (see appendix F). Feedback at that workshop, and in response to the Position Paper, enabled Commission staff to refine their subsequent modelling of the Commission's preferred post 2005 assistance options for the industry.

It has also interacted with the Automotive Council

The Productivity Commission has made various inquiry materials available to the Council, including copies of public submissions. In addition, the Chairman of the Commission, Gary Banks, made a short presentation to the Council's first meeting and, with Associate Commissioner Philip Weickhardt, provided a further briefing on the release of the Position Paper.

1.3 What is in the rest of the report?

The remainder of this report is in three parts:

- The first briefly outlines key features of the global and local automotive industries (chapters 2 and 3), and examines the local industry's strengths and

weaknesses in realising emerging opportunities as well as ‘external’ threats to its future viability (chapter 4).

- The second looks at some broad issues impinging on the industry’s future competitiveness and viability, namely: workplace arrangements, industrial relations, skilling and training issues (chapter 5); taxation and microeconomic reform (chapter 6); safety and environmental policies and issues (chapter 7); and access to overseas markets (chapter 8).
- The third focuses on the key object of the terms of reference — namely, the post 2005 assistance regime for the industry. Specifically, it:
 - assesses the impacts of previous and current assistance arrangements (chapter 9);
 - discusses a range of considerations impinging on the broad direction of post 2005 assistance policy (chapter 10);
 - sets out specific options for passenger vehicle and component tariffs after 2005 and for a future Automotive Competitiveness and Investment Scheme (chapter 11);
 - examines a range of related assistance matters, including tariff arrangements for four-wheel-drive and light commercial vehicles, government purchasing preferences, second hand vehicle tariffs and the tariff concession system (chapter 12); and
 - outlines the likely impacts of the Commission’s assistance proposals and some related adjustment issues that arise (chapter 13).

For some of these matters, additional data and supporting analysis are provided in appendices to the report.

2 The global automotive industry

2.1 A key industry receiving widespread government support

Vehicle production is the largest manufacturing sector in the world — a key activity in leading industrial nations and of increasing significance elsewhere. It draws on a range of supplier industries, from raw materials (such as steel, aluminium, plastics and chemicals) through to sophisticated component assemblies, design, tooling and engineering services.

Moreover, as an intensive developer and user of advanced technologies, the automotive industry is typically viewed as generating significant ‘spillover’ benefits for other activities. As well as undertaking product and process development relevant to other manufacturing activities, the industry is seen as contributing to skill development in areas such as production, design, engineering, computer programming, software development and management systems. In some countries, the industry has developed what have been characterised as ‘virtuous’ clusters — reflected, for example, in the increasing tendency for major component producers to locate adjacent to vehicle assemblers.

Significant direct employment in the industry, its linkages to other parts of the economy and perceived spillovers and cluster effects, have led many governments to assist their automotive sectors. This has variously involved the imposition of tariffs or other barriers on imports, incentives to attract foreign investment, and support for research and development and for education and training in the industry (see chapter 8). Such government assistance has had a pervasive impact on automotive production and trade (see below).

2.2 An industry subject to continual change

Market demand is constantly evolving

The profile of vehicle demand varies considerably across markets (see appendix figure B.1). For example, in the US market, larger vehicles dominate sales; in Japan, minicars are the market leaders; while in Europe, South America and most Asian markets, small and medium size models account for the bulk of sales. By comparison, the Australian market is more evenly spread across the spectrum of vehicle types (see chapter 3).

Within each market, the nature of demand is also changing over time. One manifestation of this is increasing demand worldwide for so called sports utility vehicles (SUVs) that provide drivers with an off-road capability. This trend has been particularly evident in the USA, where SUVs and light trucks now account for around 50 per cent of total vehicle demand. Consumers in most markets are also seeking a more diverse array of vehicle models and options.

More broadly, consumer and community expectations in relation to vehicle quality, safety, and environmental performance are increasing, leading to more stringent regulatory standards. Such changes are, in turn, driving major technological developments that will have a pervasive impact on the nature of vehicles in the future (see box 2.1).

Market growth has been variable

The growth in demand for new passenger vehicles has diverged widely over the last decade (figure 2.1 and table B.1). Sales growth in developed countries has generally been weak, notwithstanding some recent improvement in countries like the USA. In contrast, demand growth in many newly industrialising countries has been robust, with the Chinese market increasing by more than 30 per cent a year over the last decade. This trend is expected to continue over the medium term with vehicle demand in Pacific rim countries forecast to grow by close to 60 per cent between 2000 and 2010. Demand growth in the rest of the world is expected to be just 5 per cent over the same period (*autoPOLIS* 2002).

Box 2.1 Some key developments in vehicle technology

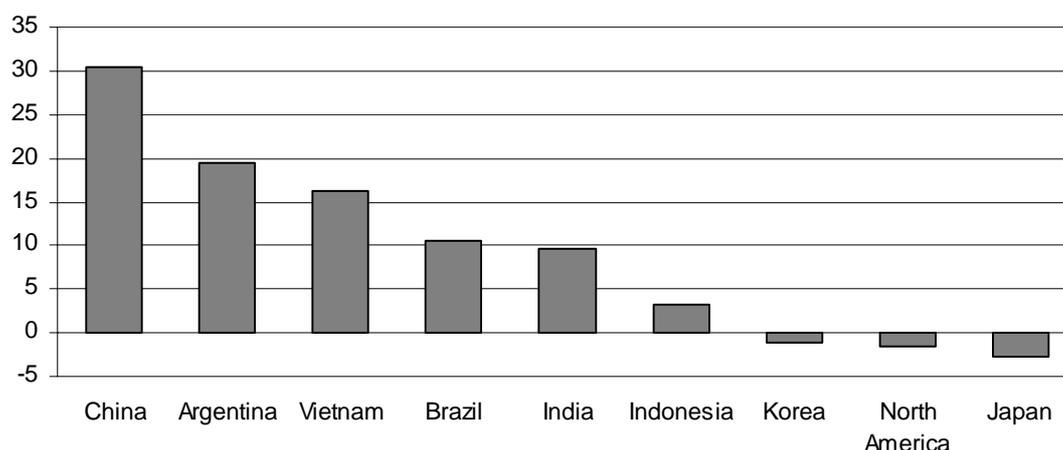
Product and process innovation have underpinned the development of the global automotive industry since its inception. Key product developments in train include:

- the development of alternative fuel systems. Fuel cell technology — which principally involves the use of hydrogen to produce electric current — will greatly increase the market potential of electric vehicles. In particular, fuel cell powered electric vehicles are projected to have a driving range of 470 kilometres compared to 50 to 60 kilometres for battery powered electric vehicles. Moreover, fuel cell technology offers the prospect of major reductions in vehicle emissions.

Fuel cell technology is expected to be making significant market inroads by around 2030. Some participants suggested that, globally, more than 50 per cent of vehicles sold by that date will be powered by fuel cells. In the interim, hybrid petrol/electric systems incorporated in vehicles like the Toyota Prius, are providing a technology bridge to the future;

- electronically controlled braking and steering systems ('drive-by-wire'). These will reduce the amount of product testing required, increase fuel efficiency, eliminate hydraulic fluid use, improve safety and allow for more commonisation of parts; and
- greater use of lightweight materials such as plastics, aluminium and magnesium.

Figure 2.1 Passenger vehicle market growth, 1990 to 1998^a
per cent a year



^a Excludes pickups and light commercials.

Data source: just-auto.com (2002).

As a result, production is becoming more geographically diverse

Much stronger growth in demand in developing countries has provided an incentive for the major global vehicle and component producers to establish production facilities in these markets. A range of other factors have reinforced this incentive including:

- local industry support measures that have both encouraged investment in production facilities and discouraged servicing these markets via exports;
- improved automotive infrastructure, production skills and tooling capacity in many emerging vehicle producing countries; and
- logistical considerations that encourage the location of component producers close to their customers. These include facilitating just-in-time and/or sequenced vehicle production and the fact that bulkiness or the risk of damage mitigates against the export of complete sub-assemblies and some individual components. (As discussed below, the manufacture of sub-assemblies is becoming an increasingly important part of the component business.)

In combination with the growth of home grown automotive industries in such countries as South Korea and Malaysia, this geographical diversification of production has resulted in a shift in the balance of output towards developing countries (table 2.1). That said, developed countries still account for the bulk of global vehicle, component and automotive tooling output and related development and design activities.

Table 2.1 **Global vehicle production, selected countries and regions, 1991 and 2001^a**

<i>Country/Region</i>	<i>1991</i>		<i>2001</i>	
	<i>Number (millions)</i>	<i>Share of global output (%)</i>	<i>Number (millions)</i>	<i>Share of global output (%)</i>
Western Europe	14.1	29.8	15.5	28.1
USA	8.8	18.6	11.4	20.7
Japan	13.2	27.9	9.8	17.8
South Korea	1.5	3.2	2.9	5.3
Canada	1.9	4.0	2.5	4.5
China	0.7	1.5	2.3	4.2
Mexico	1.0	2.1	1.9	3.4
Brazil	1.0	2.1	1.8	3.3
Australia	0.3	0.6	0.3	0.5
Other	4.8	10.2	6.8	12.3
Total	47.3	100	55.2	100

^a Includes passenger and commercial vehicle production.

Sources: OICA (2002), USBTS (2001).

The growing number of countries with significant automotive production capacity is in turn increasing competition for new investment in the industry. By way of illustration, of the four vehicle producers represented in Australia, General Motors (US) operates in more than 50 countries; Mitsubishi (Japan) in 31 countries; Ford (US) in about 30 countries; and Toyota (Japan) in 25 countries.

Cost pressures are intensifying

Automotive production is highly capital intensive, requiring large investments in product development, model-specific tooling and production facilities. Significantly, the greater complexity of modern vehicles — partly reflecting more stringent safety and environmental requirements — has raised the cost of product development. For example, the cost of developing a new vehicle model can be as high as \$US 1 billion¹. Major innovations in componentry, such as ABS braking systems and new engine technology, are also very expensive to bring to the market.

The cost pressures arising from more expensive product development have been exacerbated by consumer demand for a wider range of vehicle types and by the excess capacity which continues to characterise this industry (see below). Annual price reductions or ‘cost-downs’ — to which suppliers must typically agree if they are to secure long term contracts with vehicle producers — have been a further source of cost pressure in the component sector. The bargaining position of the vehicle producers has in turn been strengthened by developments in information technology systems which have improved access to information on the price and quality performance of competing global suppliers.

Cost pressures are driving changes to the structure of production

The increased cost of product development has changed the focus of vehicle manufacturers’ efforts to realise economies of scale. Plant and model level economies have become relatively less important to overall costs, with the major emphasis now being on ways to maximise the global volumes over which product development expenditure can be spread. This has led or contributed to:

- continuing industry consolidation through mergers and acquisitions. In 2000, the six largest automotive groups (GM, Ford, Toyota, VW, Daimler-Chrysler and PSA) had a controlling interest in 60 per cent of the world’s vehicle production;
- the use of common vehicle designs in different production locations. For instance, General Motors produces the Opel/Vauxhall Astra in five European

¹ Unless otherwise specified, dollar figures in this report are \$A.

plants, while Toyota produces the Camry at ten plants in Asia, North America, Australia and South Africa (Automotive News International 2001); and

- production of a greater variety of vehicle models from the same basic platforms. Such ‘platform engineering’ has sometimes extended to platform sharing by different producers or the rebadging of otherwise identical vehicles supplied by another producer.

Cost pressures have also driven major rationalisation in component production — over the 1990s the total number of component suppliers world-wide fell from 30 000 to just 8000. This rationalisation has been accompanied by greater global coverage of the operations of the leading component suppliers. For the top 10 suppliers, the share of sales made outside their main markets ranges from just under 20 per cent to as much as 50 per cent (Wells and Nieuwenhuis 2001).

Vehicle producers have also sought to reduce costs and foster innovation by outsourcing responsibility for product development to their major suppliers. This has precipitated changes to the production hierarchy in the component sector and to the form in which components are supplied to the vehicle producers (see box 2.2).

In consequence, the global integration of the industry has increased

Collectively, changes to the location and structure of automotive production have led to increased global integration of the industry. Such ‘globalisation’ is reflected in a number of broad indicators:

- As a result of the increasing geographic dispersion of production, foreign direct investment in the industry has increased significantly (table B.2).
- Trade in vehicles and components has also risen, notwithstanding the significant restrictions imposed on automotive imports in many markets. According to the Automotive Trade Policy Council (2001), global automotive exports in 2000 represented more than 10 per cent of total world trade in that year, up from 9 per cent a decade earlier. While exports by virtually all producing countries increased over this period, the strongest gains were made by emerging producers such as Spain, Mexico and Korea (table B.3). Australian automotive exports also rose strongly during the 1990s (see chapter 3).
- Many of the major automotive exporting countries are also significant importers of automotive products (table B.4). For example, in 2000, the USA, Germany and Canada together accounted for 45 per cent of global automotive imports and nearly 40 per cent of total automotive exports.

Box 2.2 **Some recent changes in the nature of component supply**

Component suppliers are usually differentiated by the sort of components they produce. For example:

- Tier 1 companies supply pre-assembled components such as drive-trains and brake assemblies directly to the vehicle manufacturers.
- Tier 2 companies supply individual components and pressed metal fittings to both Tier 1 firms and the vehicle manufacturers.
- Tier 3 companies supply a range of smaller components (such as fasteners, bearings and computer chips) to firms further up the production hierarchy.

However, an additional distinction is increasingly made between Tier 1 and so-called Tier 0.5 or 'full service' suppliers. The latter are large, multi-site companies that can supply vehicle producers with sub-assembled components in large volumes. These firms usually have advanced technology capabilities, can provide sequenced production flows into the assembly process and can manage the sub-supply base on behalf of the vehicle producers.

The impetus for the development of Tier 0.5 suppliers has been the outsourcing by vehicle producers of responsibility for product development and the related growth in supply of components as part of full systems or modules, rather than on an individual basis. Examples include:

- heating, ventilation and air-conditioning systems;
- drive-trains (comprising, drive-shaft and front and rear axle modules); and
- interiors (cockpit, seats, overhead, floor and door modules).

Amongst other things, module and/or systems supply can:

- improve the quality of componentry by concentrating product development expertise in the hands of a single firm selling to a number of vehicle producers; and
- offer cost savings through facilitating commonisation of some of the components in the system or module, reducing assembly times and assisting the in-line sequencing of supply leading to reduced inventory costs.

For vehicle producers, there is also a benefit from the transfer of some of the cost and risk associated with product development to their suppliers.

Modular and systems supply is still in its infancy, accounting for less than 5 per cent of global component sales in 2000. However, intensifying cost pressures in the industry are likely to see its application increase significantly over the next decade.

Ongoing change in workplace arrangements is also a feature of the industry

Flexible workplaces are critical to enhancing productivity in the automotive industry and thereby the competitiveness of firms. As a result, the industry globally

is placing an increasing emphasis on continuous improvement, skill development and effective human resource management. A stable industrial relations environment is equally crucial. The just-in-time and sequenced production arrangements that characterise the industry make it highly vulnerable to stoppages arising from industrial disputes. This vulnerability increases the importance of effective communication and cooperation between managers, their employees and their representatives.

While these production imperatives are the same across the global industry, they have been pursued within a variety of institutional frameworks (box 2.3).

Box 2.3 International examples of workplace regimes

Institutional settings

Similar to the enterprise-based bargaining system in Australia, most international industrial relations regimes are based around collective bargaining arrangements. The nature of the bargaining process, however, varies significantly across countries. In the United States and Japan, negotiations between unions and employers occur at the firm, or even plant, level. In European countries such as Germany, bargaining often takes place at the industry level, involving simultaneous negotiations with all vehicle producers. In Scandinavian countries such as Sweden, bargaining is even more centralised. A group representing employees negotiates nationally with the equivalent of a national chamber of commerce to agree on a wage deal for the entire economy.

Union structures

Employee representation in North America typically involves single union structures which cover members across a range of industries. The United Auto Workers (UAW) is the main automotive sector union in the United States (although the industry is far from being completely unionised) with around 750 000 members (down from 1.5 million in the 1970s). The UAW also represents employees in the aerospace and agricultural industries.

The Canadian Auto Workers (CAW) union is the largest private sector union in Canada with 260 000 members across a wide range of industries including transport, retail trade, healthcare, fisheries and mining. It was formerly a part of the UAW and continues to have close links with it.

The German automobile industry is more heavily unionised than in most other countries with 70 per cent of all employees belonging to a union. The major automotive union is IG Metall with 2.8 million members across a range of manufacturing industries.

A more detailed description of the institutional arrangements applying in some key automotive producing countries is provided in Appendix C.

Sources: CAW (2002), Flanagan (1998), IG Metall (2002), UAW (2002).

Such diversity suggests that the precise nature of regulation and institutional arrangements in this area may be of secondary importance to effective relationships between firms and employees.

There is little sign of price and cost pressures abating

Despite the ongoing rationalisation of production, there is still considerable excess capacity in the global automotive industry. With continuing construction of production facilities in emerging vehicle markets, and the establishment of plants in developed countries to cater for the growth in demand for SUVs, excess capacity is likely to be endemic for years to come. (Most commentators suggest that global vehicle output will remain at about 70 per cent of total production capacity for the foreseeable future.)

Profitability will therefore remain under pressure

In recent years, only one of the big six vehicle producers — Daimler-Chrysler — has achieved an average return on sales (after tax) close to the industry benchmark 5 per cent (table B.5). And, according to the *Economist* (2002), the return on capital achieved by US car makers as a group during the 1990s was less than 3 per cent, compared with a return of around 20 per cent in the industry's 'heyday'.

Profit margins have been similarly tight in component and tooling activity. For example, in 2000, the aggregate return on global sales by automotive suppliers also appears to have been of the order of 3 per cent.

With returns to automotive production heavily dependent on efficient use of installed capacity, profit margins are unlikely to improve significantly in the near future. Indeed, efforts by individual firms to improve capacity utilisation are likely to constrain price rises, potentially leading to further reductions in aggregate profitability.

Low profitability is encouraging diversification into automotive service provision

In response to declining profitability on their production activities, vehicle manufacturers have been diversifying into various aftermarket, distribution, financing and retailing activities. This shift in the emphasis of vehicle producers' activities is being facilitated by internet-based systems that provide for customised ordering and direct product marketing and distribution.

In conjunction with the outsourcing of substantial elements of the product design embodied in vehicles, increasing emphasis by vehicle producers on post-production

activities is blurring the traditional boundaries between the various segments of the automotive industry.

3 The Australian automotive industry

3.1 A microcosm of the global industry

Like its counterparts in other countries, the Australian automotive industry has undergone major changes in recent years. There has been significant rationalisation of production in all segments of the industry. Productivity and quality levels have increased and innovation has become an important contributor to improved industry performance. One outcome of this improved performance has been strong growth in Australia's automotive exports.

As a result of these changes, the Australian automotive sector is now well and truly a part of the global industry and subject to similar pressures and constraints that are dictating production and investment decisions in other vehicle markets.

It encompasses the full range of automotive production activity

All segments of the automotive industry are represented in Australia:

- There are four vehicle producers — Holden, Ford, Toyota and Mitsubishi — all of which are subsidiaries of major overseas producers. They produce five passenger vehicle models (and derivatives of those models) at four plants in Melbourne and Adelaide, augmenting this model range with vehicles imported from affiliate companies.
- There are more than 200 firms producing automotive components for use as original equipment (OE) in new vehicles and for the replacement and accessories markets. While many of these firms are located in Melbourne and Adelaide, significant component production also occurs in Sydney and in a number of major regional centres, including Geelong, Ballarat, Albury Wodonga, Taree, Launceston and Toowoomba (see appendix table B.11). There are also several hundred, mainly small, firms around Australia producing components and accessories exclusively for the aftermarket.
- There are around 500 mainly small firms providing specialised tooling to vehicle and component producers. The bulk of these firms are located in Victoria, with most of the remainder in New South Wales and South Australia. Vehicle and

component producers also have some in-house tooling capacity, but this is mainly used for maintenance and repair (table B.12).

- There are also a number of firms providing specialist automotive engineering, design, testing and customising services, although much of this activity is undertaken in-house by vehicle and component producers (table B.12).

Turnover in Australian automotive manufacturing activities exceeds \$17 billion a year. Also, while significant improvements in productivity have led to labour shedding in the industry over the last decade, it still employs some 54 000 people — around 17 000 in vehicle assembly, nearly 30 000 in component production and the rest in tooling and automotive service provision (table B.13).¹

This makes it one of Australia's largest manufacturing industries — specifically, it accounts for some 6 per cent of value added and employment in the manufacturing sector and around 0.6 per cent of value added and employment in the economy as a whole. The industry's significance to the South Australian and Victorian economies is even greater, accounting for 14 per cent and 10 per cent respectively of manufacturing value added in those jurisdictions. These two states also account for three quarters of total employment in the industry (27 000 persons in Victoria and 13 500 in South Australia).

There are strong linkages among segments of the industry and between the industry and the wider economy

As in other countries, there is a high degree of interdependence between vehicle producers and their suppliers:

- Despite growth in exports (see below), sales to the domestic vehicle producers still provide suppliers of components and tooling and design services with around 80 per cent of their business.
- Moreover, this dependence on the domestic vehicle base is not limited to supply of product for new vehicles. The majority of components produced in Australia for the aftermarket are also for use in locally manufactured vehicles.
- For their part, the vehicle producers source nearly three-quarters of their components locally. Particularly in the short term, they are therefore heavily reliant on the price, quality and reliability performance of their local suppliers. The growing emphasis on systems and modular supply will increase this dependence in the future.

¹ While employment in the Australian tooling industry is around 10 000, non-automotive production for customers in such sectors as electronics, aerospace, whitegoods, packaging and furniture, accounts for about 35 per cent of output.

The degree of interdependence between the segments of the industry is further illustrated by the concerns of component producers about the ramifications of a reduction in the number of vehicle producers operating in Australia. As discussed in chapter 4, a major theme in submissions from component producers was that maintenance of a substantial domestic demand base is a pre-requisite for retaining significant component manufacturing activity in Australia.

There are also significant linkages between the automotive industry and the rest of the Australian economy. Apart from vehicle-related service sector activities such as distribution, retailing, financing, servicing and repair, the automotive industry is an important customer for the iron and steel, paint, rubber, plastics and glass industries.

There are also spillovers for the wider economy

Like its counterparts overseas, the Australian automotive industry is an intensive user of advanced product and process technologies. It also draws on a varied, and increasingly sophisticated skill set including virtual engineering, mechatronics (the interface between mechanical engineering and electronics), and advanced design and graphics. As a result, it has an influence on the range and content of courses offered by a number of Australia's educational institutions. For example, in its submission, the Society of Automotive Engineers said the industry's need for improved engineering skills to adapt to a more competitive environment has led to:

... new educational courses, emphasizing engineering design, economics and statistics, and also production methods and cost control have been developed by universities and colleges. (sub. PP118, p. 3)

Another important theme in industry submissions was that these characteristics mean that the industry provides a range of 'spillover' or unpriced benefits to the rest of the economy. Synthesising this argument, the Federal Chamber of Automotive Industries commented that:

... the automotive industry has been a leader in organisational innovation, production methodologies, the use of advanced manufacturing technologies and the organisation of extended supply chains. It is the bedrock of many countries' engineering know-how. ...

With its new emphasis of innovation and flexibility, the automotive industry is rapidly becoming an integral part of the emerging knowledge-based economy ... (sub. 40, p. 29)

(The Commission's views on the implications of such spillovers for post 2005 policy settings, are discussed in chapter 10.)

3.2 The industry's position in the Australian market

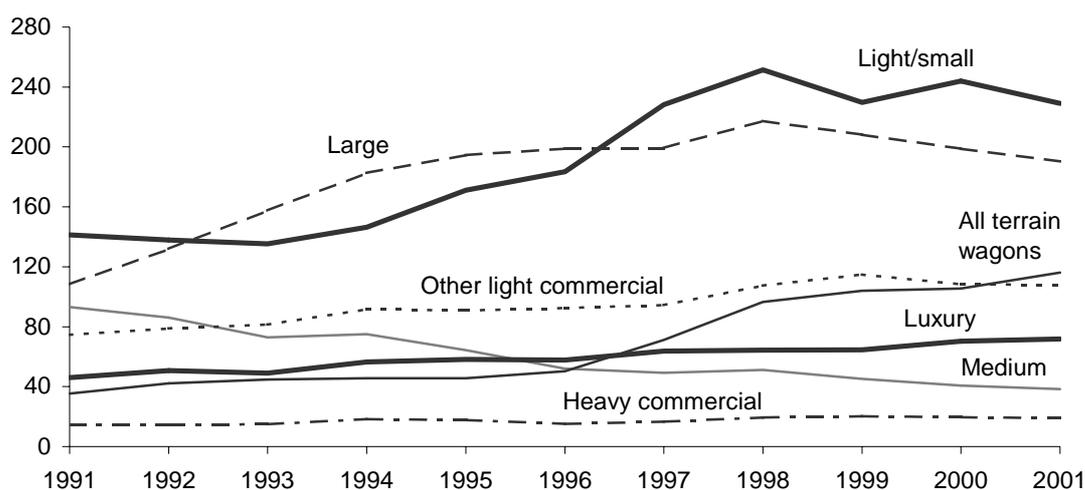
Some key characteristics of the local vehicle market

The Australian vehicle market has been growing steadily in recent years — total vehicle sales in 2002 are expected to exceed 800 000 units, more than 50 per cent above the levels attained a decade ago.

This demand growth has been facilitated by improvements in vehicle affordability and value for money. Over the last decade, the price of imported vehicles has fallen by an average of 10 per cent, despite the depreciation of the Australian dollar (figure B.2). And, while the average real price of locally produced vehicles is about the same as a decade ago, significant improvements in vehicle quality mean that purchasers are getting better value for money. Indeed, a number of participants provided data indicating that most vehicles in Australia are now relatively 'affordable' by international standards.² Toyota, for example, presented retail cost comparisons for a base model 4 cylinder Camry showing vehicle affordability in Australia was better than in Germany, Canada and Sweden and only slightly below that in the United Kingdom and the United States (table B.6). Reductions in tariffs and changes to the taxation of new vehicles (see chapter 6) have been important contributors to these beneficial outcomes for vehicle consumers.

Figure 3.1 Trends in vehicle sales, by segment, 1991 to 2001

'000 vehicles



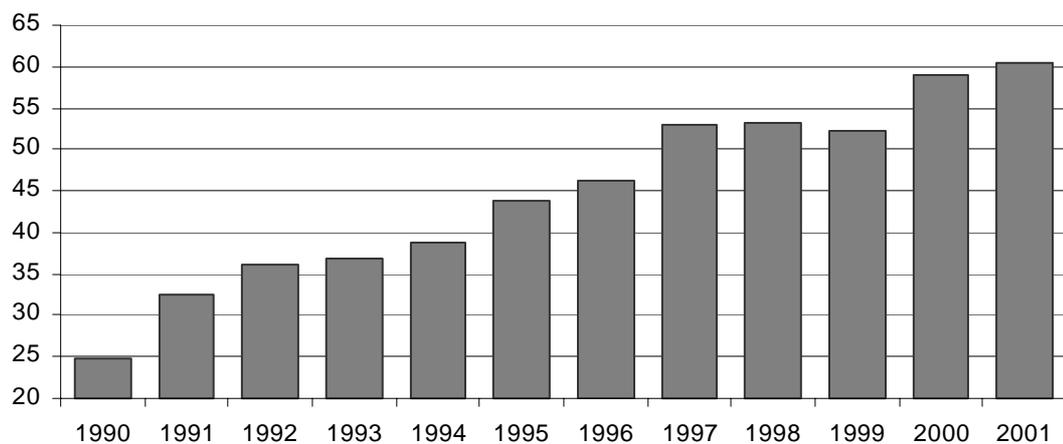
Data source: AAI (2002).

² Comparative vehicle affordability is typically defined as the ratio of vehicle cost to average weekly earnings.

However, much of the growth in the domestic market has occurred in those segments that are also driving growth in other countries — small passenger, light commercial and sports utility vehicles (the latter known in Australia as 4WDs or ‘all-terrain’ wagons). Thus, for example, sales of all-terrain wagons more than trebled between 1991 and 2001 and now represent 15 per cent of the total Australian vehicle market (figure 3.1 and tables B.7 and B.8).

Importantly, small passenger and sports utility vehicles are not currently produced in Australia. Moreover, light commercial vehicle production is limited to a relatively small number of derivatives of the Falcon and Commodore. As a result, the import share of the Australian market has risen sharply — in the case of passenger vehicles, from about 20 per cent of the market in the late 1980s to around 60 per cent at present (figure 3.2). Models imported by the four local producers account for nearly one-third of total vehicle imports.

Figure 3.2 Import share of the Australian PMV market, 1990 to 2001
per cent



Data source: AAI (2002).

Increasing import volumes have also been accompanied by a greatly expanded range of imported vehicle models. There are currently around 175 passenger vehicle models available in Australia, compared to 115 a decade ago.

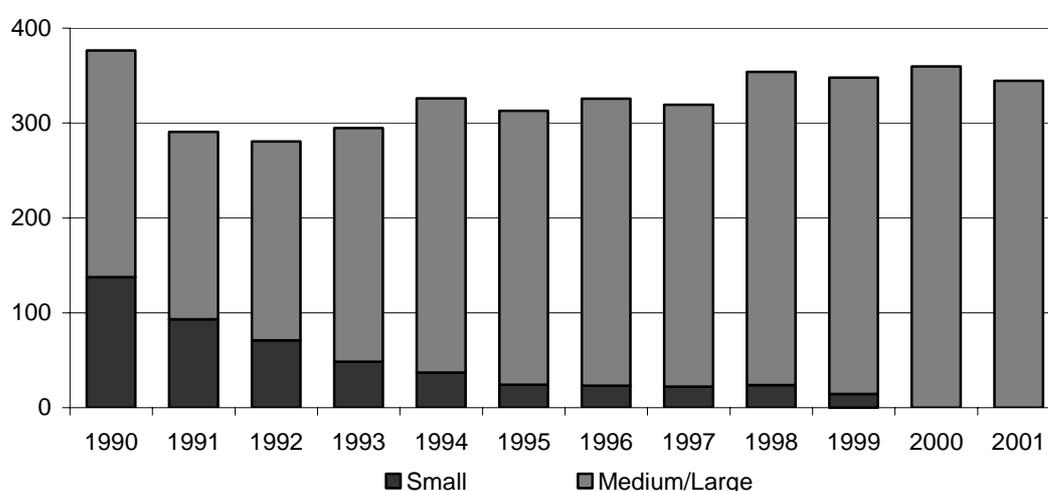
Local vehicle production is focussed in one market segment

Australia’s four vehicle manufacturers produced 345 000 vehicles in 2001. In contrast to earlier years, most of these vehicles were either large vehicles, or light commercial or luxury vehicles based on the same platforms (figure 3.3 and

table B.9). This concentration of local vehicle production reflects the significant rationalisation of model lines that has accompanied declining levels of protection for the industry.

As is apparent from figure 3.1, domestic demand for large vehicles has fallen somewhat over the last few years. Hence, to sustain overall output volumes in the face of the narrowing production base, vehicle producers have had to increase their export sales (see below).

Figure 3.3 Domestic vehicle production, 1990 to 2001
'000 units



Data sources: DISR (1999), DITR (2001, unpublished data).

The industry also relies heavily on fleet demand

Fleet demand in Australia is high by international standards. In 2001, around half of all passenger vehicle sales (including imports) were fleet purchases. Three quarters of these were made to private businesses, with the remainder going to government entities.

More importantly, fleet purchasers are much more inclined to buy large, locally produced, vehicles than private consumers purchasing new vehicles. This reflects a range of factors including operational requirements, pricing and, in the case of government businesses, an explicit preference for locally produced vehicles.

The upshot is that around three-quarters of domestic sales of locally produced vehicles go to fleets (table B.10). This heavy reliance on fleet demand and on large vehicle production more generally, is seen by many as rendering the local industry vulnerable to changes in purchaser sentiment (see chapter 4). Indeed, the perceived

need to achieve greater market coverage is driving the imminent entry of local producers into the all-terrain market through vehicles engineered from the standard model platforms, as well as the production of high performance variants of the standard marques.

Component production is more diverse

Most of the components required to produce passenger motor vehicles are manufactured in Australia. Australia has sophisticated production capacity in areas like engines, panels, braking and clutch systems, suspension systems, exhausts, transmissions and rear axles, air conditioning, occupant safety, vehicle instrumentation and electronics, lighting and mirrors, and wheels.

Manufacture of body panels and engines is largely the province of the vehicle producers. However, most other components are made by specialist producers. Reflecting this diverse production capacity, average local content in domestically produced vehicles is around 75 per cent. Further, local component producers meet about 50 per cent of demand for replacement components for both domestically assembled and imported vehicles. Indeed, a significant number of firms supply mainly, or only, to the aftermarket which includes accessories as well as replacement parts.³

Like the vehicle producers, component suppliers have looked increasingly to export markets to augment their domestic sales (see below).

Component producing structures are changing in line with global trends

In line with developments in the global industry, vehicle producers are increasingly looking to outsource the manufacture of component sub-assemblies. As a result, modularisation and systems integration are becoming more important features of local component production (although their uptake has not been as rapid as in the major vehicle producing countries). Also, just-in-time production techniques and in-line sequencing requirements are encouraging providers of major sub-assemblies to locate adjacent to their customers.

³ The aftermarket can be divided between 'genuine' parts marketed and branded by vehicle makers, and 'non-genuine' parts. The latter are often produced by original equipment component suppliers and are often virtually identical to equivalent 'genuine' parts.

Australian firms also provide tooling and vehicle design and customising services

Australia's automotive tooling sector produces a range of customised, special-purpose equipment including sheet metal body dies, injection moulds, casting dies and patterns, jigs, welding fixtures, assembly and checking fixtures, and gauges.

Outsourcing of tooling requirements by vehicle and component producers in recent years has increased the role of specialist tool makers in the industry's operations. Reflecting the growing reliance of other parts of the industry on this sector, constraints on its capacity to meet peak demands — which can be very lumpy during periods of model change — are causing some concerns (see chapter 4).

Much of the design work for vehicles and components is done in-house. However, there are a number of independent design houses, as well as firms that customise vehicles for specialist markets.

3.3 Integration with the global industry

Australia's automotive market has become more accessible to overseas suppliers

As noted, vehicle imports have increased greatly over the last decade. Component imports have also increased over this period, albeit at a slower rate.

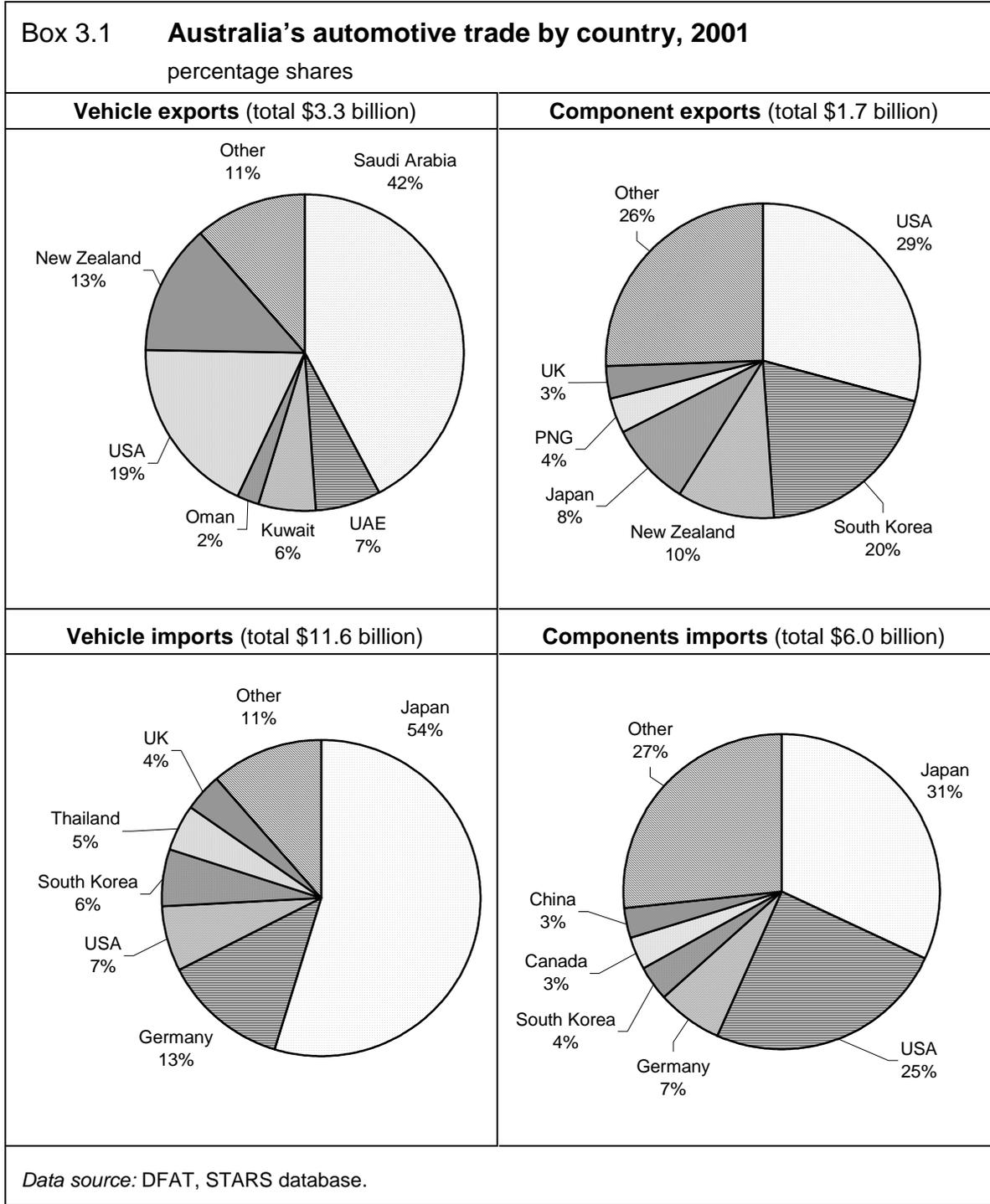
This growth in component imports has reflected a number of factors, including:

- a small decline in the average local content of domestically produced vehicles; and
- an increased import share in the aftermarket.

Major source countries for automotive imports are Japan, the USA, Germany, South Korea and Thailand (see box 3.1 and table B.15).

Australia's automotive exports have also increased

Increased competition in the local market has prompted Australian automotive producers to look for export opportunities to sustain and grow their businesses. Ongoing productivity and quality improvement (see below), favourable movements in the currency and government assistance programs, have all contributed to substantial export growth. Exports now account for more than 30 per cent of automotive production compared to less than 10 per cent a decade ago. The industry has become Australia's sixth largest exporter.



Australia's automotive exports were worth just under \$5 billion in 2001:

- Exports of vehicles, which accounted for two-thirds of this total, were mainly to the Middle East where there is strong demand for large, rear-wheel-drive vehicles. However, the USA and New Zealand are also important markets.

-
- Component exports account for most of the remainder (although exports of tooling and automotive design and engineering services are increasing). Major component exports include engines and engine parts, mounted brake linings, transmissions, rear-view mirrors, wheels, seat belts and tyres. The USA, South Korea and New Zealand are the main markets for these exports. A significant proportion of component exports (mainly from Bosch and PBR) are for aftermarket use.
 - Collectively, the Middle East, the USA and New Zealand take around 75 per cent of Australia's automotive exports (table B.15). Again, this narrow export base is regarded by some as a potential threat to the industry's future viability (see chapter 4).

And overseas investment by Australian producers has grown

A number of Australian automotive firms have established production facilities in other countries to service those markets locally. In some instances, the need to circumvent trade barriers was a major consideration in the investment decision. In others, the demands of just-in-time vehicle assembly, or the costs or risks of damage to products in transit, meant that a presence 'on-the-ground' was the most effective mode of supply.

Examples of Australian automotive producers with significant investments overseas include: PBR (aluminium brake calipers in the USA, Thailand and Malaysia); Castalloy (cylinder head joint venture in Malaysia); and Air International (heating and air conditioning systems in the USA, Europe and Asia).

3.4 Factors underlying the industry's growing international competitiveness

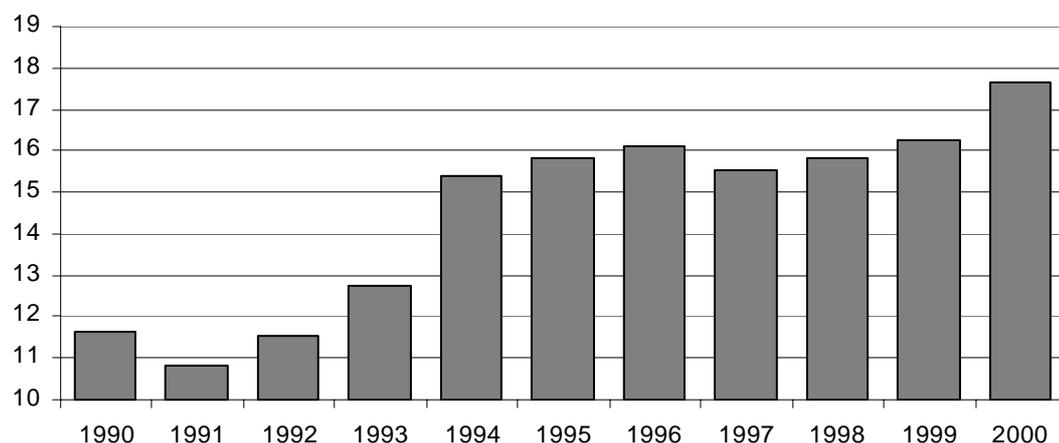
Productivity and quality have improved

While accurate measurement of productivity and quality in this industry is notoriously difficult, both appear to have improved significantly over the last decade. For example:

- the number of vehicles assembled a year per employee has increased by over 50 per cent since 1990 (figure 3.4);
- over the last decade, turnover per employee in the component sector has risen by 90 per cent in real terms;

- product defect rates across the industry have fallen significantly. For example, the South Australian Government (sub. 60, p. 14) provided data indicating that, between 1988 and 1999, average faults per vehicle fell by nearly 40 per cent for the Magna, by 45 per cent for the Falcon and the Commodore, and by more than 60 per cent for the Camry. Indeed, the industry's quality performance is now widely regarded as equal to, or better than, that achieved in overseas plants. For instance, Toyota Australia recently stated that levels of quality at its Altona plant were now equal to or better than Toyota's overseas operations; and
- the high quality of Australia's tooling and automotive design services is receiving increasing recognition overseas.

Figure 3.4 Labour productivity in vehicle assembly, 1990 to 2000
vehicles per employee a year



Data sources: DISR (1999), DITR (2001).

A range of factors have facilitated these improvements

Improved productivity and quality performance have been underpinned by changes to the structure of the industry and its mode of operation:

- Rationalisation in the industry, in combination with export growth, has allowed some firms to increase their production volumes, in turn, facilitating higher levels of automation. For example, Holden (sub. 72, pp. 28-29) said that an increase in assembly output from 480 to 620 vehicles a day has allowed it to run its body shop at 80 per cent automation and its paint shop at 100 per cent automation.
- In helping to sustain and augment production volumes in the face of declining sales in the domestic market, the industry's increased export orientation has

intensified the competitive pressures on firms. Satisfying the demands of international customers, with access to an array of competing products, has made ongoing performance improvement a necessity for Australia's automotive exporters.

- The adoption and refinement of lean manufacturing techniques has delivered operating efficiencies and lower inventory costs. According to some estimates, inventory holdings across the supply chain have fallen by an average of 20 per cent over the last five years.
- Significant investment to upgrade plant and equipment, and in process and product development, has been an important contributor to improved labour productivity in the industry:
 - In 2000-01, capital expenditure in the industry was a little over \$600 million, representing some 7 per cent of total manufacturing investment. According to the Australian Industry Group (sub. 43, p. 23), expenditure in 2002 will be over \$1.1 billion, equivalent to some 17 per cent of forecast investment in the manufacturing sector. Moreover, investment by vehicle producers in the four year period 1996-99 was some 17 per cent higher (in real terms) than the preceding four year period and more than 60 per cent higher (again in real terms) than the period 1988-91 (table B.16).
 - Spending on R&D, including product development, is currently running at around 6 per cent of industry turnover — double the level in the early 1990s. The industry's research propensity — as measured by spending on R&D excluding product development — is also about double the average for the manufacturing sector. The industry's innovativeness and demonstrated capacity to leverage market opportunities from its product and process development, has become one of its strengths (see chapter 4).

Not least of which have been better workplace arrangements

Over the last decade and a half, there have been significant changes in workplace arrangements in the automotive industry facilitated by major modifications to the underlying institutional framework. Award restructuring and simplification and more recently the introduction of enterprise bargaining, a greater emphasis on, and investment in, skilling and human resource development and a recognition by management and employees of the need to adapt in order to secure the industry's future have all made the workplace environment more productive.

A range of benefits have flowed from these changes: workplace flexibility has increased; the skill levels of both managers and their employees have improved; there is generally better communication between the two groups; and absenteeism and labour turnover is less of an issue than in the past. That said, there is a

recognition by all parties that there are still significant workplace and industrial relations issues that urgently need attention. These include addressing residual inflexibility in aspects of workplace arrangements and avoiding disruptive stoppages (see chapter 5).

Productivity growth and quality improvement has helped to shield profitability from the effects of declining government support

Interpreting automotive profitability data is fraught with difficulty. For example, much of the industry-wide data relates to return on sales, rather than return on assets. Data for the four vehicle producers also encompass activities other than vehicle production and can be affected to some degree by transfer pricing arrangements. That said, as in other countries, the Australian industry as a whole does not appear to have recouped its cost of capital in recent years.

At the same time, however, the available industry-wide data do not reveal any discernible downward trend in aggregate profitability. For example, the average reported return on sales achieved by component producers in the second half of the 1990s was only about half a percentage point lower than in the first half of the decade (table B.19). And, aggregate pre-tax profits reported by the four vehicle producers have increased over the 1990s, albeit from a loss-making situation (table 3.1). Indeed, Holden, reported an after-tax return on sales for the whole of the 1990s exceeding the 5 per cent industry benchmark.

Table 3.1 Pre-tax profit performance of the Australian vehicle producers, 1990 to 2000^a

Year	Profits	Tariff
	\$ million	per cent
1990	(224)	40
1991	(502)	37.5
1992	(202)	35
1993	53	32.5
1994	327	30
1995	343	27.5
1996	351	25
1997	344	22.5
1998	389	20
1999	311	17.5
2000	427	15

^a Profit figures for vehicle manufacturing operations only.

Sources: DISR (1999), DITR (2001).

The absence of a downward trend in industry profitability is significant given that government support for the industry has fallen substantially over the last decade. What this indicates is that improvements in productivity and quality, in combination with favourable movements in the currency, have helped to offset the impacts of lower assistance — through, for example, facilitating growth in automotive exports.

4 Outlook for the automotive sector

The Australian automotive industry's linkages to the global industry will provide it with a range of new opportunities in coming years. In realising those opportunities, the industry's growing competitiveness and recognised strengths in a number of areas will be particularly important. At the same time, however, weaknesses in the industry and some 'external' impediments are likely to detract from its future growth potential and, in so doing, hinder achievement of the government's desire for a viable, internationally competitive and globally integrated automotive sector.

Given the multi-faceted nature of the automotive industry and the complexities of its operating environment, the opportunities and challenges confronting Australian automotive producers are numerous. Strengths and weaknesses are also likely to vary across firms and particular automotive products.

Nonetheless, a number of general messages and themes have been evident in the Commission's discussions with the industry, in submissions and in some recent studies of the industry.¹ These are summarised below. As a prelude to the discussion of post 2005 assistance arrangements and other policy issues, the Commission has then drawn these messages and themes together to:

- convey a sense of the contribution that the automotive sector could, in the future, make to the Australian economy and to the community more generally; and
- provide an agenda of issues that will need to be addressed by the industry or governments if the sector is to realise that potential.

4.1 Future opportunities

Overseas markets will provide most new opportunities

While the local market will be the source of some new business for Australian automotive producers, the small size of the market will limit the scope for firms to

¹ See, for example, the Strategic Audit of Victoria's Automotive Industry (Victorian Government 2000); and the report by the South Australian Automotive Task Force (Spurling 2001).

rely on domestic sales alone. Hence, to generate the throughput necessary for longer term viability, many will need to look to export markets.

Opportunities for Australian vehicle exports are likely to be focussed in particular markets

The majority of Australia's vehicle exports currently go to the Middle East (see chapter 3). Further opportunities may arise in that market — particularly for larger engine, rear-wheel-drive models which appear well suited to customer requirements. However, some have suggested that this market is now close to being saturated. The political situation in the region also creates some inherent risks for these exports.

The US market is a possibly more promising source of new opportunities for Australian vehicles — particularly in the specialist high performance and luxury market segments. The recent announcements of export contracts for the Monaro Coupe and the luxury versions of Mitsubishi's Diamante are indicative of such potential. However, an understanding between the United Auto Workers and certain US vehicle producers, limiting vehicle importation from overseas affiliates (see chapter 8), may constrain future exports to that market.

Prospects for vehicle exports to Asia are less certain:

- while demand is expected to grow strongly in the region, much of that growth will be for smaller passenger and light commercial vehicles;
- access to many Asian markets is currently restricted by high tariff and non-tariff barriers; and
- the major vehicle producers are generally seeking to service these markets through investment in local production facilities — partly as a result of trade barriers and the availability of investment incentives.

Hence, many of the new opportunities for Australian vehicle producers may come from participation in foreign investment in Asia.

Nonetheless, the potential importance of 'targeted' vehicle exports to Asia should not be underestimated. For instance, sales of just a few thousand units to a number of these markets would collectively provide a significant boost to a producer's total volumes. This is one reason why the industry places such a high priority on improving access to Asian markets (see chapter 8). Participants also pointed to scope to build on vehicle sales made in Brazil and other South American markets.

Export possibilities for components may be more diverse

Australian made components are incorporated in a range of new vehicles across the world. For instance, Australian firms supply engines for vehicles produced in the USA, steering wheel sensors for a number of luxury European marques, air bags for some Indian vehicles and the transmissions used in several Korean models. Castalloy also supplies several components to Harley Davidson in the USA, and Australian firms supply the replacement market in a number of countries.

This suggests that the market and product spread of export opportunities for components will be wider than for vehicles. More stringent environmental standards that put a premium on greater use of lightweight materials are likely to open up a range of new export possibilities.

However, demonstrating capability to customers, and developing the linkages with them that are necessary to sustain viable export business, can take several years. Hence, in the short to medium term at least, export opportunities are likely to be concentrated in those markets where:

- Australia is already a well established supplier of components, such as in the USA and South Korea; and/or
- links with the Australian subsidiaries of global vehicle producers allow for truncation of the start-up phase of exporting.

Moreover, securing overseas business with the major global vehicle producers may increasingly require direct investment in production facilities in the markets concerned, rather than the export of finished components from Australia. The trend towards the purchase of components as either complete systems or in modules (see chapter 2) will be an important factor pushing in this direction.

Tooling and design services could be a growing source of export sales

Growth in automotive production in developing countries is likely to provide a range of opportunities for the export of tooling services, particularly given Australia's cost competitiveness and growing reputation for quality and reliability in this area. Thus, the Tooling Industry Forum of Australia (TIFA, sub. 78, p. 25) saw considerable scope to build on sales already achieved in a diverse range of export markets including the USA, China, India, Thailand, Malaysia, Russia and Western Europe. Similarly, the success of Holden's Asia Pacific Engineering Group in providing engineering services to affiliated firms in a number of Asian markets is indicative of the export potential in vehicle design and related engineering activities.

Moreover, trade barriers may not be a significant constraint on such exports — if a country has design, engineering or tooling requirements that cannot be met domestically, it will often waive any restrictions that might otherwise impede importation.

The composition of local vehicle production will limit domestic opportunities

The concentration of local passenger vehicle production in the large market segment will limit domestic opportunities for both the vehicle producers and their suppliers. Growth in demand for large vehicles has currently stalled, there is some prospect of competition for the local marques from Korean imports, and fleet sales are under threat from a growing trend for businesses to cash out the benefits to employees of company provided vehicles (see section 4.4).

There will, however, be opportunities in specialist domestic market segments for vehicles engineered from the standard model platforms. High performance versions of the standard local models and the imminent production of all-wheel-drive variants of those models are two examples. However, the capacity for these sorts of vehicles to capture significant market share from imports, rather than from other locally produced models, remains to be seen.

New domestic opportunities may also arise for original equipment component suppliers able to offer competitive alternatives for components that are currently sourced from imports. This is particularly the case as the relative value of the Australian dollar is creating incentives for vehicle producers to reassess the opportunities to reduce costs by sourcing more components from Australian firms. For example, Toyota has increased local content in the new Camry, to be introduced to the market later this year, from 75 per cent to 82 per cent (sub. 39, section 4.3).

Further, while constraints on the growth in sales of locally produced vehicles will limit opportunities for firms in the replacement component market, those firms may be able to secure new business by supplying parts for imported vehicles. Indeed, the Australian Automotive Aftermarket Association (sub. PP93, p. 8) indicated that competitive pressures have already obliged firms to move in this direction.

General economic conditions and the assistance regime will also be relevant

The economic climate in Australia will be an ongoing influence on vehicle demand and consequently on the domestic opportunities for all segments of the industry — particularly given the orientation of local vehicle production to the fleet market. And, through its impact on the competitiveness of local production, the assistance regime for the industry will be a further influence on future domestic (and export)

opportunities. In this regard, a common theme in industry submissions to the inquiry was that a supportive assistance regime is important to maintain the domestic production base (see chapter 10).

4.2 Industry strengths in realising opportunities

Features of the general business environment are helpful

Several general features of the Australian business environment provide a solid platform for viable automotive production, including:

- a stable political climate;
- generally well-developed and increasingly efficient basic infrastructure;
- a relatively open investment environment;
- ready access to most raw materials required for vehicle production; and
- a well educated population which provides the basis for a skilled workforce.

Flexibility, innovativeness and customer focus are key specific strengths

The industry also has important specific strengths which enhance its competitiveness in the market place. While these can be described and categorised in various ways, many relate to the industry's innovativeness, flexibility and strong customer focus and to characteristics of the operating environment in Australia that support those attributes:

- An emphasis on research and development in recent years has seen the industry establish a strong track record in delivering enhanced products.
- The established production base in Australia, linkages to the world's leading producers, access to a pool of skilled staff to meet most research and development needs, and lower staff costs relative to other developed countries, provide the basis for sustaining that research effort into the future. Greater clustering of vehicle and major component production is also helping to reinforce the industry's product development capabilities.
- The expertise and flexibility acquired in engineering platforms and modifying production techniques to cater for the requirements of the small domestic market, has imbued the industry with the capacity to identify 'niche' market opportunities and to respond to them quickly, flexibly and cost effectively. This has allowed some Australian producers to target small volume export opportunities that would require larger producers to make significant, and

potentially costly, alterations to their production processes. Hence, while small scale has long been regarded as an inherent weakness of the domestic industry (see below), in some contexts it has emerged as an important strength.

- In securing export business, a strong customer focus and persistence in developing and nurturing linkages have also been important. The willingness of a number of Australian component producers to establish production facilities in overseas markets is just one example of this focus on the needs of the customer.

But the industry also has other strengths

More broadly, the industry's productivity and quality performance — once a major weakness — is rapidly becoming a strength. As described in chapter 3, improvements in these key areas have stemmed from a range of factors including investment by firms in process development, new plant and equipment and improving the skills of their workforces, and the willingness of employees to make changes to increase the flexibility and productivity of workplaces. Amongst other things, enhanced productivity and quality performance has allowed some Australian firms to compete successfully with overseas affiliates for the right to supply globally 'homogeneous' vehicles and components to various markets. Toyota's exports of the Camry to the Middle East and Robert Bosch Australia's establishment of Australia's first large scale silicon chip plant to supply a major part of global requirements for power diodes are cases in point.

These examples also serve to illustrate how the linkages between the local industry and the world's major vehicle and component producers can enhance the opportunities available to Australian firms and facilitate their entry to the overseas markets concerned.² Such linkages also provide a means of transferring technological and production expertise to local firms.

The industry's other potential strengths include:

- its proximity to Asia — although the value of this is reduced by generally high trade barriers in the region and the mismatch between the type of vehicles produced in Australia and consumer preferences in Asian markets; and
- Australia's growing expertise and reputation in producing innovative lightweight aluminium components.

² However, there were suggestions that the local vehicle producers could be making greater use of these linkages to secure export business for their component suppliers with parent companies overseas. Indeed, some component producers advocated that the provision of assistance to vehicle producers under ACIS should be conditional on them securing export business for their suppliers — see chapter 11.

Many participants also argued that assistance provided to the industry — and in particular support delivered through ACIS — is one of the industry’s strengths in competing for new business and securing the go ahead from parent companies for investment and product development activity. However, in the Commission’s view, such assistance cannot be construed as an *intrinsic* strength. That said, government support has facilitated new activity, investment and research which has improved the industry’s competitiveness and viability. These sorts of benefits, together with the accompanying economic costs of this government support, are discussed in chapter 9.

4.3 The industry’s weaknesses

The limited range of domestic vehicle production leaves the industry vulnerable on several fronts

The high concentration of Australian passenger vehicle production in the large market segment reflects commercial judgements about Australia’s area of comparative advantage. The industry has also worked hard to leverage basic vehicle platforms to cater for a range of consumer demands.

Nonetheless, this narrow production base will constrain potential growth in sales in both the domestic and export markets. It also leaves vehicle producers and their suppliers vulnerable to changes in consumer sentiment. In this regard, a prominent concern in submissions was that reductions in current vehicle production volumes — were, for example, one of the vehicle manufacturers to cease production — would put some significant component production facilities and the associated research infrastructure at risk.

Economies of scale and plant throughput are still an issue for the industry

The level of output required for cost-competitive vehicle production depends on the type of vehicle. According to some commentators, volumes of at least 250 000 units a year are required for small vehicle production on which profit margins are very slim. Conversely, it appears that specialist luxury vehicles can be produced profitably at volumes of as little as 50 000 units a year. Moreover, as noted in chapter 2, while higher product development costs have increased the importance of total throughput to firm profitability, developments in computer-driven machine technology and the advent of ‘platform engineering’ have reduced the significance of scale at the individual model level.

Nonetheless, it is widely accepted that despite significant rationalisation, plant and platform outputs in Australia are still well below those required if the industry is to be internationally competitive without special ongoing government assistance. For example, no plants achieve the 180 000 units nominated by Holden (sub. 72, p. 20) as the minimum economic production volume for the sort of large vehicles produced in Australia. Moreover, some plants do not achieve, or only barely achieve, the lower annual volumes of 80 000 to 100 000 units nominated in the Spurling Report (2001, p. 20) as the minimum necessary to support the infrastructure requirements for ‘niche’ vehicle assembly. For the most part, relatively low scales of operation also characterise component production and tooling activity in Australia.

The need to address scale related weaknesses is central to the plans of many firms in the industry to increase their export volumes. It also underscores arguments for greater component commonisation in locally produced vehicles (see box 4.1).

Box 4.1 Component commonisation

The recent report of the South Australian Automotive Task Force (headed by Graham Spurling) concluded, among other things, that:

There is a particularly strong case for some sort of cost sharing/rationalisation of very capital intensive facilities such as those associated with engines and/or alloy castings, sheetmetal stamping and tooling. (p. 2)

... a unique Australian industry model is required based on strategic alliances rather than the perpetuation of Australia’s historically fragmented supplier base. (p. 10)

Some recent commonisation has been achieved in seat production, and discussions in relation to other opportunities are in train between the components sector and vehicle producers via a forum shared between the Federation of Automotive Products Manufacturers and the Federal Chamber of Automotive Industries. (trans., p. 41)

However, reliance on single suppliers does have some risks. Apart from potentially constraining the scope for vehicle producers to differentiate their products, it can increase the adverse consequences for the industry of industrial disputation in the components sector (see chapter 5). In consequence, the case for a wholesale move to single suppliers and common parts is not universally accepted.

Trade barriers and ‘head offices’ constrain realisation of economies of scale via exports

The industry’s capacity to increase production volumes through exports is limited by the array of tariff and non-tariff barriers impeding access to overseas markets. As noted, these barriers are a particular impediment to exports to Asia — a region that

might otherwise offer some worthwhile opportunities given Australia's proximate location.

Further, while global linkages provide a range of benefits to the domestic industry, global sourcing considerations can constrain Australian automotive exports, even if those exports are potentially competitive in relation to price, quality and reliability of supply. For example, at the public hearings Ford Australia said:

...we [Ford Australia] have a unique set of circumstances as a company worldwide which really make it difficult for us to achieve a volume export program... (trans., p. 127)

More specifically, in commenting on why Ford Australia was not exporting to the Middle East, the company's CEO was recently quoted as saying that the Ford group has:

... a large, rear-wheel drive, left hand-drive car in the corporate stable called the Crown Victoria and that's the one [it] sends to the Middle East, so that effectively locks [Ford Australia] out of the Middle East market. (Polites, 2002)

There is scope for significant improvement in workplace outcomes

As discussed, improvements in workplace arrangements have made a significant contribution to the automotive industry's enhanced productivity and quality performance over the last decade or so. Greater flexibility engendered by changes in institutional arrangements — including award restructuring and simplification and, more recently, enterprise bargaining — have facilitated the development of more productive workplaces. However, within these institutional frameworks, acceptance by automotive employees of the importance of workplace improvement to the longer term viability of the industry, and a greater emphasis by firms on effective management of workplace issues, have been integral to the outcomes achieved.

That said, as in other industries, workplace arrangements and practices in the Australian automotive industry are still in the process of transition from the rigid centralised system of the past, to the sort of flexible and performance-oriented regime which is so important for competitiveness in this industry. In consequence, there is general recognition by all involved that there is still a considerable way to go in achieving the sort of 'best practice' workplace outcomes that will be essential to secure the industry's transition to international competitiveness.

A focus for much of the recent concern has been industrial disputation in some key suppliers to the vehicle producers (see chapter 5). As these disputes have highlighted, the just-in-time and lean manufacturing techniques that have become essential for competitive production in the automotive industry worldwide, mean

that stoppages in strategic parts of the supply chain can quickly cause costly disruption across the whole industry. Of potentially greater concern for the longer term, is that such disputes call into question Australia's reliability as an export supplier and create pressure to adopt more conservative and therefore costly inventory holding practices. They also serve to discourage greater reliance on sole supplier arrangements that might otherwise help the industry to reduce costs by increasing realisation of economies of scale.

But recent industrial disputes are just one manifestation of more deep-seated weaknesses in this area of the industry's operations. For example:

- Notwithstanding the improvements of the last decade or so, inflexibilities continue to characterise many Australian automotive workplaces. These relate not only to the deployment of employees within the workplace, but also to the way in which workplace negotiations occur.
- Addressing such inflexibilities is made more difficult by an overly adversarial workplace culture evident in some parts of the industry, which continues to hinder the achievement of win-win outcomes.
- The skills and knowledge of some of those involved in managing workplace arrangements, or negotiating on behalf of workers, fall short of what is required to deliver internationally competitive outcomes in this industry.

Not surprisingly, therefore, most participants considered that achieving improvements in workplace outcomes and practices is a high priority for the industry (see chapter 5).

There are a range of other weaknesses, including ...

- emerging skills shortages in a range of areas including: CAD/CAM and virtual engineering; mechatronics; die setting; electronic diagnosis; and foundry skills;
- the capacity of vehicle producers to bring unreasonable pressure to bear when negotiating with their suppliers. For example, the Commission heard that such pressure can sometimes extend to threats of cancellation of overseas affiliates' business with other arms of the vehicle producer; and
- various constraints on the ability of the tooling sector to meet the needs of local vehicle and component producers. As noted, the primary manifestation is the lack of sufficient capacity in the sector to provide the full range of tooling requirements when several new model platforms are introduced concurrently. According to TIFA (sub. 78, pp. 22-23), advances in CAD/CAM technologies which have reduced product development times and thereby increased the frequency of model changes, have exacerbated this problem. TIFA went on to

note that fluctuations in demand have in turn inhibited investment in new tooling equipment. It also commented that many smaller firms in the tooling sector require additional skills in areas such as management, strategic planning, marketing, and performance benchmarking.

4.4 Threats to the industry's future viability

As well as the intrinsic weaknesses that may detract from the industry's performance, various external factors could threaten its future viability.

Many firms are sensitive to exchange rate changes

Appreciation of the currency would reduce the cost of imported inputs used by automotive producers. But at the same time, it would increase the competitiveness of imported vehicles and components in the domestic market and reduce the competitiveness of Australian automotive exports.

Not surprisingly, the capacity of firms to cope with any significant future appreciation of the Australian dollar — against the \$US and Yen in particular — appears to vary considerably. Some companies indicated that future appreciation of the local currency would be a bigger threat to their future viability than reductions in tariffs.

More generally, a number of participants commented that volatility in the value of the Australian dollar deters investment in the industry.

Changes in the fleet market are likely to reduce demand for local vehicles

As emphasised by the Australian Fleet Managers Association, rising costs of financing and operating company fleets are seeing more firms 'cashing out' vehicle benefits in remuneration packages for their employees, thereby shifting responsibility for vehicle purchasing to those employees. Significantly, private consumers purchasing a new car are more likely to choose imported models than fleet managers. They are also more likely to purchase late model used vehicles and to retain vehicles for longer periods.

With fleet purchases accounting for three quarters of domestic sales of locally produced vehicles, such changes in purchasing behaviour could have a significant adverse impact on the industry. Any changes to Fringe Benefits Tax arrangements that lessened the benefits for private consumers of acquiring vehicles through their

employers would add to this impact. So too would any watering down of government purchasing preferences for locally produced vehicles (see chapter 9).

There is a range of other potential threats, including ...

- price suppression in world automotive markets as a result of continuing and substantial excess production capacity;
- changes in global sourcing decisions (see above), or economic downturns, political instability or unrest affecting the industry's major export markets;
- the looming change from petrol and/or diesel to fuel cell propulsion technology over the next two to three decades (see chapter 2);
- erosion in the domestic supply base as a result of any further significant increase in the import share of the local vehicle market;
- the exit of a vehicle assembler or major component producers (see chapter 13);
- failure to undertake further taxation reform and microeconomic reform to improve efficiency in Australia's infrastructure industries (see chapter 6);
- the introduction of overly stringent fuel economy targets (see chapter 7); and
- uncertainty about future policy settings for the industry.

4.5 Some implications

Optimism about the future of the industry appears well founded

The automotive industry is positive about its prospects, particularly in relation to the potential for export growth (see box 4.2).

There are good reasons for such optimism:

- The industry now has a track record of ongoing productivity and quality improvement.
- It is an established supplier in a range of export markets.
- Perhaps most importantly, there is increasing recognition that Australia can play a significant role in a globalised automotive industry. It has a growing reputation as a flexible, innovative and customer-oriented producer able to cater for low volume requirements at high quality and reasonable cost. And its technological and design capacities are attracting increasing attention.

Moreover, the industry is optimistic about its future despite the various weaknesses and threats identified above, and the prospect of further reductions in assistance after 2005. Hence, a range of very significant investments are proceeding, or are planned, to meet the aspirations and targets the industry has set for itself.

Box 4.2 Some industry assessments of future prospects

For the industry as a whole:

- The FCAI (sub. 40, p. 38) commented that if the industry can capitalise on its potential to improve productivity, meet niche demands and increase exports, it could grow at a significantly faster rate in the next five to 10 years. And in elaborating on the export outlook, the Chief Executive of the FCAI (Sturrock 2002) recently said that:

The Australian motor industry could be exporting up to 150 000 cars and components worth \$6.5 billion a year within two or three years ... Export growth of more than 10 per cent each year is feasible ...

At the firm level:

- Toyota indicated that within five years, it aims to increase production by more than 50 per cent and develop strong product design/engineering capabilities and attract to Australia the Toyota Technical Centre for the Asia Pacific region. (sub. 39, p. 42)
- The CEO of Mitsubishi, Tom Phillips, indicated that the company's new vehicle lines could allow it to increase exports from the current level of around 24 000 vehicles a year to 60 000 units a year by 2007. As well as sales to the Middle East and the USA, Mr Phillips envisaged scope for Mitsubishi to supply vehicles to its parent company in Japan. (trans., p. 84)
- Robert Bosch Australia indicated that there is potential for it to increase its exports from the 2001 level of \$321 million to \$600 million in 2005 and, with a continuation of the assistance arrangements applying in 2005, to \$800 million by 2010. (sub. 47, pp. 23-24)

But a strong future performance is not guaranteed — action by both the industry and government is required

This is not to understate the task that lies ahead. The rest of the world is not standing still and the industry will need to accommodate major changes expected in vehicle propulsion technology over the coming two decades (see box 2.1). Hence, without a continuation of the innovativeness and productivity and quality gains that have been so important in launching the industry globally, it will slip backwards. It will also need to build on its strengths as a flexible and cost-competitive small volume producer. As Holden remarked:

In a world over-supplied with automobiles, and with a saturated and slow-growing domestic market, Australia's strategic opportunity is to do something different. That something is for each manufacturer to produce a coherent family of niche vehicles to sell on world markets. To succeed in this mission it will be necessary for the vehicles to remain differentiated and relevant over time – which requires continuous innovation. (sub. 72, p. 15)

The success of initiatives to secure better access to overseas vehicle markets will also have a bearing on the industry's future.

Responsibility for addressing many of the impediments identified above will lie with the industry. For others, progress will depend primarily on actions by Australian governments. And in addressing some, both the industry and governments will have important roles to play.

In the next four chapters of this report, the Commission looks at the respective roles of the industry (including managers, employees and employee representatives) and government in helping to ensure that some key aspects of the industry's operating environment are conducive to longer term viability. Specifically, these chapters consider:

- what may be required to deliver more productive and flexible automotive workplaces and to ensure that the industry continues to have access to necessary skills;
- the potential for further taxation and microeconomic reform to boost the industry's competitiveness;
- approaches and processes that will help to ensure that the formulation of safety and environmental policies gives due regard to the interests of the industry; and
- ways to improve the industry's access to overseas markets.

Self evidently, the post 2005 assistance regime will also have an impact on the industry's fortunes over the coming years. Those assistance arrangements are the subject of the final suite of chapters in the report.

5 Workplace arrangements and skilling issues

The importance of productive and cooperative workplaces to the future of the Australian automotive industry has been emphasised by a large majority of participants in this inquiry. There are a number of requirements in this regard:

- Flexible workplace arrangements are necessary to use most effectively the skills of employees, to enable firms to get the most out of expensive capital equipment and to facilitate the introduction of new technologies. The labour productivity improvements that ensue from workplace flexibility in turn provide the opportunity for remunerating employees more highly.
- A stable industrial relations environment with minimal disruption is similarly critical, given the lean manufacturing and sequenced production requirements that impose particular pressures on vehicle producers worldwide. Such an environment, in combination with evidence of workplace flexibility, will in turn send positive signals to potential investors in the industry. Indeed, without ‘best practice’ workplace arrangements, attracting and retaining the investment necessary to secure firms’ longer term competitiveness will be much more difficult.
- In facilitating productive and flexible workplaces, access to a skilled workforce is very important. Effective management skills are necessary too, not only to run an increasingly complex business, but also to promote effective communication with employees.

Workplace arrangements and relationships between managers and employees are highly productive in some Australian automotive enterprises. But equally, there are examples of workplaces that fall well short of ‘best practice’ in this critical area. Moreover, there is acceptance by all of the parties concerned that there is scope for significant improvement in the industry’s overall industrial relations performance. These matters are explored in this chapter.

5.1 Workplace arrangements and industrial relations

Considerable progress has been made

Over the last decade or so, there have been substantial improvements in the flexibility and productivity of many automotive workplaces, including:

- fewer restrictive work practices and less rigid demarcation of tasks, facilitating greater emphasis on team-based work and the multi-skilling of employees;
- greater flexibility in work hours, allowing more efficient and longer use of capital equipment and more effective management of inventory;
- less absenteeism and reduced labour turnover;
- increased use of contract labour — for example, Mitsubishi’s latest Enterprise Bargaining Agreement (EBA) provides for the use of temporary labour to meet seasonal peaks in demand for its vehicles in the USA; and
- reductions in the frequency, though not necessarily the severity, of industrial disputes (although this is an area where the data can be difficult to interpret — see below).

These improvements have been an important contributor to significant growth in labour productivity in the sector in recent years (see chapter 3).

Institutional and attitudinal changes have underpinned progress

Major changes to Australia’s labour market arrangements since the late 1980s have provided the platform for these improvements in workplace outcomes.

Most obviously, the introduction of enterprise bargaining has served to focus attention on the circumstances and specific needs of individual workplaces. Significantly, only 7 per cent of employees in the automotive industry now have their pay and conditions determined by Federal or State awards (DEWR, sub. 79, p. 11). According to vehicle and component producers, the shift to an enterprise-based regime has facilitated the introduction of a range of firm-specific changes that collectively have considerably enhanced the industry’s productivity.

But also important was the process of award restructuring and simplification that preceded the introduction of enterprise bargaining. While producers did not share the view put by the Australian Council of Trade Unions (ACTU, sub. PP90, pp. 25-6) that these reforms had been more important than the introduction of enterprise bargaining, they nevertheless acknowledged their contribution to improved outcomes.

Complementing these more flexible institutional arrangements have been significant changes in workplace attitudes:

- There is greater acceptance by employees of the need for continuous workplace improvement to help maintain and enhance the industry's competitiveness. In this regard, the Australian Manufacturing Workers' Union (AMWU) said:

The philosophy of continuous improvement, problem solving and trouble shooting has been taken on board by workers ... (sub. PP108, p. 24)

The ACTU (sub. PP90, p. 46) similarly emphasised the importance of cooperation from employees in enabling firms to make the changes necessary to improve the productivity of their workplaces.

- There is greater recognition by firms of the important role of good workplace management and effective communication with employees in engendering the cooperation necessary to sustain ongoing change. In explaining what it had done to become an employer of choice, Autoliv said that it had worked very hard to develop a culture where employees feel they have been well treated and:

... that they're respected, that we communicate with them in an open, transparent way and that we involve them in the decisions that will impact them and give them a level of choice in terms of the types of benefits and the types of workplace that they want to work in, given the normal business constraints that we have. (trans., pp. 330-1)

Indeed, without such attitudinal change, the impact of the broader institutional reforms on the productivity of automotive workplaces would inevitably have been diminished.

Reductions in protection have played a role

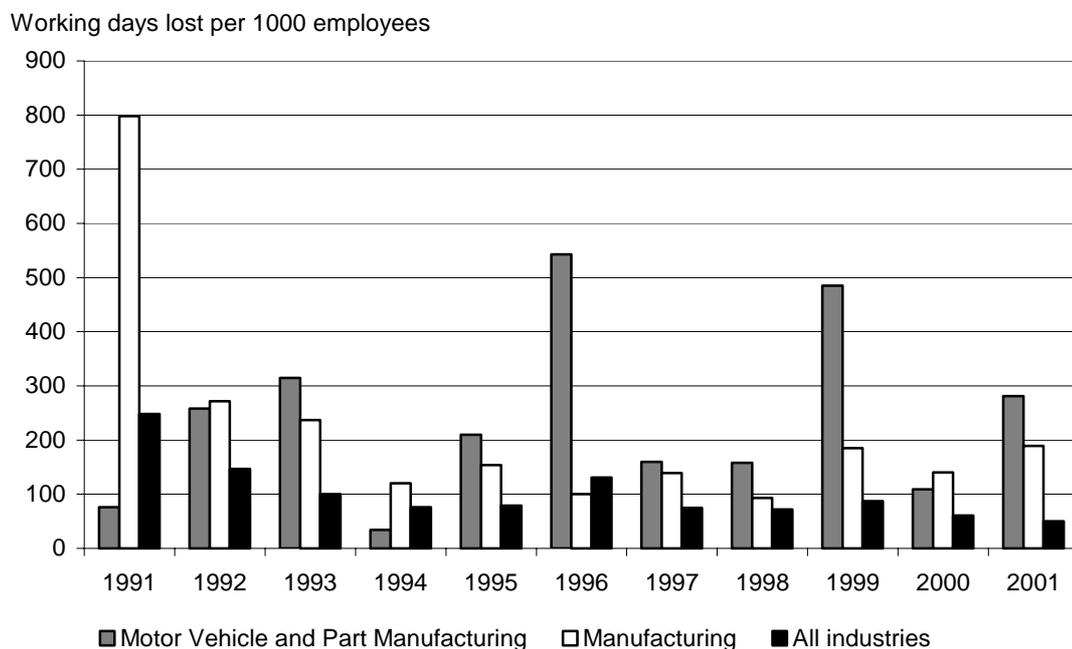
As has been widely acknowledged during this inquiry, the high protection regimes of previous years shielded firms and their employees from the usual consequences of poor management, unsustainable wage outcomes and conditions and excessive disputation. With assistance now much lower, improvements in workplace practices have become an imperative. Reflecting on the implications of operating in a much more competitive environment, Graham Spurling (sub. 36, p. 16) remarked that 'There is much greater understanding that workers and employers both require a prosperous industry in order to prosper themselves.'

However, there is still a way to go

Recent progress notwithstanding, there remains considerable scope for improvement in workplace arrangements in general, and industrial relations in particular:

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- Workplace inflexibilities such as restrictions on the deployment of labour within plants, constraints on the most efficient shift patterns and restrictions on the use of short term or contract labour to cater for fluctuations in demand, continue to limit productivity enhancement. For example, Toyota (sub. 39, p. 4) commented that traditional demarcations within the mechanical and electrical trades structure, and between trade and non trade employees, continue to inhibit necessary flexibility in labour usage in its plants. Similarly, Holden (sub. 72, p. 61) said that shifts are still related to the traditional working week, with high shift penalties — relative to international norms and even those in some other Australian industries — for afternoon, night and weekend shifts.
 - The involvement of multiple unions in many automotive plants contributes to the demarcation and other inflexibilities noted above, and may sometimes increase the complexity and cost of the enterprise bargaining process. Also, efforts by vehicle producers to outsource sub-assembly of components — a world-wide trend in the industry to achieve improvements in efficiency — are said to have been frustrated or delayed by union coverage issues.
 - Changes in production arrangements have made the industry increasingly vulnerable to stoppages, or threats of stoppages. Like its counterparts overseas, the Australian industry is now much more heavily geared to just-in-time/sequenced supply arrangements than a decade ago. Also, in order to facilitate greater economies of scale in the component sector, vehicle producers are increasingly relying on single suppliers for their major component requirements. While by some statistical measures industrial disputation is less of a problem than in the past (see box 5.1), time lost in the industry from stoppages continues to be higher than in the manufacturing sector as a whole and the economy more generally (figure 5.1). This partly reflects the fact that a dispute at a single supplier can quickly disrupt the whole industry, leading to significant down-time and substantial production losses (see box 5.2).
 - The adverse perceptions created by even a small number of major stoppages may serve to undermine the industry's longer term future. For example:
 - Concerns about reliability of supply in Australia are likely to hinder the industry's export performance. For many overseas customers, reliability of supply is paramount in choosing among potential suppliers. At the public hearings, the CEO of Toyota Australia, Ken Asano, said that within hours of news breaking of a dispute in the Australian industry, he would receive telephone calls about the company's ability to meet major export contracts for the Camry in the Middle East (trans., p. 159).

Figure 5.1 Working days lost per 1000 employees due to industrial disputation, 1991 to 2001



Data source: ABS (Cat. no. 6322.0, unpublished data).

Box 5.1 Disputation levels in the Australian automotive industry

The extent of disputation in the Australian automotive industry was the subject of some debate during the inquiry. ABS data show an increase in working days lost per thousand employees in the industry in the second half of the 1990s (see figure 5.1). The AMWU (sub. PP108, p. 27) pointed out that days lost over this period were still some 30 per cent lower than in the latter half of the 1980s. That said, average days lost in all industries fell by more than double that amount over the same decade (see appendix C).

However, the interpretation and relevance of such data are open to question. For example:

- Data on working days lost will not necessarily correlate well with the costs to the industry and wider economy of the associated disputes. Thus a very short stoppage which led to the loss of a major export contract could have very significant costs. Conversely, to the extent that lost production can be at least partially 'recouped' through the reorganisation of rostered days off etc, the costs may be diminished, though not eliminated.
- Such data do not pick up the often considerable costs for the industry of threatened disputes or narrowly averted stoppages.

Continued next page

Box 5.1 continued

- Comparisons across industries are subject to the problem that levels of disputation in large manufacturing industries, with heavily unionised workforces, will almost inevitably be higher than in primary and service sector industries with large numbers of smaller businesses.

But more importantly, such historical, domestic performance indicators say nothing about how disputation levels in Australia now compare with those in other automotive producing countries. This is a comparison that will be highly relevant in determining whether the industry continues to secure export contracts and necessary investment capital.

Unfortunately, there does not appear to be official data available for other countries on days lost from stoppages in the automotive industry. The AMWU (sub. PP108) provided information for the Canadian and Korean industries, sourced from the relevant unions in those countries. This indicated that days lost per thousand employees have been considerably lower in the Australian industry than in both Korea and Canada. But clearly, this is a very limited sample. For example, were data available for, say, the Japanese and UK industries, where some automotive producers contended that industrial disputation is less of a problem than in Australia, a different picture might emerge. Moreover, the lack of official data meant that the Commission has been unable to verify the information provided by the AMWU. Indeed, it notes the AMWU's caution that the Korean information is preliminary (p. 118).

- More broadly, perceptions about reliability may discourage global producers from investing in the Australian industry. One vehicle producer told the Commission that the workplace and industrial relations climate has been the major point of contention in its recent discussions with the parent company about proposed new investment in Australia. And, at the public hearings, the CEO of Ford Australia, Geoff Polites, confirmed that his head office had 'questioned how things were going in strike-land' (trans., p. 130).
- Vulnerability to supply disruptions has inhibited the move towards sole supplier arrangements, notwithstanding the potential cost savings and other benefits that this would provide. In combination with union related constraints on outsourcing (see above), this will in turn serve to increase the advantages for vehicle producers of importing components rather than sourcing them locally. In this regard, Ford has indicated that changes made to its stamping operations to avoid shutdowns during the recent BHP Steel dispute, have given it the capability to import its steel requirements in the future.

Box 5.2 Recent industrial disputes in the automotive industry

In the past year, there have been three disputes in the automotive industry that have led to major disruption and lost production. Two of these were related to the issue of employee entitlements, and one to the outsourcing of maintenance work.

As part of Campaign 2001, the AMWU and other manufacturing unions proposed Manusafe as a trust fund to protect employee entitlements in cases of company insolvency, transmission of business, and mobility of employment. The proposed scheme involved an employer contribution of 1.5 per cent of payroll each week toward long service leave, as well as a flat dollar amount to cover redundancy payments in the event of firm failure.

In pursuing the Manusafe proposal, the unions focussed on strategic component suppliers in the vehicle industry. The most notable of these was Tristar Steering and Suspension which supplies suspension components to all four Australian vehicle producers. Protracted (initially protected) industrial action ensued as a result of the company's refusal to agree to contribute to the Manusafe fund. While agreement was subsequently reached — involving an insurance bond to underwrite the entitlements of Tristar's employees — the dispute led to major shut downs and production interruptions across the industry.

The entitlements issue was also the cause of (unprotected) strike action taken by employees of the exhaust system manufacturer, Walker Australia. The dispute arose from disagreement about whether the Government's General Employee Entitlements and Redundancy Scheme (GEERS) — introduced subsequent to the Tristar dispute — obviated the requirement in the Walker EBA to establish a trust fund to protect employee entitlements if no national scheme was in place by 1 January 2002. Some 11 500 employees were stood down across the industry as the motor vehicle assemblers, except Mitsubishi, halted production due to lack of exhaust system supplies. It was resolved when the company promised to take out a bank guarantee to cover long service leave entitlements and to drop legal action against the AMWU.

Estimates of the cost of lost production from these two disputes have been as high as \$500 million and \$130 million, respectively. As Mitsubishi among others noted, some of this lost production was 'recouped' through reorganisation of rostered days off. But as it went on to point out, reorganisation of schedules, and altering production procedures to allow for the retro-fitting of exhausts, are themselves costly exercises.

Most recently, protected industrial action (supported by illegal picketing) at BHP Steel's Western Port plant over moves by the company to end a union veto over the engagement of contractors, threatened to halt vehicle production. While shutdowns were ultimately averted, production levels in some plants were temporarily reduced. Moreover, vehicle producers incurred considerable additional costs in securing sufficient steel to keep plants operating. For example, Toyota reportedly paid \$250 000 to charter a Boeing 747 to bring in steel from Japan.

There have also been a number of other 'near misses' over the past year. For example, major disruption from protected industrial action at the automotive glass supplier — Pilkington Australia — was only narrowly averted.

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- The Commission heard that vulnerability to supply disruptions has also:
 - created incentives for vehicle producers to agree to ‘unsustainable’ wage outcomes in order to buy industrial harmony; and in so doing
 - constrained the scope for component suppliers to tailor wage outcomes and conditions to the particular circumstances of their enterprises. A number of suppliers told the Commission that they experience considerable pressure to agree to similar wage outcomes to those negotiated by the vehicle producers — regardless of productivity offsets — in order to maintain industrial harmony and thus continuity of supply. Such flow-through of wage outcomes can have an adverse impact on suppliers who are generally more labour intensive than the vehicle producers.
 - A further outcome of recent disputes has been that vehicle producers are now requesting that their critical suppliers build up 5 to 7 days inventory before their EBA negotiating processes. This involves significant costs for those suppliers. Some of the vehicle producers indicated that they too maintain higher stock levels in Australia than overseas because of the industrial relations climate. In commenting on the implications for the industry, the Federal Chamber of Automotive Industries (FCAI) said:

The move to ‘just in time’ manufacture was designed to reduce costs by reducing inventories of productive material. The gains achieved by successful inventory management strategies will rapidly be lost if counter strategies are required. (sub. 40, p. 27)

All parties agree on the need for improvement

The Commission’s discussions and the submissions to the inquiry reveal broad agreement on the need for, and importance of, further improvement in workplace and industrial relations arrangements in the industry. In this latter regard, concerns that the issue of employee entitlements will provide a trigger for further disputation as more EBAs expire, loomed particularly large. This issue has already been the source of two major recent disputes in the industry (see box 5.2).

Synthesising the views of automotive producers on the need for improvement, the FCAI argued that:

While recently concluded enterprise bargaining rounds have seen gains in the crucial area of workplace flexibility, there is still some way to go in bringing Australian workplace practices up to world best levels. ...

The industry must obtain the labour flexibility and productivity gains needed to compete globally while at the same time avoiding major industrial disputes that could severely threaten crucial export contracts. (sub. 40, p. 10)

Similarly, the Australian Industry Group (AIG) contended:

The uniqueness of the industry requires that better industrial relations solutions be found to enable issues to be resolved before they develop into disputes and to enable industrial disputes to be swiftly dealt with. Otherwise, vehicle manufacturers may decide to source their component parts offshore, seriously damaging the Australian economy. (sub. 43, p. 7)

And in providing a union leadership perspective, the Secretary of the ACTU, Greg Combet (2002), recently observed about the automotive industry:

The real discussion at the moment should be about ... how we can reconcile the legitimate aspirations of employees for better living standards and job security with the legitimate commercial interests of employers, in an open trading environment. ... Unions and their members have no interest in unnecessary disruption, lost production and stand-downs. We want the industry to prosper

Moreover, while there are different views on some of the changes required to improve workplace outcomes, all of the parties agree that better communication and greater cooperation are critical. As discussed below, such consensus provides an important platform for moving forward.

5.2 The Position Paper findings and responses

The Commission suggested a number of possible ways forward

In the Position Paper, the Commission emphasised the importance of cooperation and better communication in engendering greater coincidence of interest. It argued that significant progress in addressing the problems outlined above will depend upon managers, employees and their representatives seeing it as in their joint interests to work together to further the industry's prospects.

The Commission went on to argue that a range of 'self-help' initiatives could foster greater coincidence of interest, including:

- measures to ensure that managers are well informed about industrial relations issues and requirements, and to further improve their communication skills in dealing with their employees and the unions;
- measures to make employees and their unions fully aware of the relationship between workplace outcomes and the viability of the firm and the industry; and
- discussion between automotive firms and the unions on ways to deal with the employee entitlements issue.

The Commission further suggested that changes to the union structure in the industry should be a longer term goal. While the vehicle division of the AMWU covers a high proportion of employees in the assembly sector, a range of unions represent employees in component manufacturing plants and even some assembly plants. In terms of numerical representation, the metals division of the AMWU is the most significant of these.¹

The Commission noted that the current, largely occupation-based, union structure creates potential for demarcation disputes and inflexibilities in the deployment of the workforce. It further argued that the multi-industry coverage of all except the vehicle division of the AMWU means that:

- the interests and agendas of these unions are not always coincident with those of the automotive industry and their employees; and
- that the broader membership base of these unions means that any concerns that members in the vehicle industry might have about the pursuit of broader agendas, or the consequences of industrial action, are diluted.

The Commission indicated that while enterprise unions or a single union covering all employees in the industry would have their own pluses and minuses, either system could better align the interests of firms and/or the industry and those negotiating on behalf of employees than the current union structure.

In addition, the Commission pointed to a need for some external pressure on the industry and its employees to improve workplace outcomes. It rejected the notion that support under a successor to the Automotive Competitiveness and Investment Scheme (ACIS) should be made conditional on the achievement of particular workplace targets, arguing that this would be a blunt, administratively difficult and potentially counterproductive way of encouraging necessary change. However, it considered that continuing predictable and gradual reductions in government support for the industry could help to facilitate such change.

Finally, the Commission indicated that a number of changes to the Workplace Relations Act proposed by the AIG, and endorsed by most firms, appeared to have merit from the perspective of the automotive industry. As set out in box 5.3, these proposed changes were designed to: further constrain the scope for workers to take

¹ As set out in appendix C, other unions represented in the automotive industry include: the Australian Workers Union; the National Union of Workers; the Communication, Electrical and Plumbing Union; the Construction, Forestry, Mining and Energy Union; the Australian Services Union; the Liquor, Hospitality and Miscellaneous Workers Union; and the Association of Professional Engineers, Scientists and Managers of Australia. In addition, the Federation of Vehicle Industry Unions plays a role in ‘coordinating combined union approaches to enterprise bargaining negotiations’ with automotive companies (DEWR, sub. 79, p. 11).

‘protected’ industrial action; give the Australian Industrial Relations Commission (AIRC) greater powers to intervene in disputes causing significant damage in particular industries or firms; and provide for additional legislative sanctions in the event of non-compliance by a union with directions from the AIRC to cease industrial action. The Commission saw such changes as seemingly providing for a better balance between the rights of workers to take industrial action, and the rights of firms and others who have suffered considerable harm from recent disputation in the industry. That said, it noted that such regulatory changes would have implications extending well beyond the automotive industry.

Box 5.3 Some proposed changes to the Workplace Relations Act

In a submission made to the Commission prior to the release of the Position Paper, the AIG (sub. 43) suggested a range of amendments to the Workplace Relations Act. These proposals — which were endorsed explicitly or in the broad by most firms in the industry — included:

- providing the AIRC with the capacity to suspend or terminate bargaining periods if a protected action is causing damage to a firm or industry and its employees, rather than only when significant damage is occurring to ‘the Australian economy or an important part of it’;
- outlawing protected action prior to the expiry of a certified agreement;
- requiring the AIRC to hear and determine Section 127 applications to stop industrial action within 24 hours of lodgement and giving it powers to suspend the registration of a union for non-compliance;
- outlawing protected industrial action in pursuit of pattern bargaining;
- giving the AIRC the discretion to determine whether a cooling-off period should be established to assist the resolution of a particular dispute; and
- requiring a secret ballot before protected action can be taken.

As discussed below, in a further submission after the release of the Position Paper, the AIG focussed its attention on possible changes to the legislation in two of these areas, namely the termination of protected action and cooling off periods.

Automotive producers supported the thrust of the Commission’s preliminary findings

In their responses to the Position Paper, automotive producers and their representatives reiterated that while considerable progress has been made, further improvement in workplace outcomes is crucial to the future of the industry. In this context, they broadly welcomed the thrust of the Commission’s preliminary findings and proposals on workplace and industrial relations matters.

Importantly, most firms recognised that responsibility for achieving further improvement in outcomes lies largely with the industry and its employees rather than government. To this end, a number specifically referred to the pressing need for better management skills in some parts of the industry. For example, in commenting on the importance of effective human resource management and communication with the workforce, Mitsubishi (sub. PP112, p. 14) said that this ‘is an area, particularly in some of the smaller component suppliers, where substantial improvement is required’. And, in elaborating on this point at the public hearings, the company said that in many supplier firms, human resource and industrial relations functions are simply ‘tacked on to someone’s job’. It contrasted this with the European automotive industry, where these functions are regarded as specialist tasks that are crucial to a firm’s success (trans., p. 100). The Federation of Automotive Products Manufacturers (FAPM) similarly suggested that there is a lot of work to be done in trying to ensure that managers can, as much as possible, secure and align the interests of employees with those of the firm (trans., p. 37).

In regard to union structures, several leading firms considered that, relative to the current regime, a single industry union would have some important advantages. For example, Ford said that with a single union:

... all industry employees would importantly and more directly be part of an exciting, dynamic and global automotive industry. Secondly, it would provide the focus and shared industry specific partnership necessary for the on-going development of a key Australian industry with unique and challenging requirements including supply chain integrity. Thirdly, it would provide for greater workplace operating flexibility by removing complexities and craft-based demarcations. (sub. PP105, p. 12)

Some firms, however, were less convinced that the current union structure is a major issue. For instance, while seeing some benefits in a single union from an industry-wide perspective, Autoliv (trans., p. 334) said that having two unions at its plant had thus far not created any difficulties. A number of firms also indicated that they had learned to live with multiple unions and that, at least at existing facilities, the benefits obtained from moving to single union coverage might be less than the costs involved.

Moreover, even among those firms that saw considerable benefits in a move to a single industry union, there was recognition that achieving such a change would most likely be a long and drawn out process. There was also recognition that ultimately it is up to employees to determine what union structure best meets their needs. Thus Holden concluded:

The solution to the issue of union structure must ultimately be a matter for unions and their members. Holden merely notes that the time is ripe for an open and innovative approach. (sub. PP101, p. 27)

Finally, there was strong endorsement from the industry for the Commission’s preliminary finding that funding under a successor to ACIS should not be tied to the achievement of particular workplace targets or industrial relations outcomes. At the same time, however, firms disputed the contention that further reductions in protection are necessary to maintain the pressure for further workplace change.

Some new regulatory proposals were put forward

In the light of recent and narrowly averted disputes, and concerns about renewed disputation as more EBAs come up for renegotiation, automotive producers reiterated their view that changes to the Workplace Relations Act are necessary — particularly to further constrain protected industrial action which damages third parties.

To this end, through the AIG, automotive producers put forward two new proposals for legislative change to enable the AIRC to:

- order a cooling off period by suspending protected industrial action to allow for conciliation or mediation of a dispute, where it considered that this would:
 - assist the negotiating parties resolve their differences; and
 - prevent significant damage being imposed on ‘innocent’ third parties;
- terminate the right to take industrial action where it was demonstrated that significant harm was likely to be caused to ‘innocent’ third parties (including other companies and employees who may be stood down).

These two proposals were modified/elaborated versions of proposals put forward by the AIG in an earlier submission to the inquiry and referred to in the Position Paper (see box 5.3). According to the Group, they would:

... be particularly helpful in improving the workplace relations environment for employers and employees in the automotive sector (amongst the many worthwhile legislative reform proposals being pursued by various parties). (sub. PP94, p. 9)

In addition, BHP Steel (sub. PP119, p. 6) proposed giving the AIRC a general power to consider ‘the circumstances in which industrial action ought to be clothed with the legal immunity which comes from protected industrial action.’ Underpinning this proposal was a concern that damage resulting from picketing action to support an industrial action might not be encompassed by the current provisions relating to the termination of protected actions.

Unions disputed the need for changes in the legislation or in union structures

Through submissions from the ACTU and the AMWU, the union movement provided an extensive commentary on workplace and industrial relations issues.

As noted, the unions agreed with firms that there is both scope and the need for further improvement in workplace outcomes. They also agreed that better firm management of workplace and industrial relations is a key to achieving such improvement. In this regard, the AMWU referred to a high stress/low trust workplace culture resulting from:

... the lack of empowerment of workers, high levels of stress, low levels of job security and negative perceptions of management and the negative cost cutting agenda they pursue. (sub. PP108, p. 21)

Indeed, a theme running through both of these submissions was that better communication and cooperation, rather than confrontation, is required to build on the significant gains made in the industry over the last decade and a half.

However, on a range of other matters, the unions took issue with the views and proposals put forward by automotive producers and their representatives and with a number of the Commission's preliminary findings in the Position Paper.

The unions rejected the notion that industrial disputation in the industry was excessive, citing ABS data showing reductions in working days lost since the mid 1980s, and information indicating higher levels of disputation in some other automotive producing countries (see box 5.1 and appendix C).

They also rejected the need for changes to the union structure in the industry, arguing that diversity in structures is a feature of the automotive sector around the world (see box 2.3 and appendix C). The AMWU went on to conclude that:

There is no conclusive empirical evidence that one form of union coverage delivers better outcomes than no unions or different forms of union coverage. (sub. PP108, p. 25)

Union representatives further rejected the need for any tightening in workplace regulation. In its commentary on legislative issues, the ACTU (sub. PP90) argued amongst other things that:

- The proposed changes put forward by the AIG and others were unnecessary as the current regulatory regime provides firms with ample flexibility, including scope to seek cooling off periods or termination of protected actions. In this regard, it noted that the large majority of applications to the AIRC for the termination of protected action have either been granted, or a recommendation or direction to cease action made (p. 41).

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- The proposals ‘to tighten the legal noose’ around protected industrial action would further restrict unions’ ability to bargain effectively and do nothing to assist with the equitable resolution of disputes.
 - These same proposals would take Australia ‘even further away’ from meeting its obligations as a signatory to the International Labour Organisation (ILO). While noting that Conventions 87 (Freedom of Association and Protection of the Right to Organise) and 98 (The Right to Organise and Bargain Collectively) do not explicitly refer to the right to strike, the ACTU went on to say that:
... the ILO has always regarded the right to strike as a fundamental right of workers and their organisations as one of the essential means through which they may promote and defend their economic and social interests. (pp. 7-8)
 - More stringent regulation could well be counterproductive, reducing morale and increasing employee resistance to workplace change.

Some of these views were shared by the Victorian Government, which argued that it did not:

... believe that the proposed legislative measures to alter the statutory bargaining framework will make any positive contribution to the industrial relations environment, and may well be counterproductive. (sub. PP114, p. 21)

The unions suggested other ways forward

While acknowledging a role for enterprise bargaining, the unions contended that both the analysis in the Position Paper and the regulatory proposals to curtail so-called ‘pattern bargaining’ were underpinned by an excessive focus on enterprise-level discussion and negotiation as a means of improving workplace outcomes in the industry. They went on to suggest that establishing some parameters for wages and conditions at an industry level (and possibly even specific wage outcomes) could:

- minimise the potential for disputation;
- reduce the transactions costs associated with the enterprise bargaining process; and
- still give firms the flexibility to negotiate with their workers on firm-specific opportunities to improve productivity.

In this context, they said that the current enterprise bargaining system has delivered relatively uniform wage outcomes and that, in a number of other automotive producing countries, a range of wage and conditions issues are negotiated at the industry level (see appendix C).

Drawing on these observations, the AMWU proposed a specific three tier approach to the negotiation of wages and conditions in the Australian industry, involving:

... collective bargaining ... conducted at the industry level (first tier) within the framework of enterprise bargaining (second tier) which is backed up by a properly maintained award system (third tier). To facilitate balance between the rights of workers [and] the need for a stable investment environment for the industry, collective bargaining must happen at the industry level as well as at the enterprise which takes into account the particular circumstances of the workplace. (sub. PP108, p. 61)

The unions also saw value in some sort of formalised industry-level discussion forum to progress workplace and industrial relations issues confronting the industry. Thus the ACTU proposed:

... formation of an automotive industry standing committee to auspice dialogue over all relevant issues including industrial relations and bargaining concerns, to meet the continuing challenge of change. (sub. PP90, p. 6)

5.3 The Commission's assessment

Responsibility for better workplace outcomes lies largely with the industry

Responses to the Position Paper have served to reinforce the Commission's view that it is largely up to managers and employees in individual firms throughout the industry to make the changes necessary to improve workplace and industrial relations outcomes.

Regulation nevertheless has a significant role to play in helping to establish the broad institutional framework within which such initiatives are developed, and in conditioning the negotiations which occur within that framework. In this latter context, effective dispute resolution provisions where the parties are unable to agree, and appropriate sanctions for non-compliance with the requirements of those provisions, are clearly necessary.

However, there was broad agreement that recourse to legislative sanctions will not generally be the best way of achieving the workplace improvements necessary to secure the industry's longer term future. Indeed, the Commission concurs with the view that reliance solely on regulatory mechanisms as a *substitute* for effective management could prove counterproductive, making it harder to secure genuine commitment from the workforce to needed change. Thus, the Commission considers that regulatory sanctions are best viewed as a safety valve for what should be only a relatively small number of disputes that are not satisfactorily resolved by the parties directly concerned.

This of course is not to deny that changes to regulatory arrangements could help to encourage consultation between the parties and promote more effective resolution of any disputes that do occur. However, as discussed below, this is an area where careful assessment is required given the complexity of the interactions involved and the fact that any regulatory changes could have implications extending across the whole economy. Thus, the Commission reiterates that efforts to improve the industry's workplace and industrial relations performance must above all focus on effective communication and cooperation within individual enterprises.

Greater coincidence of interest could be fostered in various ways

Constructive solutions to workplace issues and problems would be facilitated by improving the skills and knowledge of all of the parties involved.

As noted above, automotive producers widely acknowledged that there is considerable scope to improve management skills in parts of the industry. Various 'self-help' initiatives were raised in this context. The AIG (sub. 43, p. 12) recommended that industrial relations training programs be developed for component suppliers. A number of firms referred to the scope for initiatives to disseminate information on best practice management and to encourage its uptake — particularly by 'at risk' enterprises. And, the FAPM said that it was trying to instil a strong management focus throughout its membership (trans., p. 37).

Improved management and communication skills would also assist firms to convey to their employees and union representatives the relationship between workplace outcomes and the viability of the enterprise and the industry. At least in the eyes of automotive producers, appreciation by some employees and unions of the wider consequences of workplace inflexibilities and industrial disputation is lacking.

It is also important that employees and their representatives are receptive to endeavours by firms to convey information on these relationships. The attitude seemingly present in some sections of the workforce and union movement that such information is simply designed to 'capture' employees is unhelpful. The success of firms in the marketplace depends heavily on the commitment as well as the skills of their employees. Hence, commercial imperatives provide strong incentives for firms to treat and remunerate employees fairly.

A number of firms in the industry have worked very hard to ensure that there is effective communication and cooperation with their employees. Firms such as Autoliv, PBR International and BTR Automotive are generally regarded as having reaped significant benefits from concerted efforts to improve their performance in these areas. The Commission heard, for example, that the workplace environment is

a major factor in BTR Automotive's status as an employer of choice in Albury Wodonga, and that applications to work at the company, including from employees of other local firms, far exceed available positions.

In most instances, information on the relationship between workplace outcomes and the performance of the enterprise will be most appropriately communicated through ongoing dialogue between managers and employees. The skills required to effectively analyse and process that information may be facilitated by specific training programs. In the Commission's view, it is counterproductive to view such training as 'teaching the workers how to think.' It might even be that employees would have greater confidence in representatives who had participated in this sort of training.

More broadly, these sorts of initiatives may help to reduce confrontational win-lose approaches and the element of 'bloody mindedness' that continues to characterise workplace negotiations in some parts of the industry. During this inquiry, the Commission was provided with examples of inappropriate behaviour by managers, employees and the unions alike. As all of the key stakeholders recognise, such behaviour cannot continue if this industry is to become internationally competitive.

Alternative employee representation arrangements would have some advantages

The Commission acknowledges that significant productivity improvements have been achieved in the industry under the current union structure. Also, as the diversity in union structures in the automotive industry around the world indicates, effective communication and cooperation within whatever structure is in place, may be more important for productive outcomes than the structure itself.

Nonetheless, in the current Australian context, the Commission remains of the view that some alternative structures might provide for greater coincidence of interest than the current regime appears capable of delivering:

- While a single vehicle industry union would further concentrate bargaining power and would not obviate all factional and demarcation problems, it would almost certainly better align the interests of employees and those negotiating on their behalf with those of firms and the wider industry. As noted above, a number of firms saw a single union as being useful in fostering a partnership approach and addressing some of the craft-based inflexibilities that still characterise working arrangements and skills development in the industry. Notably, there is a widespread perception among firms that the most productive workplace relationships in the industry have generally involved the vehicle division of the AMWU — a division which only has coverage in this sector.

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- Enterprise unions would serve to focus negotiations explicitly on the circumstances and needs of individual firms and their employees. At least in this respect, they might engender greater coincidence of interest than a single industry union. On the other hand, an enterprise-based structure might cater less well for issues that are best addressed at the industry rather than the firm level (see later). Notably, there was little support from automotive producers or unions for such an approach — at least on a generalised basis.

Highly productive relationships between firms and their employees may also emerge without the need for any union involvement. In this regard, the Commission notes that, according to ABS data, only 46 per cent of the industry's workforce are now members of unions (see appendix C). While union coverage is higher among manufacturing and maintenance employees, levels of union membership are apparently quite low across all the occupational classifications in some smaller component suppliers. The Commission further notes that there are some non-unionised component plants in the domestic industry, and that non-union sites are becoming somewhat more common in both the assembly and component sectors in other developed countries.

But ultimately this is an issue on which employees must decide

The Commission concurs with the view put by some firms and the unions that it is ultimately up to employees to determine what representation arrangements best suit their needs. Thus, if firms consider that single union sites, or any other particular arrangements, would better meet the interests of their businesses, their employees, or the wider industry, the onus must be on them to convince their employees that change is desirable.

Beyond ensuring that there are no Federal or State regulatory or administrative barriers to changes in representation arrangements jointly sought by the industry and its workforce, government seemingly has no role to play. No barriers of this sort were drawn to the Commission's attention during the inquiry.

Proposed regulatory changes raise complex issues

As noted above, the Commission sees regulatory constraints on the scope for employees to take industrial action largely as a safety valve. There is ample evidence in the local industry to show that with trust and goodwill on both sides, most workplace disagreements can be addressed cooperatively without the need to resort to strike action or threatened use of regulatory sanctions. Thus the Commission reiterates that better communication and greater cooperation is the key to improving workplace outcomes in this industry.

However, as the recent disputes over the broader issue of employee entitlements illustrate, no matter how good firms' relationships with their employees are, it is possible that there will be stoppages in the industry from time to time. Moreover, the just-in-time nature of production arrangements in the industry means that such stoppages — whatever the merit of the underlying issues — can be very costly for firms, the industry and the wider community.

Hence, the efficacy of current workplace regulation in balancing the rights of workers to further their perceived interests through industrial action and the rights of those who suffer significant damage from such action, remains an important issue for the automotive industry. As is apparent below, finding the right balance is far from easy.

The intent of the two key proposals put forward by the AIG in their response to the Position Paper is to limit the scope for protected industrial action beyond current legislative provisions, where there is, or could be, significant damage caused to third parties.

The Commission was unable to obtain independent verification of the standing of these proposals in relation to ILO conventions prior to finalising this report. That issue aside, to the extent that such regulatory provisions would have prevented or shortened the disputes at Tristar, Walker and BHP Steel, they would have provided a significant economic benefit to the industry and the wider economy. Parent company and customer perceptions about the industry and its longer term future may also have been more positive.

However, there are still some significant uncertainties surrounding the AIG's proposals. For example:

- Establishing the likelihood that any 'third party' regardless of size will suffer 'significant' damage is a much easier hurdle than establishing the likelihood of significant damage for 'the economy or a significant part of it', as applies under the current legislation. While the bar could be too high at present, it is equally possible that the AIG's proposals could go too far in the opposite direction.
- As the Commission's discussions with the AIG at the public hearings exemplified, the difficulty of establishing whether the proposals would achieve the right balance in constraining industrial action is compounded by the uncertainty about the AIRC's likely interpretation of terms such as 'significant damage' and 'third parties'.
- In assessing the proposals, their relationship with the sanctions for taking unprotected action, or for non-compliance with orders made by the AIRC, is also relevant. Some have suggested that shortcomings in the current regulatory

arrangements relate more to the inadequacy of these sanctions, than to unduly high hurdles for securing orders to terminate protected action. Significantly, much of the cost of recent disputation in the industry has seemingly resulted from either initially unprotected action, or non-compliance with an order to terminate a protected action. In this regard, the Commission notes that the AIG's earlier proposals included giving the AIRC powers to suspend the registration of a union for non-compliance with an order to terminate protected strike action (see box 5.3).

- There is also the issue of whether firms could be making better use of the existing regulatory provisions.
- To the extent that the AIG's regulatory proposals were generally perceived by the community as overly stringent and therefore unfair, it is conceivable that their implementation could serve to reduce the commitment of employees to further necessary workplace change.
- The proposals are presumably intended to apply generally, rather than to the automotive industry alone. Hence, their potential ramifications in other industries and activities would be a further consideration — and one that could not be explored in this automotive-specific inquiry.

In sum, the Commission accepts the logic underlying the industry's proposals and considers that the grounds on which firms can currently seek to have protected industrial action terminated could well be overly demanding. But whether the proposed regulatory changes would strike a better balance between the rights of employees to further their perceived interests through industrial action and the rights of those who suffer significant damage from such action, is a more difficult judgement to make. This is especially the case given that the Commission has not had the benefit of the views of firms and employees in the range of other industries and activities that would be affected were such regulatory changes implemented.

It is clear to the Commission, however, that recent disputation in the industry has been very costly to firms, employees and the wider community. Hence, the concerns of the automotive and other industries seeking to improve their international competitiveness through the use of lean manufacturing technologies should be an important consideration in assessments of proposals to modify relevant aspects of Australia's workplace regulation.

Industry level consultations may be helpful

Since the release of the Position Paper, there have been a number of discussions between automotive firms and some unions on industrial relations and other workplace matters, with further dialogue planned.

In the Commission's view, these discussions may well help to progress workplace issues on which there is agreement that industry-wide or even national solutions are required. In particular, the Commission reiterates its view in the Position Paper that such discussions could provide a 'circuit breaker' on the employee entitlements issue (see box 5.4) and thereby help to minimise disruption as effective solutions to that issue are developed.

External pressure is warranted to facilitate further change

Responses to the Position Paper have reinforced the Commission's view that making ACIS support conditional on the achievement of particular workplace and/or industrial relations targets would be a blunt, administratively difficult and potentially counterproductive way of pursuing improved workplace outcomes in the industry. Indeed, the potential loss of ACIS funding for failure to meet particular workplace targets or agreements might well weaken firms' bargaining position. As Autoliv remarked:

... the company is adamant that ACIS ... should not be linked to any IR-related obligations. One potential effect of this would be to create a stronger bargaining position for the union movement, with companies acquiescing to demands simply to gain quicker access to ACIS benefits. This would introduce a distortion to the flow of workplace relations in the industry, and possibly establish a range of structures that restrict companies in the longer term ... (sub. PP103, p. 5)

Moreover, as the recent disputes at Tristar and Walker indicate, critical suppliers in the supply chain could be vulnerable to the threat of industrial action irrespective of their success in achieving productive workplace arrangements. Hence, under this sort of leveraging approach, such suppliers might have their ACIS funding withdrawn or reduced, while firms whose overall workplace performance was inferior, but who were not natural targets for such industrial action, would continue to receive their full quota of support.

That said, the Commission accepts the need to maintain 'external' pressure on parties in the industry to deliver better workplace outcomes. Without such pressure, there is some risk that managers and their employees will reduce their efforts to achieve world best practice in this critical area.

In this regard, past reductions in industry-wide assistance have provided strong incentives for productivity improvement throughout the automotive industry, including through the development of more flexible and cooperative workplaces. This is not to deny that a range of other competitive pressures create significant incentives to achieve better workplace outcomes. As Mitsubishi argued:

The pressure for workplace improvements, efficiency and flexibility are driven primarily by the internal benchmarking and competitive requirements applying within each global group. This pressure extends to our supplier base that must also achieve higher levels of efficiency and performance to remain competitive in a global sourcing framework. The[se] pressures ... are enough to ensure that every business needs to do whatever it can to remain competitive and attract investment and further market opportunities. (sub. PP112, p. 15)

Box 5.4 The protection of employee entitlements

In the Commission's discussions with firms, the prospect of more damaging industrial disputation over the employee entitlements issue was an immediate concern for them. In this context, a significant number of EBAs in the automotive industry are due to expire in March and June 2003.

Redundancy entitlements of three to four weeks per year of service, up to a limit of 70 weeks, are not unusual in the automotive industry. Such relatively generous entitlements are ostensibly in place to facilitate the sort of incremental changes in firms' employment levels and profiles necessary to respond to changing market circumstances, rather than to provide a safeguard in the event of company failure.

In this latter regard, GEERS provides a generally available safety net. However, there is an eight week cap on redundancy payments under the scheme. Accordingly, most firms accept that access to GEERS will not be sufficient to address employees' concerns about the security of their much more generous negotiated entitlements in the event of company failure.

The best way forward in this area is far from clear. As the solution to the Tristar dispute indicates, the entitlements issue can be resolved at the enterprise level. However, some have suggested that industry-level solutions might be more cost effective. Yet others consider that the issue can only be effectively addressed at the national level — although, in this context, there is strong opposition from firms to the union's previously proposed Manusafe scheme (see box 5.2).

The Commission has not explored the efficacy of these different approaches. What is clear, however, is that if the entitlements issue is left to fester, it could be the trigger for more damaging disruption in the industry. This alone is reason enough for industry-level dialogue to consider better ways forward on the issue.

Nevertheless, further reductions in protection would add to the incentives for managers and employees to work together to promote the interests of the industry and improve its international competitiveness. Conversely, a prolonged continuation of the relatively generous assistance arrangements that will still apply in 2005, could send an unhelpful signal about the need for further improvement in the industry's workplace culture and practices.

FINDINGS ON WORKPLACE ARRANGEMENTS AND INDUSTRIAL RELATIONS ISSUES

- *While productivity in Australian automotive workplaces has increased considerably over the last decade and a half, significant further improvement is required if the industry is to become internationally competitive and not have to rely on special government support.*
- *There is agreement among firms, employees and their unions about the need for further workplace change and for a stable industrial relations environment to minimise production stoppages. Because the industry is heavily oriented to just-in-time production, such stoppages can impose significant costs on firms, their employees and the wider community.*
- *Responsibility for achieving better workplace outcomes lies largely with managers and employees within individual enterprises. Better communication and greater cooperation between the parties will be crucial in this regard.*
- *There is considerable scope for firms to improve their management and communication skills. Among other things, this would assist them to better convey to their employees and union representatives the relationship between workplace outcomes and the viability of the enterprise and the industry. Similarly, providing opportunities for those representing employees to improve their skills in assessing this sort of information would lead to more productive outcomes.*
- *While a single industry-wide union, enterprise unions or greater reliance on direct negotiation between firms and their employees would all be likely to generate greater coincidence of interest than the current multiplicity of largely occupation-based unions, it is ultimately up to employees to determine what representation arrangements best suit their needs.*
- *Workplace regulation has an important role in setting the framework for negotiations between firms and their employees and representatives, and in helping to provide for an appropriate balance in the bargaining power of the various parties. However, regulatory mechanisms cannot be a substitute for effective management of workplace issues.*
- *The imperative for the automotive and other industries to improve their international competitiveness through lean manufacturing processes should be an important consideration in the assessment of proposals to modify relevant aspects of Australia's workplace regulation. However, the specific proposals put forward by the industry to constrain further the rights of employees to take industrial action raise some complex issues and would have ramifications in other industries, making it difficult to assess their merit in this inquiry.*

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- *Current discussions between representatives of automotive firms and some unions could be helpful in progressing the employee entitlements issue and other workplace problems on which there is agreement that industry level actions are required.*
 - *Continuing gradual and predictable reductions in government support for the industry would help to maintain the pressure on managers and employees to improve workplace and industrial relations performance to international best practice levels.*

5.4 Skilling and training issues

The industry's skill base: a source of competitive advantage

The automotive industry draws on a wide range of skills including trade skills, engineering, design, project management, finance, marketing and general management skills. The required skill set has expanded and deepened as motor vehicles have become more sophisticated and workplaces more flexible, and as various tasks have been automated. Access to workforce skills, and the quality of the associated education and training infrastructure, has therefore become increasingly important for competitiveness in this industry.

In this regard, Australia is generally well served. In recent years, 'entry level' skills in the Australian automotive industry have increased more rapidly than in the rest of manufacturing (see table 5.1).

But these sort of data do not reflect the very substantial specific skills acquired through on-the-job training. Thus, Holden (sub. PP101, p. 30) remarked that it was no longer appropriate to view production workers in the industry as being unskilled. Indeed, the skill base available to the industry is widely regarded as integral to its growing innovativeness and flexibility, and to the improvements in its productivity and quality over the last decade. Moreover, other industries and activities have benefited from the skills development that has taken place in the automotive sector.

The industry's skill base is developed in a number of ways

As intimated above, the development of the automotive industry's core skill base relies mainly on the initial skilling provided in educational institutions, followed by extensive on-the-job training. For example, according to Holden (sub. 72, p. 33), over the last 10 years, vehicle producers have lifted spending on 'continual learning activities' to more than 4 per cent of total wages. While recent data comparing

training levels across industries are very limited, it appears that automotive firms do spend considerably more on training than their counterparts in many other areas of manufacturing.

Table 5.1 **Educational attainment of automotive industry workers, 1996 and 2001**
per cent

	<i>Automotive^a</i>		<i>All manufacturing</i>		<i>All industries</i>	
	<i>1996</i>	<i>2001</i>	<i>1996</i>	<i>2001</i>	<i>1996</i>	<i>2001</i>
Bachelor degree or higher	10	9	8	11	16	21
Skilled vocational	24	32	25	25	17	15
Other post-school ^b	13	16	13	14	17	18
Total with post-school qualifications^c	46	56	46	50	50	53
Total without post-school qualifications	54	44	54	50	48	44

^a ANZSIC 281: Motor vehicles and parts manufacturing. ^b Includes basic vocational training, undergraduate diplomas and associate diplomas. ^c A small percentage of workers are still at school — hence the total figures for workers with and without post-school qualifications may add to less than 100 per cent.

Source: ABS (unpublished data).

Nonetheless, on occasion, the industry still sees a need to access some specialist skills — particularly ‘top-end’ automotive engineering skills — by bringing in people from overseas.

Reflecting the specialised nature of many of the industry’s skill requirements, it has established links with a range of educational institutions. Examples include:

- the industry’s role as a registered provider of training requirements for various vocational qualifications including: the Vehicle Industry Certificate, the Advanced Certificate in Technology Management and the Advanced Diploma in Engineering. Some tertiary engineering courses also have a strong automotive component and involve significant ‘on-site’ study;
- the resultant development of relationships between some producers and particular educational institutions. For example, Ford has a close association with Deakin University, RMIT and a number of TAFEs. Similarly, Autoliv has an extensive network in the training and educational institutions that includes, RMIT, the University of Ballarat and Monash University;
- Holden’s collaboration with, and funding contribution to, the Monash University Accident Research Centre; and

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- the CarNet program — a joint venture between major component suppliers, car companies and training and education institutions in the Geelong region.

Views differ on the significance of emerging skills shortages

The industry faces emerging skill shortages in a number of areas, including: virtual engineering; mechatronics; die moulding and setting; CAD/CAM; electronic diagnosis; and foundry skills. Also, firms located in regional areas can find it more difficult to attract skilled workers than their city-based counterparts.

Despite these specific shortages, some in the industry do not see access to skills as a general problem — particularly given the scope to build skills through on-the-job training. Also, at the public hearings, the Society of Automotive Engineers commented on the increasing emphasis being given in some university engineering courses to skill acquisition in emerging areas such as mechatronics (trans., p. 353).

However, others suggested that skill shortages will become a more pressing issue for the industry in the next few years:

- Some participants, including the Department of Employment and Workplace Relations (sub. 79, p. 7), indicated that there is already evidence of skills shortages and/or recruitment difficulties in Victoria and South Australia for a number of the core trades in the automotive industry.
- There is also concern that the decline in apprenticeship numbers will create problems for the industry in accessing necessary trade skills in the longer term.
- Several participants suggested that the industry's ageing workforce poses further risks for skills availability down the track.
- Others indicated that traditional sources of skilled workers such as new migrants had dried up.
- And, more broadly, several submissions reiterated concerns enunciated in the recent Audit of the Victorian Automotive Industry (Victorian Government 2000) about the negative image of the sector as a career choice.

The South Australian Government (sub. PP115, p. 12) went on to argue that ensuring adequate future access to emerging specialised skill requirements will be particularly important in enhancing the industry's competitiveness.

A responsive educational and training system is crucial

While the Commission's discussions with the industry did not convey a sense of a short term skills crisis, clearly there are issues that need to be resolved.

However, the solutions to some of these will be very specific and require a very detailed knowledge of the industry. In a short term and broadly-based inquiry of this nature, identifying and analysing such specific solutions is not practical. Moreover, as in the area of workplace reform, responsibility for addressing some of the underlying causes of emerging skills shortages would seemingly lie with the industry rather than governments. For example, it is hard to see why the community should be charged with the task of improving the industry's image to potential employees. Reflecting on this issue of responsibility, the South Australian Government's response to the Position Paper noted that:

An appropriate balance between public investment and industry/enterprise financing of training to meet emerging and higher-skill needs must be determined, particularly in the area of company-specific skills. (sub. PP115, p. 31)

The Commission also observes that *periodic* skills shortages characterise virtually every labour market. Such shortages do not necessarily require specific remedial action. That is, if firms, the educational institutions and associated training infrastructure have the capacity to respond effectively and quickly to changing skill needs, shortages in particular areas may be relatively short-lived.

However, some shortcomings in the current system have been identified

A thorough assessment of the adequacy of the education and training infrastructure in the context of the automotive industry is well beyond the scope of this inquiry. That said, the Commission notes that a range of concerns have been expressed about systemic shortcomings in the current institutional arrangements, including that:

- the links between the industry and tertiary institutions notwithstanding, many university and vocational courses in fields such as engineering are failing to produce the sort of skills required by an increasingly sophisticated automotive sector;
- automotive-related university courses give insufficient emphasis to workplace management issues;
- course structures in the TAFEs, and the capital equipment available for students to train on, have not kept pace with industry developments;
- the scope for firms to customise vocational training by drawing modules from different occupation-based packages is inhibited by union demarcation issues;
- there is an ageing teaching staff in the educational institutions, meaning that relevant industrial experience is diminishing;

-
- insufficient emphasis and support has been given to maintaining apprenticeship levels in the trades; and
 - the current training advisory board structure is unduly fragmented (see below).

Ongoing dialogue between the industry and training providers is necessary

Addressing deficiencies in the capacity of the education and training system to meet the automotive industry's evolving needs will depend, in the first instance, on effective communication between the industry and service providers. The already strong linkages that are in place will be helpful in this regard.

More broadly, the Industry Training Advisory Board (ITAB) regime provides a mechanism for monitoring the adequacy of the education and training infrastructure and the specific training packages drawn on by the industry.

However, some participants questioned whether these advisory arrangements remain well suited to the needs of the industry. For example, while one ITAB — Automotive Training Australia — is solely responsible for vocational education and training arrangements in the vehicle manufacturing sector, it is one of four boards with coverage in the components sector. An obvious issue that arises is whether there would be value in having a single ITAB covering the entire automotive sector — particularly given the commonality in many of the training issues confronting vehicle producers and their suppliers.

In the Position Paper, the Commission therefore concluded that there could be value in a review of the industry's training advisory arrangements to identify what, if any changes, could make them more relevant in the future. In their responses to the paper, a significant number of industry participants endorsed this preliminary finding.

FINDINGS ON SKILLING AND TRAINING

- *There are emerging skill shortages in a number of areas of the automotive industry. However, identifying what specific responses may be required goes beyond this inquiry. Moreover, responsibility for addressing some of the underlying causes of these emerging shortages seemingly lies with the industry rather than governments.*
- *At a broader level, a key issue for the future is how to address limitations on the capacity of the education and training system to respond effectively and quickly to skilling issues confronting the industry.*

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- *An external review of training advisory arrangements could be beneficial in helping to ensure that education and training arrangements continue to meet the needs of the industry efficiently.*

6 Taxation and microeconomic reform

The production of vehicles and components and their delivery to markets in Australia and overseas, requires the use of various infrastructure inputs including electricity, gas, telecommunications, road, rail and air freight and port services. Production costs in the industry, and the level of demand for the industry's outputs, are also influenced by various taxes.

Accordingly, reforms that address inefficiencies in the taxation regime, or that enhance the cost, quality and reliability performance of Australia's infrastructure providers, will enhance the automotive industry's competitiveness and viability. Given the industry's increasing reliance on innovation to provide it with a competitive edge, reforms that improve the effectiveness of general support for R&D will also be of considerable benefit.

6.1 Taxation arrangements

Various taxes influence the cost of producing vehicles in Australia or the level and nature of vehicle demand.

- Vehicle and component manufacturing is subject to various Federal and State taxes, including company tax and payroll tax.
- New vehicle sales are subject to the Goods and Services Tax (GST), with luxury vehicles subject to an additional tax of 25 per cent. State and Territory Government stamp duties also apply to sales of new and used vehicles.
- The cost of vehicle use (which impacts on demand) is influenced by: State and Territory registration fees; Commonwealth fringe benefits tax (if a vehicle is provided by a business to an employee for private use); leasing and depreciation rules (where vehicles are claimed as a business expense); and excise on petrol.

Taxation arrangements are less of a concern than in the past

In the last automotive inquiry (IC 1997a), the industry was particularly critical of the wholesale sales tax (WST) system, arguing that:

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- the 22 per cent tax on vehicles sold in the domestic market (with an additional 45 per cent surcharge for luxury vehicles) suppressed demand significantly; and
 - WST embedded in inputs increased the industry's costs and thereby reduced its price competitiveness in both domestic and export markets.

However, the replacement of the WST with the GST, together with provision for businesses to claim tax credits for GST paid on business vehicles, have largely addressed these concerns. These changes are estimated to have directly reduced the cost of (non-luxury) fleet vehicles for businesses and private consumers by around 9 per cent and 6 per cent respectively (Macfarlane 2002a, p. 3). While Mitsubishi (sub. 38, p. 11) questioned whether these savings have as yet been reflected in higher vehicle demand, others saw the changes as already having had substantial demand benefits. Thus the Federal Chamber of Automotive Industries (FCAI) said:

As a result of these reforms affordability of vehicles has been significantly enhanced and this has been an important factor contributing to buoyant sales over the past couple of years. (sub. 40, p. 8)

But the luxury car tax remains an issue for the industry and consumers

The luxury car tax applies to vehicles with a GST-inclusive value exceeding a specified threshold — currently \$57 009. The 25 per cent tax is levied on the incremental value of the vehicle above this threshold. The threshold also sets the maximum value of a business vehicle for the purposes of depreciation claims.

In 2000-01, around 5 per cent of new passenger motor vehicles were subject to the luxury car tax. The bulk of these were imported. Hence, the tax may have some incidental benefit for local vehicle production.

Nonetheless, representing both the views of the vehicle producers and importers, the FCAI (sub. 40, p. 77) advocated the abolition of both the luxury car tax and the depreciation limit, arguing that:

- these imposts do not apply to other goods and services;
- the tax is punitive by international standards; and
- it distorts vehicle demand as indicated by the fact that the luxury vehicle share of the total market in Australia is only around half the international average.

The Chamber further noted that the threshold for the luxury tax/depreciation limit has not been adjusted over time to keep pace with changes in luxury model pricing and specification.

There was also support from the Australian Automobile Association (sub. 70, p. iv) for the abolition of the luxury tax. It raised concerns that the tax discourages the purchase of vehicles with generally superior safety features and environmental performance.

The ACTU (sub. PP90, p. 50), on the other hand, argued that the luxury car tax be retained on the grounds that it is a 'broadly progressive tax instrument'.

There is a case for abolishing the luxury tax

The luxury car tax currently raises some \$180 million a year. As such, it is a relatively minor source of revenue for the Government.

Moreover, as a taxing instrument, it has deficiencies:

- It runs counter to the objective of reducing divergence in commodity taxation, which was one of the rationales for the introduction of the GST. Indeed, notwithstanding the progressivity argument for taxing luxury goods more highly, it is not clear why passenger vehicles alone should be singled out in this way.
- It may have had some adverse impacts on the safety and environmental performance of the overall vehicle fleet.

Such arguments suggest that removal of the tax would be beneficial. At the very least, there is a case for raising the threshold. As noted, a number of participants argued that the method of indexing the threshold means that it has not kept pace with price movements in the luxury market. Thus, the FCAI pointed out that restoration of the threshold to the market price point applying when the tax was introduced, would see it rise by more than \$20 000 to around \$78 000.

Some State taxes and FBT are also an issue

While the introduction of the GST has led to some rationalisation of State Government taxes, two of the remaining State taxes were of particular concern to industry participants:

- payroll tax; and
- stamp duty on motor vehicle sales.

Synthesising these concerns, Holden commented:

Competitive taxation arrangements are needed to enable the industry to succeed with minimal levels of government support. Many reforms will be required over time, but the most urgent are the removal of payroll tax for vehicle and component production, and the elimination of stamp duty on motor vehicle sales. (sub. 72, p. 15)

One specific aspect of concern was the cost and administrative impost of variations in these taxes between the states, particularly payroll tax rates and thresholds. Bridgestone (trans., pp. 67-8), for example, called for standardisation of these taxes across Australia.

However, the main concerns related to perceived adverse impacts of these taxes on the industry's competitive position and efficient outcomes more generally. On payroll tax, participants argued that because it is levied on inputs, it has a cascading effect on final prices, to the detriment of Australian automotive producers competing in both domestic and export markets. As Holden (sub. 72, p. 21), put it, 'payroll tax is a very unhelpful impost on any highly trade-exposed activity'. Several participants also characterised it as a 'tax on jobs'. Yet others expressed concern about the discriminatory application of exemptions and thresholds. Ford, for example, said:

... a significant reduction in the payroll burden confronting medium to larger companies could be achieved via a comprehensive narrowing of existing exemption criteria. (sub. PP105, p. 18)

As regards stamp duty, participants argued that the tax discourages consumers from replacing their vehicles, which in turn, adversely impacts on the environmental and safety performance of the vehicle fleet. A number of participants also commented that vehicle sales are one of the few items on which stamp duty is still collected. Thus, in calling for the abolition of stamp duty on vehicles, the Australian Automobile Association (sub. 70, p. 18) referred to them as a distortionary remnant of the old tax system.

Further, some participants argued that the FBT arrangements applying to vehicles supplied by businesses to employees for private use are administratively cumbersome. There were also suggestions that the (stepped) reductions in the applicable FBT rate as annual distance travelled increases, might be encouraging wasteful car travel.

But proposing changes to these taxes in this inquiry would be more problematic

As tax instruments, payroll tax and stamp duty have deficiencies (see box 6.1).

However, unlike the luxury car tax, payroll tax in particular applies across a range of activities and industries. Payroll tax and stamp duty are also bigger revenue raisers than the luxury car tax. (In 2000-01, in excess of \$9.5 billion was raised from payroll tax and around \$8.5 billion from stamp duties.) Hence, a thorough assessment of their impacts on community welfare would require a broadly-based review, including an assessment of the implications of options for replacing revenue

shortfalls. Similarly, ways to simplify the vehicle-related FBT arrangements, or an assessment of the impacts of the current FBT rate structure on vehicle travel, are not matters that can be readily addressed in an inquiry of this nature and duration.

Box 6.1 Are payroll tax and stamp duty a good way to raise revenue?

Payroll tax: This tax is one of the broadest taxes available to State and Territory Governments, meaning that it is likely to be more efficient than some more narrowly based imposts.

However, in contrast to the GST, it is a non-rebatable tax on business inputs which increases production costs — including for exporters and import competing firms. It also favours capital intensive industries. Moreover, the provision of a variety of thresholds and special exemptions for particular firms — including automotive firms — means that, in its current form, the tax is quite narrow and concentrated on larger companies, leading to higher rates than necessary. As Ford (sub. PP105, p. 18) said:

What payroll tax can potentially be — a modest tax largely across all payrolls — and what it actually is, are significantly different. This is largely because of a variety of thresholds, drawbacks and special exemptions.

Across Australia, payroll thresholds below which the tax is not levied range between \$600 000 and \$1.25 million. And State governments have frequently granted exemptions for companies with larger payrolls in order to attract or retain investment and employment.

A Productivity Commission staff research paper by Gabbitas and Eldridge (1998), which found that revenue forgone from such exemptions was just under half the total annual revenue actually collected from payroll tax, indicated that there was scope to improve efficiency by broadening the base and lowering the tax rate. The study also suggested that greater harmonisation in payroll tax schemes between States (uniform definitions and exemptions) would significantly lower compliance costs.

Similarly, a report by Econtech (1998) suggested that the replacement of payroll tax by a broadly based consumption tax would increase employment in the short to medium term and, in the longer term, reduce the cost to the community of raising the revenue involved by around \$600 million a year.

Stamp duty: Stamp duty is a commodity tax additional to the GST. Because it is only levied on some items (primarily on property transactions and vehicle sales, but also on insurance policies, leases, mortgages and hire purchase agreements), it maintains the sort of differences in commodity tax rates that the GST was designed to eliminate.

Moreover, in a vehicle-specific context, the collection of stamp duty on vehicle transfers means that the tax can be applied several times over the life of the vehicle. This serves to magnify the difference in the overall commodity tax rate on vehicles compared to items which are only subject to the GST.

FINDINGS ON TAXATION

- *As a revenue raising instrument, the luxury car tax has deficiencies. If it is retained, the threshold for the tax (and the associated depreciation limit) would need to be raised to reflect previous price movements in the luxury vehicle market.*
- *As revenue raising instruments, payroll tax and stamp duty on vehicle sales and transfers also have deficiencies. However, a thorough assessment of the impact on community welfare of abolishing these more widely applicable taxes, or changing their design, would require a broadly based review, including an assessment of the implications of options for replacement of any revenue shortfalls.*

6.2 Infrastructure services

Recent reforms have been of benefit to the automotive industry

Microeconomic reforms over the last decade and a half have addressed many of the concerns previously voiced by the automotive industry about the price, quality and reliability of infrastructure services. Utility reforms have reduced some energy costs, while reforms to road and rail transport, ports and the waterfront have enhanced the efficiency and reliability of the industry's supply chains. The latter have also facilitated the emergence of specialised transport suppliers, who now have a major role in the just-in-time supply of components to vehicle producers and the ex-factory distribution of finished vehicles.

That said, Holden (sub. PP101, p. 22) claimed that microeconomic reforms in other sectors of the economy have only marginally offset the impact of the reductions in assistance to the automotive industry.

Moreover, aspects of the supply of particular infrastructure services continue to impede the automotive industry's competitiveness. For example:

- Some participants told the Commission that while waterfront reform has greatly improved service efficiency and reliability, it has yet to deliver significant reductions in charges for these services. The frequency of service — particularly from Port Adelaide — was also raised.
- And, some said that charges for sea freight from Australia remain high by international standards.

Most of the concerns raised related to electricity supply

However, the biggest concerns related to electricity supply. Electricity is a significant input cost for most firms in the automotive industry. Reliability of supply is also important in allowing producers to make effective use of their installed capacity.

The electricity supply industry in Australia has undergone major change in recent years. There has been considerable structural reform in the generation and distribution sectors in an effort to encourage competition in these aspects of supply, and a National Electricity Market has been created to provide for additional competition in generation services.

Collectively, these changes have delivered significant savings for many business users, partly as a result of the unwinding of cross subsidies that had previously favoured household consumers.

However, some automotive producers operating in Victoria said that the benefits of these cost savings have been eroded by reduced reliability of supply in recent years. One firm told the Commission that it incurs substantial costs whenever it has to reset its equipment following an outage. It went on to claim that the privatisation of service provision in that jurisdiction has been accompanied by an increase in the number of outages.

And producers in South Australia said that, in contrast to the experience in the Eastern States, electricity prices in that state have risen significantly since the privatisation of supply. They claimed that these price increases have resulted from limits on the capacity of the interconnect with Eastern State markets — limits which were arguably maintained to maximise the sale price of South Australia's electricity assets. Evidence in a report by the Business Council of Australia (2000a) supports the contention that wholesale electricity prices in South Australia have increased in the 'post-reform' period.

The current review of energy markets is looking at these sorts of issues

A review of energy markets is currently being undertaken for the Council of Australian Governments. That review will provide a forum to assess the sort of concerns outlined above in a broad context, drawing on the experiences of a range of industries.

That said, the issues raised in this inquiry by automotive firms are suggestive of some possibly significant shortcomings in the reform process to date. For example, one objective of the reform process has been to reduce average electricity prices,

not to increase them as a means of boosting receipts from the sale of government electricity assets.

FINDINGS ON THE SUPPLY OF INFRASTRUCTURE SERVICES

- *Microeconomic reform in the transport sector has improved the efficiency and reliability of automotive supply chains. It has also facilitated the emergence of specialist transport suppliers which now play an important role in the just-in-time supply of components to vehicle producers and the distribution of finished vehicles.*
- *Continuing inefficiencies in electricity supply arrangements are adversely affecting some automotive producers. The current review of energy markets commissioned by the Council of Australian Governments provides a forum to canvass the concerns raised in this inquiry in a broad context, drawing on the experiences of a range of industries.*

6.3 R&D and workers' compensation issues

The adequacy of generally available R&D assistance is an issue for many

As noted, product and process innovation is becoming an increasingly important driver of competitiveness in the automotive industry. The strong research base in the Australian industry, and its growing reputation for innovative solutions to meet small volume market needs, is widely regarded as one of its strengths (see chapter 4).

In addition to the Automotive Competitiveness and Investment Scheme (ACIS), support for R&D in the automotive industry is available through a number of generally available measures — most notably, the 125 per cent tax concession for R&D expenditure, which has a newly introduced provision for a 175 per cent concession for a limited range of expenditures (see appendix E). The industry also benefits from automotive-related research undertaken by universities, the CSIRO and some co-operative research centres (the latter being jointly funded by industry and government).

A prominent theme in submissions was that the general tax concession for R&D is inadequate to meet the needs of producers in the automotive industry, particularly in the context of support available to automotive firms in other countries.

Apart from the rate of subsidy, a major concern was that the definition of eligible activity excludes much of the process and product development which is at the heart of innovation in the automotive sector. Such concerns in turn underpinned the

industry's strong support for a continuation of ACIS which, since 2001, has provided both explicit and indirect funding support for product and process development in the industry (see chapter 9).

The appropriate configuration of general tax concessions for R&D has been the subject of much debate. In particular, the extent to which such support should extend beyond more basic research to encapsulate product and process innovation — for which many of the benefits may accrue to the innovating firm — is a complex issue. Determination of the appropriate rate of support also involves much judgement. That said, the Productivity Commission's predecessor — the Industry Commission (1995) — previously judged that the 150 per cent tax concession applying at that time had delivered a net benefit to the Australian economy.

In chapter 10, the Commission has concluded that ACIS is not an appropriate longer term mechanism for supporting R&D and other activity in the automotive industry. Rather, the Commission sees the role of the scheme as facilitating *transition* in the industry to a lower tariff environment.

That said, the automotive industry's growing reliance on product and process development as a source of competitive advantage puts a premium on effective access to appropriate support measures in this area. With the future termination of ACIS, the adequacy of generally available support measures for R&D will again be of great importance to the industry. As Holden observed at the public hearings:

... as we move away from sector-specific funding, we actually will increase our reliance on the industry-wide support mechanisms that are available through R&D and investment attraction. (trans., p. 175)

There have been a number of recent changes to boost the effectiveness of Australia's general R&D support program. In addition to the introduction of the 'premium' 175 per cent tax concession for approved incremental R&D, these changes have included the introduction of an R&D tax rebate for firms not generating profits and additional funding for Cooperative Research Centres.

The Government has announced a forward funding commitment to 2005-06 for these and related initiatives (PC 2001b, p. 57). In the Commission's view, there would be value in reviewing their impacts prior to the end of this funding commitment. Indeed, such a review might usefully extend to an examination of the performance of Australia's R&D assistance regime more generally. At the public hearings there was strong support for such a review.

A review around 2005 would allow for completion well before the suggested termination date of any successor to the current ACIS (see chapter 11). Given the

importance to the automotive industry of effective R&D support measures, this would be a highly desirable outcome.

Increased workers' compensation premiums are hurting some firms

As in other industries, workers' compensation costs are increasing in the automotive sector. Typifying the industry's concerns in this area, the Venture Australia Group commented:

The rapid escalation of Workcover costs despite decreasing claims cost, attributed to the no fault legislation, common law claim blowouts and no recognition of personal contribution to disability is a major burden on manufacturing employers and the approach needs to be overhauled. (sub. 66, p. 3)

Also, Bridgestone Australia (sub. PP111, p. 3) commented that workers' compensation matters are further complicated by the different legislation that exists in each state.

Again, these issues are complex and span the economy as a whole. Significantly, it is now eight years since the Industry Commission (IC 1994) conducted an independent review of workers' compensation arrangements. Given ongoing changes in the regulatory framework, and the recent upheavals in insurance markets, there would be value in a nationally-based stocktake of the state of play in this area. On 24 July 2002, the Minister for Employment and Workplace Relations and the Parliamentary Secretary to the Treasurer announced that the Government would be asking the Productivity Commission to conduct an inquiry into Australia's various workers' compensation and occupational health and safety schemes, following consideration of the terms of reference by State and Territory governments (Abbott and Campbell, 2002).

FINDING ON R&D SUPPORT MEASURES

- *It would be desirable to have an independent review of the performance of Australia's general support measures for R&D around 2005. Such a review should aim to ensure that there is appropriate general support available for R&D undertaken by Australian industries — including the automotive industry after the specific support provided through ACIS ceases.*

7 Safety and environmental issues

In recent years, there have been major advances in the safety of vehicles and reductions in vehicle emissions. Such advances have been necessitated by demand from consumers for safer and cleaner vehicles and for improved environmental outcomes more generally, and by accompanying changes in safety and emission standards.

Effective policies will help the industry respond to changing community expectations

The pressures on the automotive industry to deliver better safety and environmental outcomes are intensifying. As well as more stringent safety and emission standards, changes necessitated by broader international agreements such as the United Nations Framework Convention on Climate Change and the Kyoto Protocol will have significant implications for the industry. Further, stricter waste disposal requirements and related pressure to use more recycled materials will have an increasing impact on the industry's products and practices. Major developments in vehicle technology and production processes are in train or in prospect to accommodate anticipated future requirements.

Effective responses to changing expectations and requirements in these areas will be an imperative for the Australian automotive industry if it is to continue to be a viable global player. There is no demur from the industry on this matter. Rather, the key concern for Australia's automotive producers is that related policy settings and approaches facilitate the orderly implementation of the changes necessary at the firm and industry level.

In the Commission's view, there are two key requirements in this regard:

- vehicle (and related) standards, and the processes for setting those standards, should facilitate, or at least not frustrate, the industry's participation in the global industry; and
- the setting of broader environmental goals and targets impinging on the industry must have regard to firms' capacity to make the necessary adjustments to their operations.

At the same time, it is important that such policies are formulated, in the first instance, on the basis of their capacity to further the environmental and safety objectives concerned. While environmental and safety policies may sometimes assist the development of the local industry, any such benefits should be a secondary consideration.

7.1 Vehicle and related standards

Harmonisation of Australian Design Rules is proceeding

Through Australian Design Rules (ADRs), the Commonwealth Government establishes national safety and emission standards that apply to vehicles at the time of first sale in Australia. Australia is currently in the process of aligning its ADRs with the standards established by the United Nations Economic Commission for Europe (UNECE). While the USA operates a separate regime, the European standards provide the basis for most other countries' safety and emission requirements. (Australia has also entered into, or is considering, bilateral agreements that provide for mutual recognition of vehicle standards and the testing regimes to establish conformity with those standards.)

Once completed, this harmonisation process will be of significant benefit to local vehicle manufacturers and importers alike. For example, Ford argued that, notwithstanding the alignment that has already occurred, compliance with unique ADRs currently costs those supplying vehicles to the Australian market around \$1 million to \$2 million a model without providing any safety benefits. It went on to express some frustration about the pace at which the alignment process is proceeding. (trans., p. 131)

But some divergences in standards will remain

At the completion of the harmonisation process, Australian safety standards for passenger motor vehicles are expected to depart from the UNECE standards in only two areas — namely, specific Australian requirements for full frontal occupant protection and child restraint anchor points.

There is also a schedule in place for the introduction of the Euro 3 and 4 emission standards. These will provide environmental benefits by significantly reducing harmful emissions. However, the scheduled introduction dates mean that Australian emission standards will continue to lag those in Europe for some years to come (see table 7.1).

Table 7.1 Comparison of introduction dates for emission standards

<i>Euro Standard</i>	<i>Introduction date in Europe</i>	<i>Introduction date in Australia</i>
Euro 2	1996	2003
Euro 3	2000	2005
Euro 4	2005	No date as yet

Source: Australian Greenhouse Office and Environment Australia, sub. 62.

The divergences in safety standards are unlikely to be a significant impediment to the industry's future development

The Commission has not explored the benefits of Australia's unique full frontal occupant protection and child restraint anchor point requirements.

Clearly, however, they will have some costs. In particular, establishing compliance with these unique requirements will add to the costs of any firm supplying vehicles to both the Australian and overseas markets. Indeed, these additional compliance costs could conceivably be sufficient to deter importers from supplying very low volume marques to the Australian market.

That said, it seems unlikely that these requirements will be a significant impediment for Australia's vehicle producers and, in particular, their capacity to increase vehicle exports. This is because compliance with safety standards applying in the industry's major export markets, and/or the need to supply vehicles of comparable safety performance to those available from competitors, will generally require the incorporation of features that will satisfy Australia's specific full frontal occupant protection requirements. And, meeting the local anchor point requirements is apparently a relatively minor engineering task.

But the impact of divergent emission standards is less clear

Of itself, the delayed introduction of more stringent emission standards in Australia will not prevent local vehicle producers from improving the performance of their engines to meet emission requirements in global markets. With vehicle exports now accounting for some 30 per cent of total Australian vehicle production, as well as significant engine exports to the USA, the commercial imperatives to make such improvements are significant.

However, such product development may be constrained if vehicle producers cannot recoup some of the associated investment cost in the price of vehicles sold in the domestic market. In this regard, Holden (sub. PP101, p. 32) indicated that 'the additional amortisation of investment of the development costs would impact on the

ability to price competitively in the domestic market.’ The Australian Greenhouse Office and Environment Australia, (sub. PP88, p. 3) similarly contended that the emission performance of Australian vehicles would continue to be determined by conditions in the domestic market and hence by Australian regulatory requirements.

Australia’s lower fuel quality standards could also impede product development

Australian fuels have a lower minimum octane rating and a higher sulphur content than fuels sold in a number of the world’s major automotive markets.

Apart from contributing to poorer environmental outcomes, lower fuel standards might well be a further constraint on the industry’s uptake and development of engine technologies necessary to remain competitive in global markets. That is, if these technologies cannot be used, or used optimally, in vehicles sold in Australia because of the lower fuel quality, it could be difficult to justify expensive product development work that would mainly have application in export markets.

The Australian Greenhouse Office and Environment Australia (sub. PP88, p. 7) said that there are some improved engine and emission technologies for spark ignition engines that could be introduced under existing fuel standards. Moreover, there is scope to ‘de-tune’ more technically advanced engines to allow them to operate satisfactorily using Australia’s lower quality fuels. Indeed, such de-tuning already occurs.

However, a consequence of such de-tuning is often higher fuel consumption (and hence greater emissions). Moreover, it is unclear whether de-tuning will continue to be a viable option for some of the emerging technologies.

The price and availability of high octane fuel is a further issue

Some vehicle producers contended that, from an industry development perspective, a possibly more important issue than the lower quality of ‘standard grade’ fuels, is the limited availability and significantly higher price of higher octane (95 RON) fuel. In elaborating on this matter, Ford referred particularly to the limited availability of 95 RON fuel in rural and regional areas, noting that this was slowing down development work by the Australian industry on more fuel-efficient cars, as well as preventing the importation of some more fuel-efficient vehicle models available in markets overseas (trans., p. 142). Reflecting these concerns, the Federal Chamber of Automotive Industries (sub. PP99, p. 23) advocated initiatives such as ‘lowering excise on low sulphur petrol to encourage more rapid uptake of improved quality fuels in the Australian market’.

A forthcoming review should help to progress these matters

Environment Australia and the Department of Transport and Regional Services will shortly be undertaking a review of Australia's vehicle emission requirements and fuel standards. Provision has already been made to upgrade fuel standards prior to 2005 to support the introduction of the Euro 2 and 3 emission requirements. However, according to the Australian Greenhouse Office and Environment Australia (sub. 62, p. 17), any further upgrading to mesh with the requirements of the Euro 4 emission standards would not come into effect before 2008 to give the oil and automotive industries adequate time to adjust.

The need to take account of adjustment capacity in the oil refining sector — a point emphasised in the South Australian Government's response to the Position Paper (sub. PP115, p. 14) — illustrates the more general point that any future changes to Australia's requirements in these areas must have regard to the benefits and costs for the community as a whole. In this regard, the impact on fuel prices, and thus on the costs of operating the existing vehicle fleet, would be another important consideration.

Suffice to say that emission and fuel standards, as well as the availability and price of higher octane fuel, are matters of considerable relevance to the future development of the Australian automotive industry. Hence, it is important that the industry is given appropriate opportunity to put its views to the forthcoming review.

Consistency in standards for new vehicles and vehicles in service is also desirable

The implementation of standards for vehicles in service is the responsibility of the States and Territories. Their road-worthiness requirements draw heavily on ADRs.

However, the increasing performance emphasis in the ADRs has led to some perceived problems for those enforcing road-worthiness requirements. For example, there is no longer an explicit requirement in the ADRs that vehicles be fitted with windscreen wipers. To plug these 'gaps', some jurisdictions have implemented additional standards for vehicles in use. There has also been ongoing debate about the need for States and Territories to implement standards to cover accessories such as bull bars, which are usually fitted after initial manufacture of a vehicle.¹

Like the relationship between new vehicle standards in Australia and those overseas, additional State and Territory standards for vehicles in use are only likely to be a significant problem for the automotive industry if they conflict with ADRs.

¹ At the most recent meeting of the Australian Transport Council, Ministers requested that a national standard for bull bars be developed as soon as possible (ATC, 2002, p. 4).

While there are differences in the two regimes, the Commission received no evidence to suggest that there are material inconsistencies in requirements.

The National Road Transport Commission has an overarching role in the development of standards for all vehicles in service (although its emphasis to date has been on heavy rather than passenger and light commercial vehicles). In this role, it consults with a range of bodies including the Commonwealth Department of Transport and Regional Services, State and Territory road transport authorities and environment protection agencies. Via the National Motor Vehicle Environment Committee it also has the benefit of input from vehicle manufacturers, fuel providers, environment groups and technical experts.

This consultative process would seemingly provide an avenue for ensuring that significant inconsistencies or differences in standards for new passenger vehicles and for vehicles in use do not emerge.

Specific standards for some replacement components would have benefits

At present, the standard of replacement components is only indirectly regulated through road-worthiness requirements for vehicles in use. Some participants argued that specific standards, as apply in some other countries, would improve safety by removing poor quality imported replacement parts, accessories and second hand tyres from the market and, in so doing, provide a significant boost to the local aftermarket and tyre industries.

In the Commission's view, ensuring that critical replacement parts meet minimum standards could well be of benefit to the community.

However, such arrangements could easily become administratively complex and cumbersome if they encompassed too wide a range of parts. The Commission also acknowledges the point made by some aftermarket producers that care would be required to ensure that such standards did not become a means to unfairly protect the production of 'genuine' replacement components by the vehicle producers and original equipment suppliers. Thus, in its response to the Commission's Position Paper, the Australian Automotive Aftermarket Association (sub. PP93, p. 18) raised concerns about the possibility that the introduction of standards for replacement parts could inappropriately disadvantage both aftermarket producers and consumers if those standards restricted competition from parts which did not pose a safety risk.

This would suggest that:

- any such standards should be limited to replacement components which are integral to vehicle safety or to a vehicle's environmental performance; and

-
- responsibility for developing such standards should lie with an independent body.

In regard to the latter requirement, this might be another area where the National Road Transport Commission could play a useful role.

More efficient approval processes for industrial chemicals would benefit some automotive suppliers

The National Industrial Chemicals Notification and Assessment Scheme requires proof of safety for new chemicals, even if those chemicals have been approved for use in other developed countries. According to some participants, the cost of proving safety for specialist chemical additives used in items such as scratch proof automotive paint and windscreen tinting, has made it infeasible to use those additives in Australia. As a result, automotive producers have simply imported the final products.

Quite apart from its impact on automotive suppliers, a requirement for retesting of chemicals that have already been demonstrated to be safe is at odds with the thrust of standards reform in Australia. An important element of those reforms has been mutual recognition of compliance with like standards across jurisdictions. Consistent with this approach, proof of safety for new industrial chemicals which have been certified as safe in other developed countries, would seemingly only be warranted if the regulator can demonstrate both that a particular chemical is 'high risk' and that specific circumstances in Australia make re-testing essential. A submission from the Plastics and Chemicals Industries Association (PP117) sets out some possible criteria that could be incorporated in the relevant legislation to give effect to these two broad requirements.

FINDINGS ON VEHICLE AND RELATED STANDARDS

- *Australia's emission and fuel standards, as well as the availability and price of higher octane fuel, are matters of considerable relevance to the future development of the Australian automotive industry. In particular, they are likely to influence incentives to develop more fuel efficient and environmentally friendly engine technologies. Hence, it is important that the industry is given appropriate opportunity to put its views to the forthcoming review of Australia's emission and fuel standards.*
- *The consultative processes of the National Road Transport Commission could provide an avenue for ensuring that significant inconsistencies and differences in standards for new vehicles and vehicles in use do not emerge.*

-
- *The introduction of specific standards for replacement components that are integral to vehicle safety or to a vehicle's environmental performance could benefit the community. However, the involvement of an independent body in the development of such standards would be important to ensure that they were not used to reduce appropriate competition from imports or from particular local suppliers.*
 - *The application of 'proof-of-safety' requirements for new industrial chemicals which have been certified as safe in other developed countries, would only be warranted if the regulator concerned can demonstrate both that a particular chemical is 'high risk' and that specific circumstances in Australia make re-testing essential.*

7.2 Fuel consumption targets

Australia is seeking to reduce fuel consumption

To encourage better environmental outcomes, national average fuel consumption (NAFC) targets have been in place since 1983. In 2000, NAFC — which is calculated as a weighted average of the fuel consumption performance of all new vehicles sold in Australia in any particular year — was around 8.3 litres per 100 kilometres.

As part of a package of measures intended to affirm Australia's international environmental commitments that would apply under the Kyoto Protocol, current government policy is to pursue a 15 per cent improvement in fuel efficiency over business as usual by 2010, to be achieved through negotiation with automotive companies.

The efficacy and implications of the current approach are the subject of debate

According to the Australian Greenhouse Office and Environment Australia (sub. 62, p. 17) current government policy translates to a NAFC target of 6.3 litres per 100 kilometres in 2010. Underlying this figure were studies suggesting that, by 2010, average fuel consumption would decline to 7.4 litres per 100 kilometres under business as usual. For its part, the industry disputes these numbers and has proposed two 'cooperative targets' of 6.8 litres per 100 kilometres by 2010, and 6.3 litres per 100 kilometres by 2015.

The Australian Greenhouse Office and Environment Australia (sub. PP88, p. 7) said that achievement of average fuel consumption of 6.3 litres per 100 kilometres in

2010 would represent a comparable rate of improvement to that anticipated across the vehicle fleet in Europe. It went on to emphasise that while there might be legitimate reasons for higher average fuel consumption in Australia than in Europe, a lesser target would see the current gap widen.

However, vehicle producers argued that a target of 6.3 litres per 100 kilometres by 2010 is not commercially achievable, and that even meeting the industry's proposed target of 6.8 litres per 100 kilometres would pose a considerable challenge (see box 7.1).

Box 7.1 Holden and Ford on changes to fuel consumption targets

Holden:

The National Average Fuel Consumption Target of 15% over business as usual by 2010 has been under discussion between the industry and the Government for some years. The industry has proposed two "Co-operative Targets" of 6.8 litres per 100km by 2010, and 6.3 litres per 100km by 2015. These targets represent a significant challenge when compared to the "Achievable Target" of 7.4 litres per 100 kilometres that had previously been identified. Clearly, whether these targets can be achieved will depend on a range of factors including availability, costs and uptake of relevant technologies, availability and quality of fuels, consumer preferences and policy settings. In particular, the industry has identified the need for Government participation, requiring that it work closely with industry to achieve a policy framework in which consumers value fuel efficiency improvements sufficiently to choose to purchase them, without sacrificing their existing preference for large cars which is the basis for the industry's viability. ...

At least in a relative sense, fuel efficiency ranks relatively low when compared to other vehicle attributes such as performance, towing capacity, features and safety. This can be attributed in the main to the relatively low cost of fuel in Australia, and it appears unlikely that this will change in the short to medium term. What it means in practical terms is that if we are required to incorporate new technologies into our vehicles that the consumer does not value, we will obviously not be in a position to recover the cost of those technologies in the price of the vehicles. Ultimately, this will have the effect of rendering our vehicles less competitive in the marketplace. (sub. 72, pp. 43-44)

Ford:

The industry has offered a co-operative target(s) of 6.8 L/100 km by 2010 and 6.3 L/100 km by 2015. This represents a considerable challenge for the industry, particularly given the domestic demand for medium to large passenger cars. To dimension the magnitude of the task, it should be noted that a NAFC of 6.3 L/100 km would not be achieved today even if all new cars sold were Laser/Corolla/Astra size vehicles.

The industry's ability to achieve the abovementioned target(s) will be dependent on a number of factors including model cycles, manufacturing volume base, global technology developments and the widespread and affordable availability of new higher-octane fuels. (sub. PP105, p. 21)

More generally, the Department of Transport and Regional Services (sub. 73, pp. 14-15) suggested that explicitly targeting fuel usage would be a more efficient

way of pursuing greenhouse objectives than attempting to improve the average fuel economy performance of the vehicle fleet.² And, in its response to the Commission's Position Paper, the South Australian Government (sub. PP115, p. 14) suggested that 'Alternative policy strategies could be explored at a nationally coordinated level with the participation of the Federal, State and Territory governments and key stakeholders'.

Fuel consumption targets must have regard to the industry's capacity to deliver

While voluntary average fuel consumption targets may not be the most effective way of seeking to reduce fuel use, theoretically preferable alternatives would not be without their problems. In this regard, the Australian Greenhouse Office and Environment Australia said that the Government prefers a 'light handed' approach to regulation and that although:

... fuel taxation would be a more direct option for targeting fuel consumption, ... recommended actions must be realistic and the level of price change required to induce a behavioural change needs to be considered. (sub. PP88, p. 5)

If voluntary targets are to continue to be the preferred method for pursuing reduced fuel consumption in Australia, consultation and cooperation with the automotive industry in developing those targets is essential. This will help to ensure that the targets that emerge from the process provide an appropriate balance between environmental considerations and commercial realities.

FINDING ON FUEL CONSUMPTION TARGETS

- *The formulation of future fuel consumption targets should involve extensive consultation with the automotive industry to determine what improvements in the fuel efficiency of local vehicles can be achieved without significantly impacting on the industry's competitiveness.*

7.3 The relationship between safety and environmental policies and industry policy

There are some significant linkages between safety and environmental policies on the one hand, and industry policy on the other. For example:

² The Department also noted that encouraging the use of smaller, more fuel efficient, vehicles could have adverse safety implications. In this regard, it cited experiences with the Corporate Average Fuel Efficiency scheme that applies in the USA.

-
- Changes to safety and environmental policies will sometimes have an incidental effect on the competitiveness of local industries vis a vis their overseas competitors. For example, the proposals being developed in New South Wales to link stamp duties to emission levels might advantage local vehicle producers — at least insofar as they discourage the use of less fuel efficient imported 4WD vehicles.
 - Conversely, changes in industry policy can have environmental and safety implications. Thus, the downward pressure on new vehicle prices from past assistance reductions may have encouraged faster replacement of vehicles than would otherwise have been the case, with flow-on benefits for the environment and safety.

Some proposed policy changes sought to take advantage of these linkages

In addition to proposals relating to standards and fuel consumption issues, there were a range of more general policy initiatives put forward during the inquiry to improve vehicle safety or to reduce the environmental costs associated with the production and use of motor vehicles in Australia. Many of these possibly worthwhile proposals were beyond the scope of this inquiry. Measures to facilitate wider application of voluntary waste management protocols in the tyre industry are a case in point.

However, reflecting the sort of linkages outlined above, some of these proposals sought to simultaneously pursue industry development and environmental or safety objectives. As well as the proposal for specific standards for replacement components (see above), these included:

- *implementing more stringent road-worthiness requirements*: This was seen as a means of forcing older vehicles off the road, thereby improving safety and environmental outcomes as well as boosting demand for new vehicles.
- *raising the tariff on 4WD vehicles to the rate applying to passenger vehicles*: Some argued that this would simultaneously reduce demand for a generally less safe and less environmentally friendly class of vehicles, and increase demand for locally produced large passenger vehicles.
- *providing environmentally friendly vehicles with tariff or tax preferences*: In addition to the proposed differential stamp duty arrangements in New South Wales (see above), there were proposals to give a tariff preference for hybrid electric vehicles such as the Toyota Prius. While the primary goal of such an approach would be better environmental outcomes, it was also seen as a means of providing a signal to local automotive producers about the sort of vehicles they should be producing in the future. Indeed, the Australian Automobile

Association (sub. 70, p. vii) suggested that a tariff preference might be accompanied by grants to the local industry to assist the development of such production.

- *assisting local vehicle producers to incorporate intelligent transport (ITS) technology in their vehicles*: Though the primary motivation for this proposal was again to enhance safety and environmental outcomes, proponents saw such support as also helping Australian businesses to secure a growing share of the global ITS market.

But the impact of such policies on vehicle safety or the environment should be the key consideration

Explicit pursuit of multiple objectives can give rise to significant problems where individual objectives are pushing in different directions. For example, a policy designed to encourage greater use of small vehicles for environmental reasons might well hinder industry policy goals, given the focus of local vehicle production on larger models.³ Hence, the merits of the sort of policies outlined above should be judged primarily on the basis of their capacity to further the environmental and safety objectives concerned.

This is not to suggest that complementarity between different policy objectives should be ignored. Indeed, on occasion, it may strengthen the case for a particular policy change. Hence, potential environmental and safety benefits reinforce the industry policy arguments for aligning tariffs on passenger and 4WD vehicles. That said, as discussed in chapter 12, industry policy considerations also suggest that such alignment would be better achieved by reducing the passenger vehicle tariff, rather than by raising the tariff on 4WD vehicles.

³ As noted in footnote 2, such a policy could also have detrimental safety impacts. However, as the Australian Greenhouse Office and Environment Australia (sub. PP88, p. 7) noted, the lesser average safety performance of smaller vehicles may at least to some extent reflect fewer safety features in a typical small vehicle, rather than the vehicle size alone.

8 Market access

8.1 A major issue for the industry

With the industry's future viability heavily tied to exports, access to overseas markets is clearly very important.

As discussed in chapter 4, the global sourcing policies of the major vehicle and component producers can constrain or preclude exports by their Australian subsidiaries to particular markets. Also, securing overseas business with the major global vehicle producers may increasingly require component producers to invest directly in production facilities in the markets concerned, rather than exporting the finished components from Australia.

Export opportunities for Australian automotive producers are also constrained by various trade barriers in overseas markets, as well as by investment attraction measures that reinforce incentives for firms to establish production facilities in those markets, rather than supply them through exports.

These government imposed constraints on exports are a bone of contention for Australia's automotive producers — particularly in relation to the Asian region, where rapidly growing demand and geographical proximity might otherwise provide worthwhile new opportunities for Australian firms. Synthesising these concerns, the Federal Chamber of Automotive Industries (FCAI) commented:

Failure to secure ... better access to highly protected regional markets will rob the Australian industry of the chance to capitalise upon its cost and quality competitiveness and its ability to tailor products to meet local market conditions. If greater market access is obtained, the growth prospects of the Australian industry would be significantly enhanced. Without it, Australia will become a less attractive investment location as the parent companies of the Australian manufacturers locate new investments in countries that can offer access to larger ... vehicle markets. (sub. 40, p. 66)

In the light of these concerns, industry participants and the Victorian and South Australian Governments argued that reductions in Australian vehicle tariffs after 2005 should be tied to progress in reducing trade barriers in other markets.

8.2 What is the current state of play?

There have been some reductions in automotive trade barriers

Through various multilateral, regional and bilateral forums and initiatives, there has been some progress in reducing automotive trade barriers. For example:

- While still very high, tariff rates in some ASEAN countries have declined significantly — in Thailand and Indonesia, for instance, maximum vehicle tariffs have fallen from 200 per cent at the end of the 1980s to 80 per cent. (However, in the case of Indonesia, the threat of higher tariffs has apparently been used to deter imports — see box 8.1.)
- In China, the maximum tariff rate for vehicles has fallen from 220 per cent in 1992 to 50 per cent. Moreover, as part of its recent accession to the World Trade Organization (WTO), China has agreed to further reduce tariff rates to 25 per cent on vehicles and 10 per cent on components by 2006.
- A number of developing countries, including Indonesia, South Korea, China and Taiwan, have recently abolished local content regimes. Indonesia and South Korea have also dispensed with import licensing arrangements, while China and Taiwan have announced plans to do so as part of their accession to the WTO (see below).

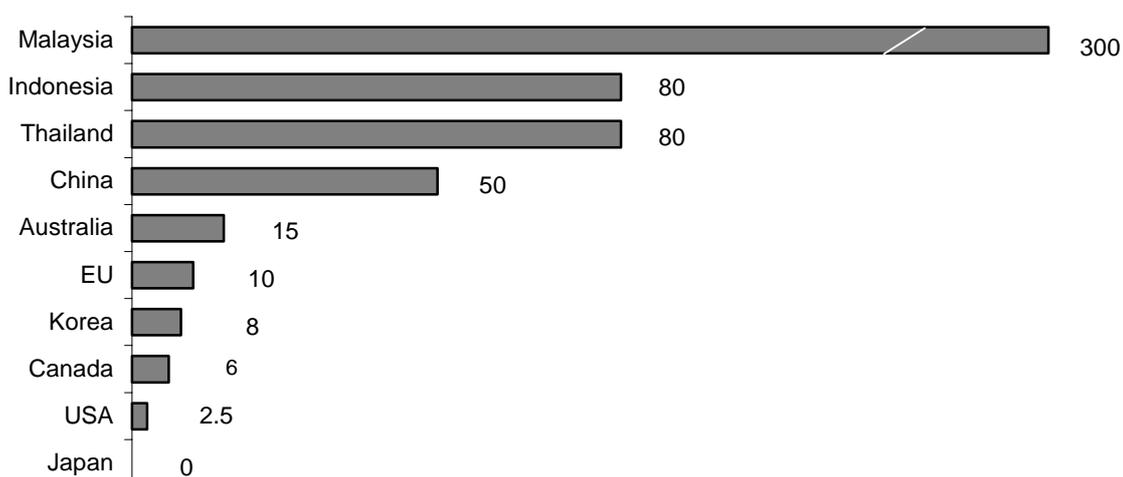
But restrictions on automotive trade remain widespread

Notwithstanding such progress, considerable barriers to trade remain:

- Tariffs in many developing countries are still much higher than in Australia (see figure 8.1). And, although these tariffs have generally been declining, there are exceptions. The stand out is Malaysia, whose maximum tariff rate on vehicles has increased from 40 per cent in 1988 to 300 per cent. Also, in 1999, Thailand increased tariffs on completely-knocked-down vehicle kits from 20 per cent to 33 per cent to help offset the impacts on the domestic component industry of the abolition of local content protection.
- Non-tariff barriers such as import licensing, quantitative import restrictions and lack of transparency in customs procedures, remain commonplace in developing countries. The FCAI (sub. 40, p. 56) claimed that in the case of Korea, ‘almost impenetrable non-tariff barriers make the tariff rate virtually irrelevant’.
- Although tariffs on passenger vehicles in developed countries are currently lower than in Australia, the USA imposes a 25 per cent tariff on imports of some ‘open tray pick-up’ light commercial vehicles. According to advice from the

Department of Foreign Affairs and Trade, this vehicle type accounts for about 20 per cent of the total US vehicle market.

Figure 8.1 **Current tariff rates for passenger vehicles^a, selected countries**
per cent



^a Maximum rates for passenger vehicles and components. Rates may be higher for some light commercial vehicles. For example, the USA imposes a 25 per cent tariff on imports of some 'open tray pick-up' light commercial vehicles — see text. Also, the base value on which tariffs are levied varies across countries. In Australia, tariffs are levied on the free-on-board price. In most other countries, they are levied on the higher, freight inclusive, landed duty free price, which increases their protective impact by a small amount. However, adjusting for this difference would not change Australia's relative position in this figure.

Data sources: ATPC (2001), DFAT (2002a).

- There are also 'non-government' trade barriers in some developed countries. For example, Japan's vehicle distribution system and the EU's controlled franchised and dedicated dealer arrangements are widely claimed to discriminate against imported vehicles. Another example is the 'understanding' that certain US vehicle producers have with the United Auto Workers (UAW) to limit importation of vehicles from their overseas subsidiaries (see further discussion below).

One indication of the overall significance of trade barriers in the industry is provided by a recent study by the United Nations Conference on Trade and Development. In regard to tariffs, the study found that, globally:

- weighted average applied tariffs faced by major exporters of passenger type vehicles were nearly 70 per cent higher than for manufactured products in total, and in South Asia were some 3.2 times higher than the all manufacturing average for the region; and
- weighted average applied tariffs faced by major exporters of components and other vehicles were double those for manufactured products in total, but in South

Asia were about 7 per cent lower than the all manufacturing average for the region.

The study further found that, in developed countries, the frequency of non-tariff barriers applying to passenger type vehicles was 3.8 times greater than for manufactured products in total, and in South Asia was 7.2 times greater than the all manufacturing average (UNCTAD, 2001, pp. 35, 44).

Additional information on current barriers to automotive trade and recent progress in improving market access is provided in appendix D.

These barriers partly explain why import shares in many countries are low

At around 60 per cent, the import share of the Australian passenger vehicle market is high by international standards. In South Korea, imported vehicles account for only 2 per cent of the market and in Japan only 6 per cent. Moreover, while the import share in countries like the USA (34 per cent) and Germany (47 per cent) is closer to that in Australia, the majority of these imports are sourced at preferential tariff rates from other NAFTA and EU countries respectively.

Such differences in import share reflect a number of factors, including: consumer sentiment; the range of locally produced vehicles available in each market; the intrinsic competitiveness of particular automotive producers; and the global sourcing policies of the major vehicle producers. In this regard, the West Australian Department of Treasury and Finance (sub. PP104, p. 4) suggested that a high import share in the Australian market was inevitable almost irrespective of tariff levels given the focus of domestic vehicle production on larger family vehicles.

That said, import shares in a number of overseas countries would almost certainly be higher in the absence of the current barriers.

These barriers have cost Australian firms business

Participants provided various examples of instances where overseas trade barriers, or other restrictions on market access, have precluded otherwise viable Australian automotive exports (see box 8.1). Moreover, circumvention of trade barriers has been a consideration in decisions by some Australian component producers to service overseas markets via production in the countries concerned, rather than through exports.

Box 8.1 Lost export opportunities as a result of overseas trade barriers

In illustrating the impact of tariff barriers on export opportunities, Holden said that it had:

... scheduled to begin exports to Indonesia in May 2001 with the 3.8 litre Commodore to be imported as a CBU [fully assembled vehicle] and sold under the Chevrolet Lumina nameplate. The Lumina would compete in the luxury car market and would attract an 80% import duty and 50% luxury tax. Volumes were projected to grow from around 250 in the first year up to 1500 per year over the life of the program. However, under changes announced after the first 50 vehicles were manufactured and ready for shipment, tariffs were increased to 100% duty and 75% luxury tax. This translated to a retail price increase of approximately 27% positioning the vehicles well above the point at which they could be competitive. (sub. 72, p. 42)

Holden also suggested that, in the absence of the USA's 25 per cent tariff on certain light commercial vehicles (see above), it would be able to export as many as 20 000 utilities a year to that market. (trans., p. 168)

Intercast & Forge commented that it supplies:

... a range of brake components to PBR's plants in Australia and USA and they are quite keen that we supply equivalent components to their plant in Thailand. Although our prices including freight are quite comparable to the Thai prices, addition of a 45% import duty prevents us from securing any business. (sub. 35, p. 2)

And Calsonic Australia said that while major growth in vehicle production in Thailand potentially offers significant opportunities:

We recently quoted a condenser for the next generation Isuzu pick up truck and our ex factory price was competitive compared to their in house manufacturing cost, however the import duty rate was 25 %. (sub. 31, p. 2)

In discussing the impacts of non-tariff barriers, Air International referred to the difficulties both it, and an Australian vehicle producer, had experienced in the USA due to union related constraints on imports to that market:

In the United States, the Australian industry is routinely either excluded or constrained from supply deals for which it is the most competitive supplier. This has happened to us with major component supply projects where a major buyer has pulled out despite our being the best source of supply.

The most common obstacle to such deals is union resistance. ... It is common knowledge that a few years ago, union resistance was a major factor in the failure of an Australian subsidiary of an American vehicle manufacturer to land a major order to supply around 50,000 large family sedans and station wagons per year to the United States. (sub. 56, pp. 22-23)

The impacts of such union 'resistance' on Australian exports to the USA are discussed further in the text below.

Investment incentives are commonplace

The use of government incentives to attract automotive investment has increased significantly in recent years. Such measures are now commonplace in developed and developing countries alike. Moreover, they are becoming increasingly contingent on investors meeting specific conditions (such as transferring technology and investing in R&D).

Investment incentives take various forms. As well as financial support for specific investments, they can sometimes extend to ongoing assistance for R&D and for education and training.

In developing countries, significant investment incentives are available for most automotive investment. Examples include:

- a 200 per cent tax deduction in Malaysia for R&D, with Malaysian owned-companies able to access direct support which provides funding for between 50 and 70 per cent of eligible R&D expenditure;
- corporate tax exemptions in Thailand for at least eight years, as well as exemptions from duties levied on imported machinery;
- industrial technology support grants in Korea for small and medium enterprises; and
- South Africa's Strategic Investment Program. This program — which has similarities with Australia's Automotive Competitiveness and Investment Scheme (ACIS) — provides import duty credits worth between 50 and 100 per cent of the value of automotive investments.

In developed countries, firm-specific incentives are often available. Some recent examples include:

- the provision by the State of Alabama of an assistance package to secure Hyundai's investment in a new assembly plant, which has been variously reported as worth between \$US 123 million and \$US 253 million;
- a regional package worth \$US 244 million provided by the city of Leipzig to secure the BMW plant which will produce the 3 series models from 2005; and
- a \$US 58 million contribution from the UK Government to Nissan to assist the company's reinvestment in the 'Micra' production facility in Sunderland.

However, industry-wide investment incentives can also be part of the assistance package in developed countries. For example:

- Since 1993, under the Partnership for a New Generation of Vehicles program, the US Government has provided annual funding of around \$US 240 million for

automotive R&D directed at improving ‘environmental, competitiveness and innovation outcomes’.

- The UK Government has provided funding worth \$US 140 million since late 1997 for the Foresight vehicle program aimed at stimulating suppliers to ‘develop and demonstrate market driven technologies for use in mass market vehicles of 2020’.
- The Japanese Government has announced that it will be increasing tax incentives and subsidies to support achievement of the goal that one in eight Japanese vehicles be eco-friendly in 2010.

Australia’s ACIS similarly provides industry-wide assistance to automotive firms — some of which is linked to investment in plant and equipment or R&D. The cost of this scheme is expected to average around \$A 560 million a year over the period 2001 to 2005 (see chapter 9).

While these sorts of investment incentives do not directly restrict trade, they can affect the location of production and thereby distort trading patterns. Indeed, to the extent that such measures influence whether an industry or firm exists in a particular country, they could be an even more significant policy issue than tariffs and other border measures. Hence, an important theme in submissions from the industry was that Australia’s automotive assistance regime must continue to recognise that there is competition for global investment and take account of investment support provided in other countries (see chapter 10).

‘Head office’ constraints and other non-government barriers can also impede exports

While global linkages provide a range of benefits to Australian automotive producers, global sourcing policies can be a significant constraint on exports. Indeed, they may sometimes preclude exports to markets where there are no significant trade barriers in place. Thus, as noted in chapter 4, the decision by Ford (US) to export the Crown Victoria to the Middle East has locked Ford Australia out of that market.

More broadly, in discussing the implications of global sourcing policies for its operations, the Australian-owned component producer Air International said:

... there remain powerful impediments to the export of technology and design services — even though there are effectively no tariff or transport barriers. These might best be summarised as the ‘head office’ mentality. (sub. 56, p. 23)

As noted above, Japan’s vehicle distribution system and the EU’s controlled franchised and dedicated dealer arrangements are widely claimed to discriminate

against imported vehicles. However, the intent and impact of those arrangements have been the subject of some debate.

In contrast, there can be no dispute that the ‘understanding’ which certain US vehicle producers have with the UAW to limit importation of vehicles from their overseas subsidiaries, is designed to help support activity and employment in the US industry. This understanding has previously cost Australian firms export business (see box 8.1). Moreover, at the public hearings, Holden said that in the absence of the USA’s 25 per cent tariff on certain light commercial vehicles, demand for its utility in that market would exceed the 20 000 unit ceiling that applies under the understanding between its parent and the UAW (trans., p. 168).

8.3 What is in prospect?

The current round of WTO negotiations should help to improve market access

The latest WTO round of trade negotiations — the Doha Round — is currently in progress. Of particular relevance to the automotive industry will be negotiations on market access for non-agricultural products and the subsidies code.

While negotiations are still at a preliminary stage, and there is a possibility that new provisions for non-actionable subsidies might provide more leeway to developing countries, there should be benefits for Australia’s automotive producers. Thus, the FCAI said that it:

... welcomed the initiation of the new WTO round of multilateral trade negotiations. There is clear scope for the new round to deliver meaningful improvements in international market access on industrial products, including automotive products. (sub. 40, p. 6)

And the Federation of Automotive Products Manufacturers (FAPM) added that:

The strengthened WTO dispute settlement system makes it more difficult for members to block potentially unfavourable findings. This can only speed up the process of global economic integration for the automotive industry. (sub. 37, p. 67)

New accessions to the WTO will also provide opportunities

As well as resulting in lower tariffs and the abolition of local content protection, China’s accession to the WTO will see it phase out import licensing arrangements by the beginning of 2005. As an initial step in this process, China has agreed to allow non-licensed importation of \$12 billion worth of vehicle and component imports (mainly, engines, compressors and air conditioning units). Previously, these

items could only be imported by government agencies or licensed foreign affiliate firms.

Similarly, as part of its recent accession to the WTO, Taiwan has agreed to provide for 10 000 passenger and light commercial vehicle imports from each of a range of WTO members (including Australia) within a tariff quota system (DFAT 2002a). That system will then be phased out by the end of 2010. Imports of vehicles from Australia are currently restricted by quota to around 2 300 units (and prior to 1997 they were banned). Taiwan has also committed to making its investment measures compliant with WTO requirements.

So too will the APEC process

APEC was established in 1989 as a forum to progress the liberalisation of trade and investment among both members and non-members. A milestone for APEC was the 1994 Bogor Declaration in which member countries agreed to the goal of achieving free and open trade and investment in the region, by 2010 for developed member countries and by 2020 for developing member countries.

Unlike WTO agreements, APEC is not predicated on the notion of reciprocal ‘concessions’ by member countries. Nor does it provide for penalties for failure to meet its goals. It seems generally accepted that achievement of the Bogor timetable for free trade and investment in the region is less certain than if it involved a binding agreement.

Nonetheless, in its own right and in supporting the WTO process, APEC should help to achieve further trade liberalisation. For example, consistent with its APEC commitment, Indonesia has foreshadowed further reductions in automotive tariffs by 2003 (APEC 2002). Moreover, lower level initiatives like the APEC Automotive Dialogue — which was established in 1999 to consider issues such as customs and technical regulatory harmonisation and to share information on market access matters — should also be constructive.

8.4 What are the implications for Australian policy?

As noted, given their concerns about restricted access to overseas markets, and their perception that progress in addressing restrictions will be slow, virtually all industry participants argued that reductions in Australian vehicle tariffs after 2005 should be tied to reductions in trade barriers in other markets. This proposed approach raises a number of broad issues concerning the relationship between Australia’s assistance policies and policies in other countries.

Most countries agree on the need to reduce and ultimately remove trade barriers

At the most general level, some might ask why Australia should contemplate reducing assistance provided to its vehicle industry when other countries continue to protect their automotive sectors.

In this regard, however, it is important to distinguish between the goals of countries' trade policies and the transition towards those goals. Notably, all of the major automotive producing countries are members of the WTO — an institution dedicated to promoting trade in goods and services, including automotive products, by removing trade barriers. A number of these countries are also signatories to the APEC Bogor Declaration aimed at achieving free and open trade and investment in the Asia Pacific region. In other words, there is consensus among most countries that industry specific support for the automotive and other industries should ultimately be withdrawn.

But transition paths vary

That said, individual countries are transitioning to this longer term goal, or planning to do so, in different ways. In the case of the automotive industry, this reflects a range of factors, including differences in:

- the stage of development of the industry in particular countries;
- its overall significance in terms of employment and investment to the economies of those countries;
- the degree to which the industry or consumers in particular countries depend on access to imported automotive products — either components or vehicles — to supplement the local product range; and
- the political environment and public awareness of the trade-offs involved in industry protection.

What this means is that the perceived benefits and costs of different paths for reducing, and ultimately removing, automotive assistance will vary across countries. Also, governments' perceptions about the scope to use their automotive assistance as a bargaining chip in trade negotiations (see below) are likely to differ.

Australia should act in its own best interests

The implication is that each country will transition towards free trade in automotive and other products on the basis of what it judges to be in its best interests. This approach should similarly underpin Australia's future assistance regime for the

automotive industry. Thus as Toyota (sub. PP95, p. 9) and the Victorian Government (sub. PP114, p. 17) acknowledged in responding to the Commission's Position Paper, there can be no benefit to Australia from making its assistance arrangements hostage to what other countries choose to do.

As both went on to point out, an approach based on national self interest does not obviate the need for countries to have regard to the impacts of policies applying in other countries when formulating their own assistance regimes. In particular, the possible role of industry-specific assistance in helping to attract and retain footloose global automotive capital is a relevant consideration.

However, what is called into question is the efficacy of a country determining that it will *only* reduce its assistance if other countries do likewise. In effect, such an approach would sideline the range of domestic considerations that are relevant to Australia's decision on whether to further reduce automotive tariffs after 2005. For example, the costs imposed on consumers and other Australian industries by protection for the domestic automotive industry remain relevant in the post 2005 policy calculus (see chapters 10 and 11).

Australia's automotive assistance provides limited bargaining coin

There is also the issue of whether Australia should try to use its remaining automotive assistance as bargaining coin to secure better access to overseas markets. In principle, such an approach could be compatible with promoting Australia's national interest. However, its practical policy relevance will depend on the likelihood that Australia would be successful in this sort of bargaining endeavour.

For good reasons, WTO rules effectively prohibit countries from negotiating product-specific deals limited to individual trading partners. Hence, the use of any bargaining coin attaching to Australia's automotive assistance would be largely confined to WTO negotiations and the current exploration of a number of bilateral free trade agreements (see below).

In its Position Paper, the Commission argued that given that the Australian vehicle market is small and our automotive tariffs are already relatively low, the value of any bargaining coin in these contexts, at least in relation to applied rates, would be limited. Thus, it went on to argue that efforts by Australia to use its remaining automotive assistance as a negotiating lever to secure better access to overseas markets would have little prospect of success.

In their responses to the Position Paper, industry representatives suggested that, in specific instances, Australia's remaining automotive assistance might still provide

some negotiating leverage. The South Australian Government (sub. PP115, p. 60) similarly argued that the Commission had underestimated ‘Australia’s muscle in liberalisation negotiations’.

But at the same time, there was some acknowledgment that the value of Australia’s bargaining coin would generally be limited. For example, at the public hearings, a representative of the FCAI observed:

I don’t think anyone would claim that we had a huge leverage in terms of remaining applied rates, and I think that is borne out [by] the CER-AFTA negotiations and the lack of leverage we potentially had there. (trans., p. 10)

Moreover, there was also recognition that in a WTO context, much of the formal negotiation relates to willingness to reduce ‘bound’ rates rather than applied rates. In Australia, as in many other countries, bound tariff rates for automotive products are considerably higher than the applied rates. To the extent that these higher bound tariffs provide negotiating coin, the option of bargaining would remain open to Australia even were it to further reduce its applied tariffs.

Hence, the Commission remains of the view that bargaining coin considerations are not a cogent reason for maintaining special tariff treatment for the Australian automotive industry.

But continuing efforts to secure better market access for Australian automotive exports are important

This is not to deny the importance for both the industry and Australia of continuing initiatives to prise open restricted overseas automotive markets. As economic modelling commissioned for this inquiry illustrates (see appendix F), Australia has much to gain from improved access to overseas markets across the spectrum of its export activities.

Not surprisingly, therefore, continued endeavours by Australian Governments to improve overseas market access were seen as very important by the industry. In this regard, the FAPM commented on the role that Australia’s negotiators have already played in securing improved access to the Chinese market, and concluded that:

These trade negotiation efforts by the Australian Government are vital to the interests of the Australian automotive industry and are strongly supported by the FAPM. (sub. 37, p. 68)

Both multilateral and bilateral approaches could be helpful

Some participants suggested that there was scope to enhance the role of the WTO in reducing automotive trade barriers. For example, Air International (sub. 56, pp. 40-41) canvassed the possibility that Australia could make a case for reducing the degree of 'leniency' afforded to developing countries in relation to WTO requirements (see appendix box D.1).

In this regard, the current Doha Round appears to provide some opportunities to re-shape the 'special and differential treatment' provisions for developing countries in a way that provides stronger disciplines in the area of tariff reductions, including for automotive trade, and enables their greater integration into the world economy. The broad sectoral coverage and 'single undertaking' nature of these negotiations, also permit developing countries to offer concessions on automotive (and other) barriers in seeking further liberalisation of textiles and clothing barriers and improved access for agriculture in developed countries. Such opportunities are worth pursuing.

A major theme in submissions from the industry and the South Australian Government was that there are limits on what can be achieved by WTO and APEC processes and that therefore greater emphasis should be given to the development of bilateral free trade agreements. Australia has had a bilateral agreement with New Zealand since 1983, and is currently exploring possible agreements with Singapore, Thailand, the USA and, most recently, Japan.

Bilateral agreements are not problem free

At a very broad level, the overall economic impact of bilateral trade agreements will depend on the extent to which they create additional trade, as distinct from merely diverting it from other countries. If the costs of imports from the bilateral partner are high relative to third countries, the trade diversion effect may predominate and there might be little overall economic benefit for either country (and possibly even net costs).

Moreover, while such agreements could be 'building blocks' for multilateral liberalisation, there is a risk that they could entrench discrimination and divert attention from the pursuit of more broadly based trade reform. And, a proliferation of bilateral agreements could lead to a 'spaghetti bowl' of trade rules covering such things as rules of origin, resulting in significant administrative and surveillance costs.

Mooted agreements would have benefits for Australia, though not necessarily for the automotive industry

Notwithstanding these potential problems and risks, recent studies suggest that a number of the free trade agreements which Australia is currently exploring — and particularly an agreement with Thailand — would be beneficial to both parties, provided that their coverage was comprehensive (see box 8.2).

Notably, the study on the impacts of an agreement with Thailand also concludes that the automotive industries in both countries would be significantly advantaged — in part because of the high degree of complementarity in current product ranges. Consistent with these findings, negotiation of an agreement with Thailand is seen by the industry as being of high priority. Moreover, Ford argued:

A comprehensive free trade agreement between Australia and Thailand could do more for the Australian automotive industry than just provide greater access to one market. ... such tangible market access could also potentially expand to other regional growth markets and also facilitate greater global integration for the Australian automotive industry. It is also likely to be able to "link" two industries at an important relatively early phase in the development of the Thai industry.

Ford Australia believes a free trade agreement approach in the case of Thailand is capable of delivering earlier automotive industry benefits than is likely through the Doha WTO round, which could take some years, or the APEC liberalisation process and its focus on 2010/2020 trigger points for developed and developing economies. For an industry in transition, like the Australian automotive manufacturing industry, time is crucial. (sub. PP105, pp. 15-16)

However, the US study also illustrates the important point that even bilateral agreements that benefit a country as a whole, will inevitably disadvantage some activities and industries. Thus, the modelling projections for this agreement indicate that while the Australian economy as a whole would grow, the Australian automotive industry would be adversely affected. The Commission acknowledges that the plausibility of these particular modelling results is open to question. While the projected boost in Australia's automotive exports to the USA is not inconsistent with the evidence of the restrictive effect of the current 25 per cent tariff on certain light commercial vehicles applying in that market (see box 8.1), it is far from clear that US automotive exports to Australia would rise by anything like the amount projected by the model. Nor is it clear that such exports would displace Australian production rather than other imported products. That said, some reticence among industry participants about embracing a free trade agreement with the USA was evident during the inquiry.

Box 8.2 Impacts of mooted free trade agreements on the Australian economy and automotive industry

The likely impacts of proposed free trade agreements between Australia and Thailand, the USA and Singapore have each been the subject of recent studies. Those studies cover both country-level impacts and the effects on particular industries.

Singapore

A recent study undertaken for the Department of Foreign Affairs and Trade by Access Economics indicated that a free trade agreement between Australia and Singapore would offer 'some practical trade and investment benefits as well as some significant strategic benefits'. However, the study suggested that because merchandise trade between Singapore and Australia is already substantially unencumbered, most of the direct benefits for Australian firms would arise in the services sector.

In terms of impacts on the automotive industry, the study observed that there is little direct trade in automotive products between the two countries. But it went on to report concerns from Australian industry associations that without proper policing of rules of origin, there would be a risk of increased transshipment via Singapore of 'pirated' components and Japanese second hand vehicles.

Thailand

A joint scoping study on a bilateral agreement between Australia and Thailand was forwarded to Ministers of both governments in April 2002. It concluded that such an agreement would bring significant benefits for both countries, with quantitative modelling projecting increases of \$US 6.6 billion and \$US 25.2 billion in Australia's and Thailand's GDP, respectively, from comprehensive liberalisation.

The study further suggested that both countries' automotive sectors would benefit from closer integration of the two markets — particularly given the complementary nature of vehicle production (small and light commercial vehicles in Thailand and large cars in Australia). The scope for significantly increased component exports from both countries, as well as greater two-way investment flows in the industry, was also envisaged.

The USA

A recent modelling study undertaken for the Department of Foreign Affairs and Trade by the Centre for International Economics projected that a comprehensive free trade agreement between Australia and the USA would provide a modest boost to Australia's real consumption and GDP of between a third and half of one per cent.

The modelling also projected that Australian exports of motor vehicles and parts to the USA would increase by around 10 per cent, but that much greater growth in US automotive exports to Australia (46 per cent) would see total output in the Australian automotive sector decline by a little under 1 per cent.

Sources: Access Economics (2001), CIE (2001), DFAT and DBE (2002b).

The fact that the automotive or any other individual industry could be disadvantaged by a particular bilateral agreement should not, of course, be decisive in determining whether to proceed with that agreement. That is, the merits of proposed bilateral free trade agreements should be assessed with regard to their likely benefits and costs for Australia as a whole.

But what the preceding discussion illustrates is that bilateral agreements cannot be a panacea for the market access problem of the automotive industry and should not reduce the emphasis given to securing better access through the more broadly-based WTO and APEC forums.

FINDINGS ON MARKET ACCESS:

- *Some progress has been made in reducing trade barriers faced by Australia's automotive exporters. However, significant and widespread barriers remain.*
- *The use of incentives to attract automotive investment may be increasing. Such incentives are also likely to inhibit trade in automotive products.*
- *There are some significant non-government barriers to trade, including the global sourcing strategies of the major automotive producers and the 'understanding' that certain US vehicle producers have with the United Auto Workers to limit their importation of vehicles from overseas subsidiaries.*
- *WTO and APEC processes are likely to improve Australian automotive exporters' access to overseas markets and should continue to be the principal focus for Australia's trade negotiation efforts.*
- *While some potential bilateral free trade agreements that would yield net gains for Australia would also benefit the automotive industry, this will not always be the case. More generally, the bilateral approach has some risks and is not a panacea for Australia's market access problems.*

9 The impacts of automotive assistance

9.1 The historical context

Tariffs were first introduced on vehicle bodies and components in 1907. The protective rates increased over the decades and by the late 1970s, tariffs on passenger motor vehicles (PMVs) peaked at nearly 60 per cent, underpinning quotas which restricted imports to 20 per cent of the market and a local content scheme to promote the use of domestic components. These arrangements, designed to stimulate the development of viable automotive manufacturing in Australia, also served to insulate the industry from external competitive forces. However, in 1985, the focus of automotive policy, consistent with broader changes to industry policy, shifted to one of exposing firms to greater import competition. Reductions in assistance have proceeded gradually and steadily since.

Reductions in assistance have encouraged industry restructuring

Lower tariffs and the removal of other restrictive arrangements have made imports more accessible to consumers. Vehicle producers have been obliged to compete more vigorously against imports (and also for investment capital against companies in their global groups). These pressures have flowed through the production chain with component producers having to match world prices more closely as tariff and quota protection declined and the abandonment of the local content scheme removed the artificial inducement for domestic supply.

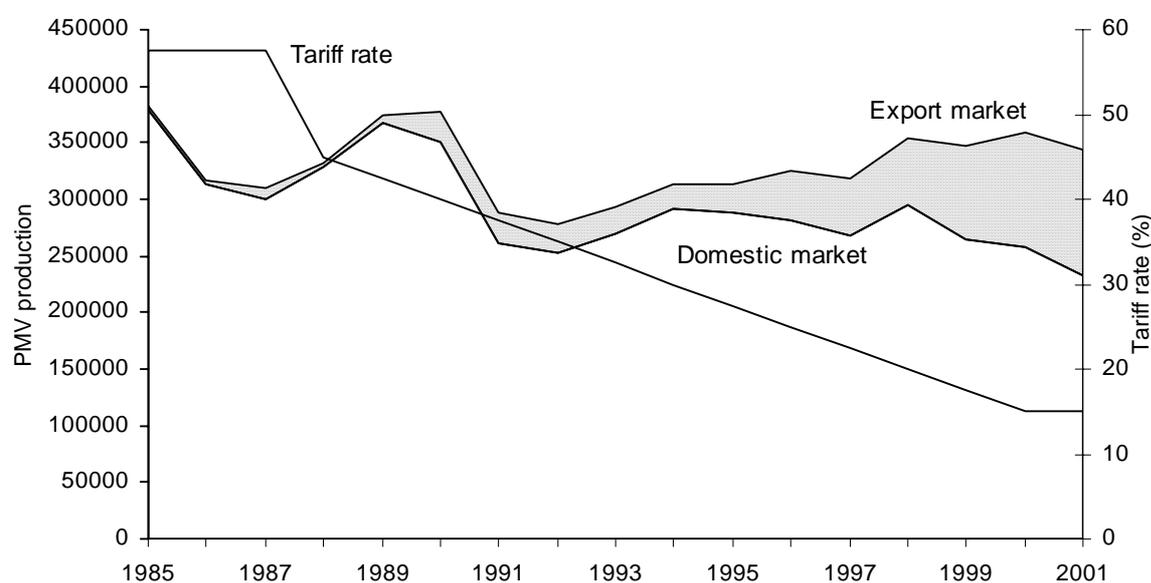
Since 1985, the number of vehicle producers has fallen from five producing 13 models in eight plants, to four assembling five models in four plants. Rationalisation has also occurred throughout the supply chain with the emergence of several large suppliers of some critical components. A decade ago, few would have expected that the industry would be performing so strongly with a 15 per cent tariff. Indeed, the industry has maintained annual production at over 300 000 vehicles since 1994, despite tariffs falling from 30 per cent to 15 per cent over this period.

The import share has risen and the industry has turned to export markets

As tariffs have declined, the share of imports has increased from around 15 per cent of total PMV sales in 1985 to around 60 per cent today. Changing preferences have been a major cause of the decline in local market share. Over time, consumers have increasingly demanded vehicles other than the large locally produced PMVs — such as small cars and sports utility vehicles (see also appendix B, table B.8). In 2001, imports captured 100 per cent of these market segments. In the large car segment, however, the domestic vehicle producers continue to dominate, with a 97 per cent share in 2001.

Faced with a rising share of the domestic market going to imports, the industry has increasingly sought out export markets as a source of growth. This has enabled vehicle producers to sustain their output (figure 9.1). Exports of vehicles and components reached \$5 billion in 2001, nearly double the level in 1998 and more than a tenfold increase since 1985. Moreover, a number of home-grown multinational component firms have emerged, with a presence offshore, and others are deriving income from licensing technologies to overseas firms.

Figure 9.1 Production for local and export markets, 1985 to 2000



Data sources: DIST (1998), DITR (2001, unpublished).

As noted in chapter 4, the local market, while limited, also provides opportunities for growth. Some local vehicle producers are soon to release sports utility vehicles to service the burgeoning market for these ‘lifestyle’ cars. Such developments are indicative of vehicle and component producers not only revealing a capacity to

adjust, but also demonstrating strong competencies in world competitive niche manufacturing.

Industry employment has declined

Industry rationalisation has brought with it significant reductions in employment. Total automotive manufacturing employment has declined by about 30 per cent over the decade to 2001. Nearly all of this decline has occurred in vehicle manufacturing, where the workforce has halved — partly as a result of increased outsourcing of component production (see chapter 3). The maintenance of production levels in the face of declining employment has contributed to the substantial improvements in labour productivity across the entire automotive sector.

Notwithstanding the significance of this decline in employment, industry rationalisation has been relatively orderly. The last vehicle assembly plant closure (Nissan) occurred in 1992.

Consumers and user industries have benefited

Reductions in automotive tariffs have contributed to real price declines for motor vehicles despite a weakening of the Australian dollar. This has benefited private and commercial users and improved the transport options available to the less well off in the community.

Consumers have also benefited from greater choice. When quotas were in place, 80 per cent of new car consumers were limited to purchasing a locally produced vehicle. And with only 20 per cent of the market available to importers, it was larger cars with higher profit margins that tended to fill the available quota. Since the abolition of quotas, consumer preferences for small/light vehicles have been easily met. The range of available models (including passenger, light commercial and four-wheel drive vehicles) has increased from 69 in 1985 to 250 today. In addition, competition from imports and the demands of export customers have contributed to an increase in features in local models (eg. ABS brakes).

But reductions in assistance have not occurred in a vacuum

Reduced assistance has not been the only factor affecting the structure and performance of the automotive industry. Much of the adjustment since the 1980s has coincided with a significant real depreciation of the Australian dollar. This has partially insulated the industry from the import price pressure associated with lower levels of protection. (By the same token, it also has reduced the extent of the cost savings on inputs used by vehicle and component producers.)

There have also been microeconomic reforms, and more recently, taxation reform during this period. While some of these have directly affected the automotive sector — such as more cost-effective transport or reductions in input taxes — others have been more ‘facilitative’, requiring firms to respond in order to gain the benefits. For instance, award restructuring and subsequently the introduction of enterprise bargaining, have contributed to the removal of some restrictive work practices, thereby paving the way for productivity improvements. (However, as noted in chapter 5, there is scope for further improvement in this area.)

More subtly, increasingly vigorous competition has contributed to changes in culture and attitudes by sharpening incentives to pursue available avenues to improve productivity. For example, competitive pressures have encouraged firms to innovate, to benchmark against international best practice and to adopt new technologies (see chapter 10).

Commenting on what it saw as the drivers of performance improvement, Holden said that, in addition to globalisation of the industry, movements in exchange rates and budgetary assistance:

Reductions in the automotive tariff to date have provided a stimulus to the industries improving their performance in terms of product quality, price, productivity, business innovation and export orientation. (sub. 72, p. 65)

Indeed, the profitability performance of the industry over a period in which tariffs have fallen substantially (see chapter 3) is testimony to its adjustment capacity.

9.2 Current assistance arrangements¹

Post 2000 automotive tariffs

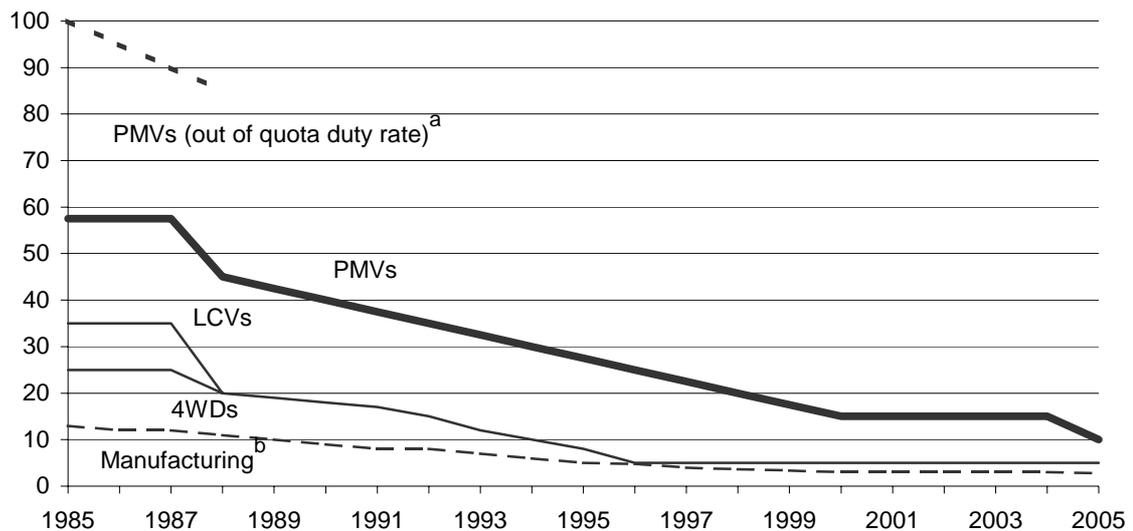
The Government’s post 2000 arrangements commenced on 1 January 2001. Tariffs on PMVs and derivatives and components for these vehicles will pause at 15 per cent before dropping to 10 per cent in 2005. In that year, the automotive industry will receive around double the average tariff assistance afforded the rest of manufacturing (excluding the textiles, clothing and footwear (TCF) industries). However, the gap between tariff protection for the automotive industry and the average for manufacturing has narrowed (figure 9.2).

Apart from PMVs, tariffs of 5 per cent apply to light commercial vehicles (LCVs) and four wheel drives (4WDs) and components for these vehicles, with no changes

¹ Additional detail on these arrangements is provided in appendix E.

currently scheduled. Vehicle tariffs also apply to second hand imports, *plus* a specific tariff of \$12 000 per vehicle. No changes are scheduled for the specific tariff on second hand imports.

Figure 9.2 **Automotive and manufacturing sector tariffs, 1985 to 2005**
per cent



^a Tariff quotas were abolished in 1988. ^b Since 1996, the average rate for manufacturing has been lower than the 'general rate' owing to a large number of tariff items with rates less than 5 per cent.

Data source: Commission estimates.

Anti-dumping and countervailing activity

Dumping is said to arise when a foreign supplier exports goods at a price below the 'normal value' — usually, the price in the supplier's home market. Under WTO rules, a country can apply anti-dumping measures if dumped imports cause, or threaten to cause, material injury to a competing domestic industry. From 1995-96 to 2000-01, 127 anti-dumping and countervailing cases were initiated in Australia. No cases were initiated by firms in the 'transport equipment' sector (PC 2001b).

In discussions, one vehicle producer raised concerns about the price of certain Korean 'entry level vehicles' sold in the Australian market in the past. Importers of Japanese and European vehicles (not aligned to the local manufacturers) said that this was marginal cost pricing by a new entrant to help establish a foothold in the Australian market. Some component suppliers indicated that some foreign firms had entered into supply arrangements with local vehicle producers at 'unrealistic' prices.

Given the lack of anti-dumping initiations in the automotive sector, dumping may not be a significant issue. For instance, the need for component suppliers to often

have a direct relationship with vehicle manufacturers (in some instances, involving sequenced delivery into their production lines) may mean that the automotive sector is less exposed to dumping than some other sectors.

Alternatively, the lack of anti-dumping initiations might reflect:

- reticence on the part of component producers to complicate their relationships with the vehicle producers by initiating anti-dumping actions against foreign firms entering into a commercial relationship with a vehicle producer;
- difficulties in establishing a causal link between an imported vehicle model and injury to a local vehicle producer; and
- the time taken for anti-dumping investigations to be resolved.

Automotive Competitiveness and Investment Scheme

ACIS commenced on 1 January 2001 and will conclude on 31 December 2005. It is intended to operate as a support measure to facilitate the transition to lower assistance. The scheme provides eligible participants with tradeable import duty credits based variously on their production, R&D and investment activities (box 9.1). Duty credits can be used by the firm to which they accrue, or by other importers who have purchased duty credits, to discharge customs duty on vehicles and components.

Box 9.1 Summary of ACIS beneficiaries

Motor Vehicle Producers are eligible for duty credits based on:

- the value of 25 per cent of production of motor vehicles, engine and engine components, multiplied by the automotive tariff rate; and
- 10 per cent of the value of investment in approved plant and equipment used to produce motor vehicles, engines or engine components.

Automotive Component Producers, Automotive Machine Tool and Automotive Tooling Producers and Automotive Service Providers are eligible for duty credits based on:

- 25 per cent of the value of investment in approved plant and equipment; and
- 45 per cent of the value of investment in approved R&D.

In addition, where MVPs produce automotive components (other than engines and engine components), automotive machine tooling or automotive services for third parties, they also can access the 25 per cent plant and equipment benefit and the 45 per cent R&D benefit. (This is discussed further in chapter 11.)

ACIS funding is drawn from two ‘pools’:

- one is capped at \$2 billion for the life of the scheme. It caters for all participants’ claims for duty credit based on their investments in plant and equipment and R&D, plus a proportion of vehicle producers’ claims for credits relating to their production; and
- the other is an uncapped pool catering only to vehicle producers’ claims for some of their production credits. This is estimated to cost around \$840 million.

Thus, ACIS will provide around \$2.8 billion over five years. No claimant can receive benefits exceeding 5 per cent of its sales in the preceding year.

ACIS claims are ‘modulated’

As projected claims over the life of the scheme exceed the funding available for the capped pool, these claims are modulated. This involves:

- estimation of the total amount of claims for duty credit for each participant over the life of ACIS, taking into account their 5 per cent of sales funding caps;
- determination of how much ACIS funding remains relative to the total amount of anticipated duty credits;
- determination of a modulation factor to ensure that total expenditures remain within the \$2 billion cap;
- application of the modulation factor to each participant’s claim; and
- payment of the modulated claim up to a maximum of 5 per cent of the participant’s previous year’s sales.

The modulation rate is currently 0.71. According to Department of Industry, Tourism and Resources, modulation is sequenced this way to ensure that participants have the potential to earn 5 per cent of their previous year’s sales. However, several participants said that modulation was having such an impact that achieving this level of benefit was infeasible.

The vehicle producers receive the greatest benefit

At the current modulation rate, the projected distribution of the \$2 billion *capped* pool is around \$1 billion to the vehicle producers, and \$950 million to component producers, with the remainder going to the toolers and service providers.

Overall, the vehicle producers are expected to receive around \$1.8 billion (65 per cent) of the total \$2.8 billion available. Around 85 per cent (\$1.56 billion) of their

projected benefit comes from production credits. The remainder (\$280 million) is derived from investments in plant and equipment and R&D for third parties.

The component sector is projected to derive over 60 per cent of its credits (\$579 million) from R&D activity and 40 per cent (\$369 million) from investments in plant and equipment. The toolers and service providers are more R&D intensive — drawing over three quarters of their entitlements from R&D activity (DITR, unpublished).

Duty credits are fungible

Being fungible and tradeable, duty credits are comparable to cash. Indeed, many component producers sell their credits to vehicle importers — currently for around 95 to 98 cents in the dollar. They are therefore equivalent in their impact to a cash payment which can be used for any purpose such as R&D, investment, export market development and training.

Like any subsidy payment, ACIS credits will have an impact on activity levels in the industry with the benefits ultimately shared between shareholders, customers, suppliers and employees. While the distribution of ACIS benefits between these groups is unclear:

- the bargaining power afforded unions by just-in-time production processes could mean that a higher share flows to labour than would be the case in many other activities (were they to receive similar support); and
- vehicle producers appear to have been able to use their market power to *extract* some of the ACIS benefit earned by suppliers — it is standard procedure for vehicle producers to impose stringent purchasing conditions and cost downs on suppliers.

A new mechanism to deliver an old subsidy

Although ACIS is ostensibly a transitional program to help secure change, its design is such that it delivers a similar quantum of support as previous arrangements, but in a manner which sought to address the vulnerability of the Export Facilitation Scheme (EFS) to challenge as a prohibited subsidy under the WTO. ACIS removes the link between assistance and exports in favour of a more general production subsidy (for vehicle producers) that is not tied to any particular end-use. In addition, for all participants, ACIS extends assistance to R&D and investment, which are avenues of support generally regarded as more benign from a WTO standpoint.

Other government assistance

The industry also receives support from general budgetary measures

The automotive industry receives budgetary assistance from a range of Commonwealth programs which are applicable to all industries — in 2000-01, such support totalled around \$120 million (PC 2001b). The most significant sources of funding were the development allowance, R&D incentives and the TRADEX concession.²

Ad hoc assistance is substantial

Invest Australia, a Commonwealth body, aims to attract to Australia investment in projects with significant net economic and employment benefits that would have otherwise located offshore. Under the Strategic Investment Coordination (SIC) program, Holden received \$12.5 million to establish a new V6 engine plant in Victoria.

Mitsubishi also sought additional assistance from the Commonwealth — in this instance, to increase the capacity of its vehicle production facility. In April 2002, the Government announced that Mitsubishi had accepted \$35 million in cash assistance (plus further assistance from the South Australian Government — see below). The Commission understands that the assistance to Mitsubishi did not meet the SIC criteria and it remains unclear on what basis it was provided.

And purchasing preferences also provide support

The automotive industry also benefits from Commonwealth vehicle fleet arrangements which provide that vehicles purchased by government agencies must be made in Australia by vehicle producers which satisfy the criteria for registration under ACIS. Imported vehicles with an engine capacity of less than 2000cc can be purchased only if marketed by local vehicle producers.

Similar preference arrangements have been adopted by State Governments and, to a lesser extent, local governments.

² Some participants submitted that TRADEX is not 'assistance'. However, as in other industries, in coming to a view on the extent to which government policies facilitate (or hinder) an industry, such support is relevant. For example, the tariff protection afforded to a particular component producer will overstate the assistance it receives, if tariff concessions mean that duty is not actually paid.

State Governments have also been active

The automotive industry also receives assistance from the Victorian and South Australian Governments. Information on state-based assistance to the industry is not readily accessible. However, some indicative examples are provided in box 9.2.

Box 9.2 Examples of State Government assistance

- In December 2000, Holden announced that it would build a new V6 engine plant in Victoria. The Victorian Government offered a special package to secure the Holden investment, although the conditions were not revealed.
- In March 2001, the South Australian Government announced that Mitsubishi had accepted a State-funded interest free loan package to the value of \$20 million. Half of the loan will be waived if certain export and job creation targets are met. In April 2002, the South Australian Government made an additional financial commitment, bringing its total reported commitment to around \$50 million.
- In November 2001, the Victorian Government announced that Ford had decided to invest \$500 million in Victoria to produce a new 4WD vehicle. The Victorian Government will provide assistance to the project largely in the form of payroll tax relief, with further assistance being provided through funding for industry infrastructure, training and R&D.

Sources: Bracks (2000, 2001), Minchin (2000), PC (2001b).

Discussions with State Governments have indicated that performance criteria may be attached to the provision of automotive industry assistance. In some cases, for example, assistance has apparently been linked explicitly to the achievement of certain employment outcomes. In some instances, broad information about State industry support measures may be made public retrospectively. However, the details of offers of assistance that have not been accepted generally remain confidential.

At a broad level, the merits of such assistance raise the same sorts of issues as assessments of the tariff and ACIS. However, the efficacy of State Government support would be particularly questionable if its primary impact was merely to entice activity across state borders. There have been reports that the recent decision of Castalloy (based in Adelaide) to build a new foundry in northern Adelaide followed offers of incentives from the Victorian Government for the firm to transfer its operations to that state. This is said to have led the South Australian Government to offer counter-incentives to keep the company in Adelaide (Canberra Times 2002). These matters are discussed further in chapter 11.

What does all this assistance add up to?

Tariffs are worth at least as much as the ACIS

For vehicle production, tariffs are akin to a production subsidy (combined with a tax on consumption of imports — discussed later). However, for products such as vehicles, it is often difficult to assess the effects of tariffs, and estimates of their equivalent value as a production subsidy depend critically on assumptions made about their price raising effects (box 9.3).

Box 9.3 Putting a value on automotive tariffs

It is possible to estimate the amount of money necessary to provide the vehicle production sector with an equivalent level of assistance to the tariff. This so-called gross subsidy equivalent (GSE) of output tariffs is a measure of the change in vehicle producers' gross returns as a result of tariff protection. Calculated in a standard assistance measurement framework, the subsidy equivalent of the 15 per cent PMV tariff would amount to around \$840 million (based on 2001 production values).

The validity of assumptions underlying GSE measures have been questioned in the past by vehicle producers. The key area of debate centres on the validity of imputing the price raising effects of tariffs, in full, to all locally produced vehicles. If imported vehicles are not perfect substitutes for domestic vehicles, then the GSE will overstate the price raising effect of the tariff.

However, the industry clearly sees the tariff as valuable. This indicates that, if the price effects of the tariff are small, the quantity shifts — that is, greater market share for local producers — must be significant. Either way, returns to producers are increased.

Calculated in a standard assistance measurement framework, the subsidy equivalent of the 15 per cent PMV tariff would amount to around \$840 million (based on 2001 production values). However, given the sensitivities associated with such estimates, the Commission sought comment from vehicle producers on this matter. Some contended that, from their perspective, the assistance delivered by the tariff and ACIS is broadly equivalent. This would imply a subsidy value of the tariff of around \$360 million a year (based on the \$1.8 billion that vehicle producers are projected to receive under ACIS over five years).

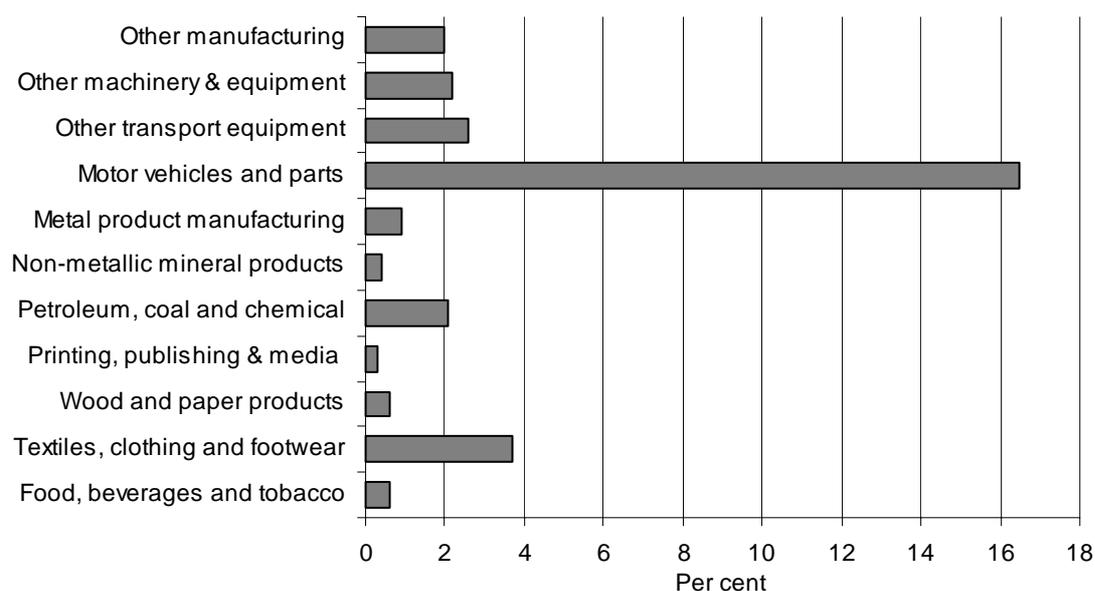
Non-tariff assistance is worth around \$700 million a year

For the 2000-01 financial year, total Commonwealth budgetary assistance provided to the automotive industry was around \$730 million, derived from revenue forgone under the ACIS and its predecessor scheme (\$599 million), the Automotive Market

Access and Development Strategy and SIC funding (\$10 million), and general measures (\$119 million — see appendix E).³

The preferment accorded the automotive sector relative to other manufacturing activities is reflected in estimates of budgetary assistance as a share of value added (figure 9.3). This primarily reflects the extent of assistance delivered through ACIS.

Figure 9.3 Budgetary assistance for manufacturing expressed as a share of industry gross value added, 2000-01^a



^a Estimate for the motor vehicle and parts sector. Excludes the \$88m forgone in 2000-01 under the now lapsed duty free allowance.

Data source: Based on data contained in PC 2001b, p. 56.

Adding up tariff and budgetary assistance

Aggregation of the subsidy equivalent of the tariff (\$360 million per year based on the industry's lower bound estimate), ACIS subsidies (\$560 million per year) and general support measures (\$120 million per year), gives a total of at least \$1 billion per year in industry assistance. This equates to over \$2 800 per locally produced vehicle. While such 'gross' estimates are useful for providing a broad indication of assistance to the automotive industry, they are not particularly revealing about its relative standing with other domestic activities.

³ Estimated support for 2000-01 reflects six months of ACIS and the former arrangements respectively. It includes part of the SIC grant to Holden (paid over several years), but excludes the \$35 million grant for Mitsubishi.

The ‘effective rate of assistance’ is a long standing and widely used methodology for estimating the *net* impact of the benefits that the output tariff provides to an assisted industry, the taxes that tariffs impose on inputs used by that industry and its budgetary assistance. Effective rates are most useful where an economy is replete with activities with high and disparate levels of assistance. However, given the sensitivity of the estimates to variations in assumptions, their usefulness is limited in lower, more uniform assistance environments.

Each year the Commission publishes assistance estimates for all manufacturing activities, including a general category called ‘PMV industries’. For that category, the latest published estimates indicated an effective rate of around 15 per cent for 1999-2000 (PC 2001b).⁴ For this inquiry, the Commission has produced more detailed assistance estimates confined to those activities which fall within the terms of reference. Based on this classification, the Commission estimates that in 2001 the effective rate of assistance for *both* the vehicle production sector and the components sector was around 30 per cent, compared to the manufacturing average of around 5 per cent. Further, in 2005, when the PMV tariff will fall to 10 per cent, the Commission estimates that the effective rate for each of these sectors will be around 20 per cent, compared to an average rate for manufacturing of just over 4 per cent (see appendix E).

Some participants provided their own effective rate estimates. For example, the Federation of Automotive Products Manufacturers (FAPM) considered that the effective rate for component production in 2005 would be between 6 and 13 per cent and that the corresponding rate for vehicle production would be 33 per cent. In contrast, Holden contended that the effective rate would be higher for the component sector, given the lower tariffs on that sector’s inputs relative to vehicle production.

At least in a high assistance environment, significant variations in effective assistance between these sectors would be of concern from a resource allocation perspective — possibly to the extent that there could be a case to change the relativities (distribution) in assistance between these groups.⁵ Indeed, Holden drew on its calculations in arguing for changes to ACIS (see chapter 11).

⁴ The effective rate for manufacturing as a whole was around 5 per cent and for agriculture around 6 per cent. For mining, it was negative — the overall effect of tariffs has been to penalise that industry (PC 2001b).

⁵ It is the disparities in assistance across the economy (including services as well as manufacturing and primary industries) that matter in terms of an efficient allocation of resources and community welfare. Wide deviations in assistance across industries, and in particular between similar activities, distort production and consumption patterns. While the disparity between automotive and total manufacturing assistance is still significant, in absolute terms it has fallen substantially.

However, as explained in appendix E, the divergences in effective assistance between the component and vehicle production sectors suggested by some participants are not supported by the standard measurement methodology. As noted, the Commission considers that the effective assistance afforded to these two sectors is broadly comparable. This is further reinforced by the modelling results which project similar reductions in output from the base case for the two sectors were assistance to be reduced (see appendix F).

More importantly, given the lower and more uniform assistance environment prevailing today, and with further reductions in tariffs in prospect, in the Commission's view, the key policy issue is to ensure a smooth transition path to the general levels of support applying to the manufacturing sector, rather than seeking precision in effective assistance between constituent parts of the automotive industry.

In this light, the key inferences which should be drawn from the effective rate estimates are that:

- automotive assistance is falling — in 1985 the effective rate of assistance for the component sector was over 150 per cent and for vehicle production over 250 per cent, compared to 25 per cent for manufacturing as a whole; and
- the automotive industry still receives greater assistance than other activities (apart from TCF) and is therefore advantaged in competing for resources. Thus, it is likely to be larger than it would be if all manufacturing (and other) activities were assisted more equally. (This is supported by the economy-wide modelling — see appendix F).

9.3 Impacts of assistance — the industry view

The tariff supports the domestic industry

For the vehicle producers, the PMV tariff enables higher returns from local production, through a combination of higher prices and greater market share. For component suppliers, the tariff increases the price of substitutable imported inputs, which is regarded as important in their negotiations with the vehicle producers.

Moreover, the PMV tariff is seen as important in a wider sense because of the linkages between the vehicle producers and supplier industries throughout the production chain. Thus, to the extent that the PMV tariff enables the vehicle producers to increase their production, this has flow-on effects in terms of the derived demand for inputs from suppliers.

There is much anecdotal evidence on the benefits of ACIS for the industry

ACIS is only in its second year of operation. While the projected disbursement of funds is known, detailed evidence on its effects is limited. As the FAPM indicated:

Accurate assessment of the impact of ACIS is difficult for two reasons. First, the Scheme has been in operation for only one of a scheduled five years. Second, the effects of ACIS are mixed up with a whole range of other factors which affect performance ... (sub. 37, p. 77)

Consequently, most of the views reported below are based on anecdotal evidence. After the release of the Position Paper, the industry made available a study, prepared by Deloitte Touche Tohmatsu (DTT 2002), on the impacts on ACIS. Findings from this study, which was based on surveys and interviews, have been included below.

ACIS rewards, and helps to secure, R&D and investment

ACIS is commonly perceived as an important mechanism for facilitating R&D and investment by providing access to capital. Reflecting the value of ACIS, industry support for the scheme is just about unanimous. All contend that ACIS rewards firms for undertaking the sorts of activity required to improve the industry's international competitiveness (box 9.4). Many firms submitted that ACIS is the prime reason that they are able to invest in capital, R&D and training to improve their efficiency and keep abreast of technological developments.

These sorts of views were encapsulated by the key associations. For example, FAPM (sub. 37, p. 7) noted that 'without ACIS, it is extremely doubtful whether the industry's relatively low return on funds employed would be sufficient to finance the change required over the next decade'. It said that expenditure by component producers on plant and equipment had averaged \$293 million per year for the two years prior to ACIS and would average \$442 million per year for the first two years of ACIS. On the same basis, expenditure on eligible R&D is projected to increase from an average of \$276 million to \$295 million.

The Federal Chamber of Automotive Industries (FCAI) also sought to quantify the benefits of ACIS in reporting that:

Over the five-year life of ACIS, investment in plant and equipment and R&D by the four Australian vehicle manufacturers is anticipated to be over \$2.5 billion higher than would have been the case in the absence of ACIS. (sub. 40, p. 73)

This gives one benchmark against which to assess the extent to which ACIS generates investment, given that the four vehicle manufacturers are expected to draw about \$1.8 billion from ACIS over the five year period.

Box 9.4 **Some participants' views on ACIS**

Toyota submitted that ACIS has had a range of positive impacts including:

- helping vehicle manufacturers and leading tier one component producers bear the costs associated with working with the broader supplier base to improve their quality and efficiency performance to world standards;
- assisting Australian subsidiaries of international companies to secure new investment when competing with other overseas subsidiaries; and
- supporting efforts by component producers to dramatically increase their innovation capabilities. (sub. 39, p. 26)

Robert Bosch Australia (RBAU) said:

... there is a strong causal link between ACIS and RBAU's ability to:

- initially win key projects;
- ensure the continuity of these projects in Australia through successive generations of product development; and
- enhance the features or technology of a product or process. (sub. 47, p. 32)

Calsonic Australia submitted that ACIS funding has enabled it:

... to convince the parent company to continue to take a long term view of the Australian business and to start to create the necessary infrastructure which is necessary in order to effectively compete with global competition ... (sub. 31, p. 2)

aiAutomotive stated that ACIS funding supports:

... ongoing investment both in plant and equipment and research and development. These ongoing investments will ensure that aiA is able to position itself as a Tier 1 supplier for metal forming and fabrication as well as E Coating. (sub. 8, p. 1)

In elaborating on the role of ACIS in supporting investment, many participants said that the scheme assists domestic subsidiaries of automotive multinational firms to secure funding from their parent companies. Many global automotive firms have a strong R&D presence in several countries, including Australia. Some participants indicated that ACIS has facilitated a continuing R&D presence in Australia and/or the attraction of R&D that might otherwise have been conducted offshore. For example, PBR International (sub. 63) submitted that, without ACIS, Australia might not remain the knowledge centre of its global business in the long term as other factors might support a decision to move R&D to North America.

More generally, some firms reported that the assistance regime indicates that the Australian Government is prepared to support the automotive sector and that this, in turn, provides a degree of 'comfort' for head offices. Some added that, without ACIS, their overall performance may not be acceptable to their parent companies.

Impact of ACIS on the industry — some survey evidence

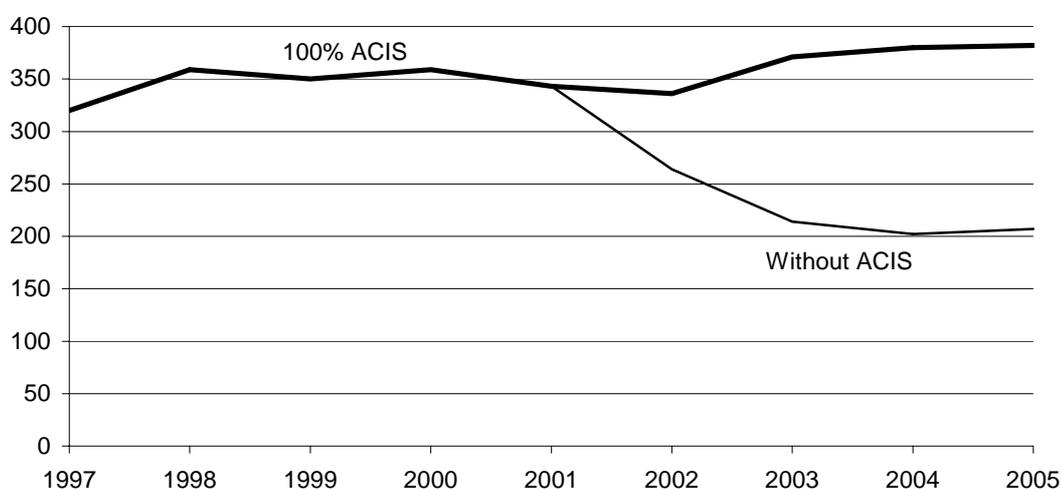
A survey conducted on behalf of the FCAI and FAPM (DTT 2002) asked respondents to estimate various outcomes in scenarios ‘with ACIS’ (assuming no modulation) and ‘without ACIS’. At face value, the results — which include responses from the four vehicle producers and 44 component producers — suggest that ACIS has had a strong impact on industry behaviour.

For instance, survey respondents’ claims would suggest that, had ACIS not been implemented, then for the period 2002 to 2005:

- vehicle producers’ sales would fall by around \$17 billion (39 per cent), R&D expenditure would fall by \$713 million (60 per cent) and expenditure on plant and equipment would fall by \$1.3 billion (49 per cent); and
- component producers’ sales would fall by around \$2.9 billion (19 per cent) — a result seemingly at odds with the estimated fall in vehicle production — R&D expenditure would fall by \$344 million (39 per cent) and expenditure on plant and equipment would fall by \$291 million (32 per cent).

The survey results further suggested that the removal of ACIS ‘would have a devastating impact on the industry’s future production’ (DTT 2002, p. 11). On the basis of responses, were ACIS removed, vehicle production in 2005 would collapse from a projected 377 000 vehicles to 205 000 vehicles. If accurate, this would not only be a reduction in future output, it would also represent a significant reduction on pre-ACIS production levels (see figure 9.4).

Figure 9.4 **Survey respondents’ estimates of the impact of ACIS on motor vehicle production volumes**
‘000s of vehicles



Data source: DTT (2002).

On the matter of investment attraction, respondents were asked to rank (from negative to high) the impact of ACIS on their ‘ability to win the mandate for manufacturing investments in Australia’ (see table 9.1). While the four vehicle producers said ACIS has had a high impact, respondents for the component sector provided more varied responses.

Table 9.1 Survey respondents’ views on the impact of ACIS on the ability of firms ‘to win the mandate for manufacturing investment in Australia...’
per cent

	<i>High</i>	<i>Medium</i>	<i>Low</i>	<i>No impact</i>	<i>Negative</i>	<i>N/A</i>
Vehicle producers						
funded by Australian business’	100	0	0	0	0	0
funded by overseas business’	50	25	0	0	0	25
Component producers						
funded by Australian business’	26	26	21	16	0	12
funded by overseas business’	26	12	19	26	0	19

N/A Not applicable.

Source: DTT (2002).

The survey data has significant deficiencies

The extent of the industry’s reliance on ACIS implied by the survey appears to be overstated. For instance, the Commission finds it difficult to accept that, in the absence of ACIS, vehicle production would plummet to the levels implied — particularly given no change in the tariff rate until 2005. As noted, there are also inconsistencies which raise significant questions about the survey results.

It is well established that questioning the direct beneficiaries of a subsidy program about its impacts, particularly when that program is under review, will lead to ‘strategic’ responses. This was readily acknowledged by participants at the public hearings:

... I think it is fair to acknowledge that there is a degree of subjectivity and variation in those responses, and I wouldn’t disagree that there is some risk of a more positive attitude than a less positive attitude in the survey. (FCAI, trans., p. 14)

... when you take that data generally, it does become, to some extent, a blancmange and needs to be discounted because of enthusiasm. (Air International, trans., p. 43)

Nevertheless, when taken together with submissions, discussions with participants and the modelling results (appendix F), the survey supports the contention that

ACIS is promoting growth in the automotive industry. Indeed, it would be surprising if a subsidy of this magnitude did not have some effect on activity levels.

9.4 Impacts of assistance — the view from others

Most participants outside the automotive industry did not take issue with ACIS. Their concerns revolved more around the impacts of tariffs on the competitiveness of user industries and household income (box 9.5). More specifically, they contended that:

- higher costs for user industries discourage investment to expand output which, in turn, reduces employment and demand for inputs from suppliers. Where such firms are involved in exporting, their international competitiveness is reduced owing to the inability to pass these costs on to world markets; and
- higher prices for cars reduce household income for spending on other goods and services, which in turn deters investment and employment to supply those goods and services.

These sorts of costs are, of course, the ‘standard’ costs that result from tariff protection. In effect, tariffs increase the return on domestic production of PMVs and tax imported vehicles. Thus, there is a transfer from consumers to domestic producers (the GSE — see above) and also to the Government (tariff revenue). The sum of these influences is termed the consumer tax equivalent.

While the degree to which tariffs influence the price of domestically produced vehicles can be debated (see above), the price effects of tariffs on imports are much clearer. For example, an imported vehicle with a customs value of \$10 000 will incur a tariff penalty of \$1500 (with a 15 per cent tariff) which subsequently will be magnified by the imposition of the GST and stamp duties. As imports now comprise around 60 per cent of domestic PMV sales, it is evident that, even if some of this impost is absorbed by importers, consumers of the majority of new PMVs are paying a significant tariff-related impost on their purchases.

The Commission estimates that, in 2001, the consumer tax equivalent was around \$1.9 billion, with around \$1 billion appropriated by the Government in the form of tariff revenue (before ACIS). Given the reservations described above in relation to the GSE, this is an upper bound. Nonetheless, the transfer from consumers is substantial and a prime reason why user groups take issue with automotive tariffs, notwithstanding that rates are now much lower than in the past.

Box 9.5 **Automotive tariffs — views from outside the industry**

The Australian Automobile Association said:

... assistance arrangements, taxes and charges inevitably lead to higher priced vehicles for motorists. Higher prices discourage the purchase of newer cars which are, in general, safer and more environmentally friendly ... (sub. 70, p. 3)

The Australian Consumers' Association submitted that:

Tariffs reduce consumer purchasing power ... Assistance to the ... automotive industry cost Australian consumers around one billion dollars in year 2000. (sub. 18, p. 1)

The National Farmers' Federation said that:

Australian farmers are particularly hurt by domestic tariffs as they not only impose higher input costs on the sector, but the nature of international commodity markets mean that these costs cannot be passed on In effect, non-protected industries involuntarily subsidise inefficient and protected industries. (sub. 64, p. 8)

The Western Australian Chamber of Commerce and Industry contended that:

These [tariff] distortions have flow-on effects in the economy. The higher domestic prices caused by the tariff eat into disposable incomes which in turn reduces demand in industries unrelated to the protected sector. (sub. 61, pp. 3-4)

The Department of Treasury and Finance of Western Australia stated that:

... the presence of a tariff on PMVs greater than the general rate of tariffs, and the operation of the ACIS, are detrimental to output and welfare in the Australian economy as a whole. (sub. PP104, p. 2)

The Royal Automotive Club of Victoria submitted that:

A reduction in tariffs further from 10% to the manufacturing average ... has the potential to reduce prices of imported new cars by 6-7% — clearly a benefit to consumers. (sub. PP116, p. 4)

The Australian Greenhouse Office and Environment Australia reported that:

... the higher prices for vehicles sold in Australia, resulting from the current tariff of 15 per cent, encourage motorists to hold on to their vehicles for longer, thereby slowing the penetration of emission-reduction technology and newer, more fuel efficient, vehicles in the national car park. (sub. 62, p. 6)

9.5 **Broader considerations**

Although ACIS represents a means to deliver a similar quantum of assistance as previous arrangements, it is fundamentally a new scheme with a new rationale — that is, to provide transitional assistance 'in the context of trade liberalisation'. This is widely acknowledged by the industry. For example, FAPM said:

... the purpose of ACIS is to improve the automotive industry's investment and competitiveness in the lead-up to the planned implementation of free trade under the APEC Bogor Goal in 2010. (sub. 37, p. 40)

It is in the context of a transitional mechanism, that it is important to ensure that those investing in the scheme — the Australian community — are receiving commensurate benefits.

Does ACIS pull the right strings?

The linking of duty credits to production, R&D and investment reflects a need to provide WTO-compliant assistance. There is a well accepted case for government support for R&D where market forces might lead to its under-provision and where governments can intervene in ways which improve outcomes for the community.

The extent to which firms conduct R&D is largely determined by their perceptions of the likely payoff. If they consider that they cannot capture enough of the benefits to make it worthwhile, the R&D may not proceed. Yet, this forgone R&D may have generated substantial spillover benefits for society as a whole, which go well beyond the private benefits. It is this divergence between private and social benefits which underpins interventions such as patents (to ensure that those conducting research can appropriate sufficient benefit to make it worthwhile) and/or financial incentives (to encourage firms to undertake socially worthwhile, but privately unprofitable, R&D).

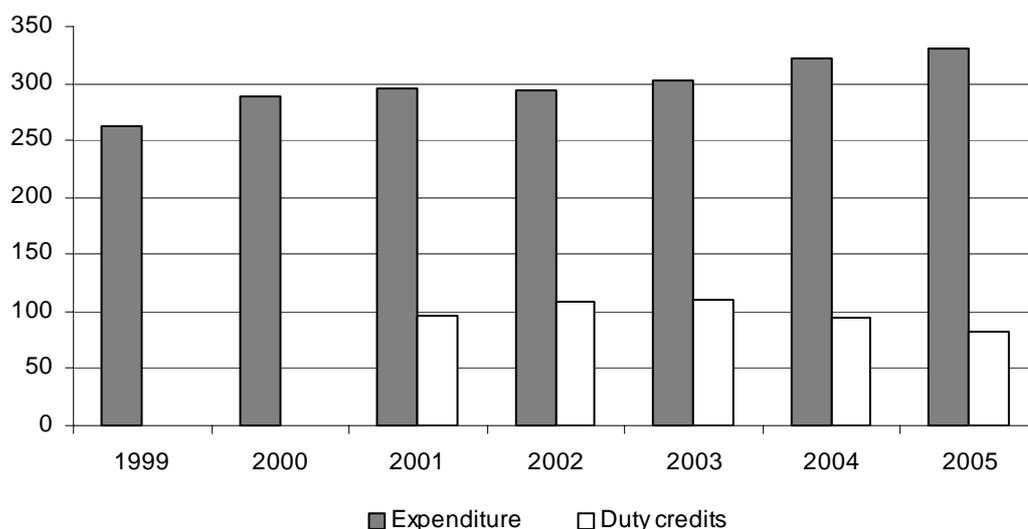
In the Australian automotive industry, the bulk of R&D activity claimed under ACIS involves modifications to existing products, processes and production systems. This could include, for example, ‘stretching the platform’ of a vehicle to produce a niche variant, or research into making a work station more productive. These sorts of activities may have applications for other industries — that is, positive spillovers. However, it is also possible that firms would appropriate enough of the benefits from such firm-specific investment to make it worthwhile to proceed given that this type of development work is a necessary response to competitive pressures. It is for this reason that such activities are typically ineligible for general R&D assistance.

The extent of ‘additionality’ from subsidised R&D through ACIS is difficult to gauge. Apart from the survey data reported above, there are also official AusIndustry data based on the industry’s projections for future ACIS claims, which cast some doubt on the extent of additionality claimed in the survey (see above).

For the components sector as a whole, expected investment in eligible R&D and expected ACIS credits earned are shown in figure 9.5. Relative to R&D expenditures made in the non-ACIS years of 1999 and 2000, it seems that ACIS

could possibly ‘reward’ R&D to a greater extent than it will generate additional activity.⁶

Figure 9.5 Component sector: expected eligible ACIS R&D expenditures and expected R&D duty credits earned
\$ million



Data source: Data extracted from FAPM, sub. 37, p. 43, table 3.3.

However, the subsidy clearly needs to be linked to some form of activity — whether production, R&D, investment or some other indicator. As discussed in chapter 11, viewed in a transitional assistance context, it may not matter a great deal in the long term whether this relates to production or to spending on investment in R&D. Firms presumably invest in plant and equipment and R&D with the objective of boosting the value/profitability of their output. In this regard, the DTT survey found that ‘even though ACIS does not currently specifically reward “own use” R&D activity, ACIS benefits are in fact being applied to this activity’ (DTT 2002, p. 25).

Does ACIS facilitate the transition to an internationally competitive automotive industry?

It is axiomatic that where an activity is subsidised, more of that activity will occur. Hence, in the absence of ACIS it is likely that:

⁶ Interpretation of these data is subject to the usual problem of not knowing what expenditures would have arisen (or would have been reported) in the absence of the subsidy. The component sector also received funding from the former EFS (around 35 per cent of the total), compared to about half of the capped ACIS pool. While EFS funds were tied to exports, some of that benefit may have been used to underpin component sector investment in R&D in 1999 and 2000.

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- some of the observed investment in R&D and plant and equipment would not have occurred at all or would have occurred later; and
 - some R&D being conducted in Australia would have occurred offshore.

However, as figure 9.5 indicates, the significance of such effects are unclear. More generally, there are risks in always ascribing increases in activity (whether R&D, production or investment) that arise from subsidisation as ‘benefits’. For example, in the case of an uncapped subsidy, there would come a point where the value to the community of the additional activity generated would fall below its cost. It is a matter of judgement whether this point has yet been reached in relation to ACIS.

There is also potential for subsidy schemes to frustrate, rather than facilitate, adjustment — and this is particularly relevant for a transitional assistance regime. For instance, some firms claimed they may not be viable without ACIS. This raises the prospect that the scheme could be inhibiting rationalisation that may be in the long term interests of the industry. As Spurling submitted:

At the very least, for however long industry specific assistance remains, that assistance should not help firms resist the forces of rationalisation. And where possible it should actively assist the process ahead of other objectives. (sub. 36, p. 19)

This is an important issue for the composition and quantum of assistance delivered by any future transitional assistance regime.

FINDINGS ON THE IMPACTS OF ASSISTANCE

- *Reductions in assistance to date have contributed to the rationalisation of the automotive industry, encouraged a stronger focus on export markets and provided incentives for higher productivity. Consumers and business users have benefited significantly.*
- *The automotive industry continues to receive tariff protection above the average for manufacturing as a whole and significantly greater budgetary assistance than any other sector. This has benefited the industry, as well as some other related activities. But it also imposes costs on the wider community and, in particular, consumers and business users of vehicles.*
- *The rationale for ACIS is to provide transitional support in the context of trade liberalisation rather than to inhibit rationalisation that may be in the long term interests of the industry. To date, it appears that ACIS, which is widely supported by the industry, has generated additional investment in plant and equipment and R&D in a manner consistent with its objectives.*

10 Issues in formulating post 2005 assistance options

10.1 The objective: improving community welfare

The terms of reference request the Commission to identify policy options ‘which would assist the sector to achieve long term sustainability’, bearing in mind the Government’s desire:

- for an internationally competitive and globally integrated automotive manufacturing sector; and
- to improve the overall economic performance of the Australian economy.

What is required therefore are policy options which can ultimately deliver a sustainable and competitive automotive industry without detracting from overall economic performance. Accordingly, the reference emphasises the need to assess the impacts of options on employment, consumers, resource allocation, regional Australia, and growth prospects generally. This seeks to encapsulate all dimensions which bear on the welfare of the Australian community, including consideration of the transition as well as the end point.

The reference also requires the Commission to have regard to ‘Australia’s commitment under APEC to achieve free and open trade and investment by 2010 and its obligations in respect of WTO (subsidies) and our broader trade liberalisation objectives’. While these commitments bear on the merits of different options, they should not be considered in isolation from other factors impinging on assistance policy choices.

10.2 Participants’ views on future assistance policy

The automotive industry saw benefits in retaining the status quo

Virtually all participants from the automotive industry, the unions and the Victorian and South Australian Governments were largely in agreement that there should be

no change to broad industry policy settings before 2010 and then only when other countries reduce their automotive assistance. In support of this position, industry participants put a range of arguments.

- The industry was seen as having special characteristics — such as the extensive generation of spillover benefits for the economy.
- Current levels of assistance were:
 - claimed to be no longer generous relative to those which other countries provide to their automotive industries;
 - seen as helping to attract footloose capital which is necessary given the Australian industry’s intrinsic disadvantages from isolation, a small domestic market and lack of scale; and
 - considered important for signalling to global companies that the Australian Government is committed to the domestic industry.
- It was argued that the benefits of assistance reductions to the economy would be small.
- Assistance reductions were seen as involving significant transitional costs for the industry, possibly even resulting in ‘over-shooting’ — in which case, the industry might not be able to recover lost activity that would have been sustainable in the longer term under a more cautious approach.
- It was argued that Australia’s international obligations need not be at risk in maintaining the status quo, because:
 - ACIS is WTO consistent;
 - Australia has scope to offer significant reductions in bound tariff rates without further lowering applied rates; and
 - in regards to APEC, Australia could reduce its assistance when other countries do likewise.
- Tariffs were also seen as providing a buffer against the vagaries of exchange rate movements.
- Finally, it was noted that tariff reductions would reduce government revenue, thereby requiring new and possibly more burdensome taxes.

Other participants saw benefits in further reductions in assistance

Participants representing vehicle users, consumers, agricultural and export interests and businesses in non-automotive States put forward different views in support of further reductions in automotive assistance.

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- It was argued that assistance reductions would lead to lower vehicle prices and:
 - benefit private consumers and households, leading to increased spending on other goods and services;
 - reduce business costs, leading to increased investment and demand for intermediate inputs;
 - reduce the cost burden on exporting activities which are unable to pass on tariff-inflated costs in world markets;
 - have positive distributional implications in terms of vehicle affordability for the less advantaged in the community; and
 - produce a ‘younger car park’, thereby resulting in improved environmental and road safety outcomes.
 - Gains from reallocating resources among activities were seen as being only one dimension of the benefits flowing from reductions in assistance. A more competitive environment would also provide stronger incentives for ongoing productivity and quality improvements.
 - It was contended that the transitional costs of further assistance reductions would be manageable, particularly as the industry has essentially been on notice since 1985.
 - As Australia has much to gain from further trade liberalisation internationally, it was argued that we must continue to signal our commitment to this goal by reducing our own trade barriers.

10.3 The Commission’s view

The policy calculus is now more complex

The high assistance provided to the industry in the past imposed substantial costs on consumers and businesses and led to significant distortions in resource allocation across the economy. Addressing the cause of those costs and distortions through reductions in assistance offered the prospect of large gains to the community — an outcome reflected in quantitative modelling undertaken at the time. These so called ‘static resource allocation’ gains were judged to easily exceed the accompanying adjustment costs — particularly given the opportunity for the industry to reduce adjustment pressures through improvements in productivity and quality. Thus the appropriate direction of assistance policy was clear.

The potential for resource allocation gains has diminished

With assistance to the industry now much lower, the purely ‘allocative’ gains likely to ensue from further assistance reductions are commensurately smaller. Indeed, the quantitative modelling undertaken for this inquiry suggests that these static allocative gains could be outweighed by small, but adverse, shifts in the aggregate price of Australia’s exports relative to its imports — known as ‘terms of trade’ effects (box 10.1).

Box 10.1 Modelling the impacts of unilateral reductions in assistance

Economic models can play a useful role in illustrating the size and the direction of impacts of policy changes. The computable general equilibrium models that are typically used for this purpose allow the effects of assistance changes to be considered in a systematic economy-wide framework which recognises the myriad of linkages between different industries and activities. They do not, however, provide an adequate basis on which to formulate policy options as they are only one input into an increasingly complex policy calculus (see text).

The FAPM and the FCAI, through Allen Consulting, contracted the Centre of Policy Studies at Monash University (using the MONASH Model) to evaluate the benefits to Australia from automotive production based on a continuation of the assistance regime that will apply in 2005. This modelling projected that the industry will provide a significant boost to economic activity, reflecting assumptions about strong growth in output and significant productivity gains. It did not, however, examine the impact of reductions in post 2005 assistance for the automotive industry.

To shed light on this matter, Commission staff made further use of the MONASH Model to determine the outcomes for a range of assistance reduction scenarios. In addition, the Commission contracted Econtech (using the Econtech 600+ model) to evaluate the same scenarios. These studies are reported in appendix F.

The modelling results suggest that the resource allocation gains of reductions in assistance to Australia’s automotive industry after 2005 would be very modest. The Commission’s in-house MONASH modelling indicated negligible impacts on household income — either small positives or small negatives — depending on the scenario. The Econtech modelling showed similarly inconsequential impacts for the wider economy. Both models also highlighted that any (small) resource allocation gains would be offset by (small) terms of trade impacts. This is in contrast to past modelling exercises where terms of trade effects have been swamped by the resource allocation gains from reducing very high protection.

The projected impacts for the automotive industry were potentially more significant. The most severe outcomes in the modelling undertaken prior to the Position Paper were projected to occur in a scenario involving the elimination of all tariff and ACIS assistance.

Continued next page

Box 10.1 continued

For this scenario, the Commission's in-house MONASH projections indicated an 18 per cent reduction in output (by 2016) relative to 'business as usual' (the base case) and the Econtech modelling suggested a 21 per cent reduction (in the longer term) relative to the base case. However, such impacts would be offset by growth in demand for the industry's output. For example, under the base case scenario in the MONASH model, by 2016, PMV output was projected to be 38 per cent higher than in 2005. Thus, under the worst case scenario for the industry, output would still be around 13 per cent higher than in 2005. This appears to be consistent with the industry's positive assessment of its growth prospects (see chapter 4).

A similar economy-wide story also appears to emerge from modelling undertaken by the Victorian Government.

Results of that modelling, but not the modelling itself, were submitted to the Commission after the release of the Position Paper. According to the Victorian Government (sub. PP114, p. 9), its modelling indicates that a reduction in the tariff to 5 per cent 'would result in a rise in economic welfare nationally of \$1.50 per person per annum'. This is a similar order of magnitude to the economy-wide impacts projected by the MONASH and Econtech 600+ models. However, as discussed in chapter 13 and appendix F, the Victorian Government reported that its modelling projected somewhat larger negative impacts for the Victorian economy than these other two models.

It is important to note that modelling exercises do not encapsulate the dynamic dimensions of changes in assistance policies (see text): nor do they shine much light on the transition to the end point (see section 10.4). Because of the small static allocative effects, such other considerations loom much larger in policy assessment than previously.

'Dynamic' considerations have become more important

With the allocative and terms of trade effects being both small and counter balanced, 'dynamic' considerations that are not encapsulated in quantitative modelling assume even greater importance in formulating future assistance policy. For instance, modelling does not take account of the incentives that assistance reductions can provide for productivity and other improvements (the so-called 'cold shower' effect). Indeed, the failure to make sufficient allowance for such induced changes meant that interpretation of past modelling projections proved too pessimistic, greatly overstating the reductions in output resulting from assistance reductions. Not surprisingly, the industry's assessments of its capacity to cope with past reductions in assistance were even more pessimistic.

Unlike the allocative benefits reflected in the models, the 'dynamic' benefits do not necessarily become more than proportionately smaller as tariffs are reduced. Indeed,

even with an optimal allocation of resources, greater competitive pressures would continue to increase the incentive for firms to seek more productive ways of going about their business — for example, through improved workplace arrangements; restructuring opportunities including strategic alliances, mergers and acquisitions; process innovations and commonisation; and closer integration of production with wholesaling and retailing activities.

By the same token, as participants have identified, other ‘dynamic’ considerations such as short term adjustment impacts, spillovers from the industry and the impact of assistance on Australia’s attractiveness as an investment location also need to be taken into account in considering future assistance policy.

Spillovers are difficult to quantify

Virtually all industries generate spillovers — and larger industries typically generate larger spillovers. They are, however, difficult to disentangle from the more readily identified multiplier effects.¹ For example, a number of participants referred to the industry’s linkages to the steel, aluminium, glass, plastics, rubber and paint industries.

Examples of spillovers from automotive production cited by participants (see also box 10.2) included:

- the development of knowledge intensive inputs — such as advanced software tools — which have applications for other industries;
- the industry’s contribution to the ‘knowledge economy’ through its links with tertiary institutions and investments by firms in improving the skills of their employees;
- dissemination of best practice manufacturing methods through, for example, requiring their suppliers to adopt improved quality processes and ‘lean’ manufacturing techniques;
- the demonstration effect from vehicle exports enhancing Australia’s reputation as a producer of complex manufactured products; and
- reductions in road trauma owing to the development of improved braking and restraint systems.

¹ Multipliers are summary measures of linkages between activities and are typically couched in terms of the number of jobs that an induced expansion in output, exports or R&D will create in supplier industries/regions. However, to the extent that the induced activity involves resources being bid away from other industries, there will be offsetting negative multiplier effects, including diminished job opportunities in those industries. That is, all of these other activities and alternative uses of government funds also have multiplier effects.

Box 10.2 Examples of spillovers from automotive production

Participants cited various examples of positive spillovers from the automotive industry.

The FCAI stated that:

... design and engineering have also moved very significantly to a partnership model in which the car manufacturers and their first tier suppliers become partners in product development. This relationship tends to flow on to second and third tier suppliers. The consequence is a spreading of R&D and engineering capabilities across the supply chain rather than its concentration in a limited set of companies. (sub. 40, p. 23)

Ford said that the industry:

... provides a knowledge channel by which new processes and skills are introduced into the wider production system, and is a driver of the creation of knowledge by component and services supplying industries ... (sub. 41, p. 32)

The Insurance Australia Group submitted that:

The technological spin-offs arising from automotive research and development are being applied in fields beyond the market for vehicle sales, including magnesium casting and plastic mouldings. (sub. 22, p. 1)

BHP Steel remarked that it:

... was able to take the learnings from its automotive market Supply Chain Management (SCM) strategy and embark on developing a just-in-time approach to the supply of steel into the building and construction market. (sub. 75, p. 14)

Based on a survey of the four vehicle producers and 44 component producers, the industry-sponsored study on the impact of ACIS (DTT 2002) reported that:

Based on the interview results, ... flow-on benefits to the wider economy typically occur in one of two ways:

- A company that is itself a diverse manufacturer will take technologies developed to meet a requirement of the automotive industry, and apply it in another line of its manufacturing activity; or
- An automotive company will collaborate with research bodies such as universities or the CSIRO, sometimes through Cooperative Research Centres, in developing new technologies, and the knowledge generated is diffused back into other industries through these more broadly based research organisations. (DTT 2002, p. 42)

In the Position Paper, the Commission stated that there was no question that the automotive industry generates significant spillover benefits. However, it added that there were questions about:

- the extent to which these spillovers benefit other industries — as distinct from firms within the automotive industry itself;
- whether firms would obtain sufficient benefit from the activities which generate spillovers for them to undertake those activities without assistance; and

-
- whether such spillovers are significantly greater than those generated by other high skill/technology-based activities that must compete in the marketplace without the sort of support currently directed to the automotive industry.

In response to the Position Paper, several participants contended that the Commission had underplayed the spillovers generated by the automotive industry. For example, Autoliv Australia said that:

... there has been insufficient discussion on the spillover benefits coming from the auto industry, in particular ... the auto industry plays a large part in setting the quality standards in manufacturing industry in this country (trans., p. 323)

Commenting on the impact of automotive assistance on the generation of spillovers, BHP Steel contended:

... would the spillovers have occurred had we not been in automotive? ... I'd say maybe years and years later. ... automotive is your driver, is your technical driver, is your service driver. So that brings that to the market much, much sooner, I propose. (trans., p. 295)

The Victorian Government nominated a range of other spillover generating activities — including, microelectronics, information equipment, biochemicals and medical and scientific equipment. However, it added that:

... the motor vehicle industry is one of Australia's few manufacturing industries that operates on a sufficient scale to contribute significantly to the development of a knowledge driven economy. (sub. PP114, p. 19)

Having assessed all of the evidence submitted by participants, the Commission is satisfied that the spillovers generated by the automotive sector are significant and that some flow through to other industries. That said, it still questions the extent to which spillover generating activities require the continuing provision of *industry specific* assistance. In recognition of the potential for the market to fail to undertake sufficient innovation in the face of spillovers to third parties, there is a range of generally available measures designed to support likely sources of such benefits. These include, for example, R&D grants and tax concessions for expenditures on R&D (see appendix E).

In the Commission's view, it is preferable to support spillovers through general measures rather than to provide compensatory industry specific assistance. This, of course, puts a premium on ensuring that available general support measures are operating effectively. Indeed, given that the R&D intensity of the automotive industry is high relative to other industries, access to effective general measures would clearly be important. In this regard, the Commission has proposed that a review of the performance of Australia's R&D support measures would be desirable (see chapter 6).

In sum, the Commission considers that, with the availability of appropriate general support measures, spillovers alone are not a reason for continuing to provide preferential assistance to the automotive industry.

Does competition for global capital mean Australia should match what others do?

Capital in the automotive industry is globally mobile and, given that the industry suffers from excess capacity worldwide, major firms have choices about where they locate their production and research facilities. Usually this is based on a sound business case such as the logistical necessity for suppliers to locate near assembly operations or the desire to establish a production facility in a major market.

At the margin, however, capital can be attracted to countries in response to financial inducements or the need to get behind tariff barriers. As the FCAI explained:

... the four Australian vehicle manufacturers are in constant competition for investment with other subsidiaries of their parent companies.

... If Australian policy is significantly less supportive of automotive investment than that in place in competing investment locations, despite the inherent competitiveness of the Australian industry, investment may be lost to overseas production centres where the policy environment is more favourable.

.. a policy environment that is not globally competitive could see investment and capacity lost even if internal industry performance is world class. Once lost, this investment and capacity would be very hard to get back when the international policy environment does move to a more level playing field. (sub. 40, p. 69)

However, as the FCAI and others have noted, it is the policy environment which is most important in securing investment funding. Accordingly, in the Position Paper, the Commission concluded that:

- there were better ways for governments to help attract necessary investment capital, such as changes to overall policy settings, than the provision of industry-specific investment incentives; and
- whether the pay-backs for Australia of ‘buying’ investment are likely to outweigh the costs, is problematic, particularly if much of the assistance went to soundly-based investments that would have occurred anyway, or attracted capital away from other Australian firms, rather than augmenting the nation’s capital stock.

In response to the Position Paper, the vehicle producers, component manufacturers and some State Governments re-iterated the view that Australia’s automotive assistance regime should be competitive with that of other countries. This matter is

discussed further in chapter 11, in the context of reactions to the preliminary assistance options in the Position Paper.

Australia is a 'contracting party' of the WTO ...

Australia is a member of the WTO, which provides a rules-based multilateral system for international trade. Membership brings benefits such as the avoidance of discriminatory trade arrangements and, over time, improved access to markets. Members commit to 'binding' their tariffs and not imposing rates of duty above 'bound' rates. As Australia's automotive tariff rates are currently well below its bound rates, these commitments do not bear on any feasible post 2005 tariff options.

On the other hand, the Subsidies and Countervailing Measures Agreement (SCM) of the WTO more closely constrains assistance options.² Significantly, the SCM was the catalyst for the design of ACIS, as its predecessor — the Export Facilitation Scheme — did not comply. It therefore has implications for any options which involve subsidy arrangements beyond 2005.

... and has been instrumental in APEC

Australia was an instigator of APEC, which now comprises 21 countries in the Asia-Pacific region. In 1994, APEC countries announced a commitment to free and open trade and investment in the region by 2010 for industrialised economies and 2020 for developing economies (referred to as the Bogor goal).

It is in Australia's overall interests that member countries meet the Bogor goal — a point acknowledged by many participants (see also box 10.3). However, as APEC is not a binding commitment, there has been some uncertainty about how liberalisation to meet the goal of free and open trade in the region will proceed.

That said, it is important that Australia, as an APEC leader, be seen to act in a manner consistent with its international commitments (a point recognised in the terms of reference). It therefore would be undesirable for Australia to signal an intention *not* to meet the Bogor goal unless there were overwhelming domestic benefits from taking that course.

² The SCM Agreement regulates subsidies based on a 'traffic-light approach'. Subsidies are prohibited (red) if they are contingent on exports or local content, actionable (amber) if they cause adverse trade effects and, until late 1999, allowable (green) if they were generally available or related to R&D, regional development or certain environmental activities. According to the Department of Foreign Affairs and Trade, apart from generally available measures, this last group of activities are now also regarded as actionable subsidies.

Box 10.3 Modelling of the impacts of multilateral trade liberalisation

The Commission contracted the Centre for International Economics (CIE) to model the implications for Australia of a range of trade liberalisation scenarios — from unilateral reduction in automotive tariffs by Australia to the removal of trade barriers on agricultural and manufacturing products worldwide (see appendix F). The CIE found that:

- Consistent with the domestically focussed modelling projections from the Econtech and MONASH models, further unilateral reductions in Australia's automotive tariffs would provide a small allocative gain.
- It is important not to overstate the gains for the Australian automotive industry from better access to the automotive markets of Asia because:
 - More open access to those markets could benefit other automotive producing countries as well as Australia; and
 - Tariff reductions could promote efficiency improvements in (currently) highly assisted overseas automotive industries which would improve their competitiveness against imports.
- There would be substantial gains to Australia from broadly based multi-country assistance reductions — reflecting that restrictions on agricultural exports are the biggest single problem confronting Australia in the international trading environment.

Nonetheless, some want 'fair' trade, not free trade

To many, reducing assistance to Australian automotive producers while their overseas competitors continue to receive generous government support would seem unfair. For example, Autoliv said that it:

... is prepared to face international competition in its bids to win investment into Australia. However, the company does not believe that, once it has reached full international competitiveness, it should have to display added levels of efficiency or lower costs to compensate for Australian government assistance levels being out of step with competitor locations. (sub. PP103, p. 4)

It is also understandable that producers who face competition from imports subject to a 15 per cent tariff, but who cannot gain access to other countries' markets because of punitive tariff regimes, regard this as unfair.

But this is only one of the dimensions of fairness associated with the current assistance regime. The fact that Australian automotive producers get much greater government support than other Australian firms might also be regarded as unfair. So too might the fact that Australian consumers and businesses pay higher prices for their vehicles which may, among other things, help support higher wages for a

particular group of workers, and boost the profitability of some of the world's major global automotive producers.

The subjectivity involved in judgements about fairness is one reason why nations have signed up to the rules-based WTO system. Membership also reflects the potential for unilateral actions based on notions of 'fair trade' to degenerate into lose-lose situations.

More importantly, as noted in chapter 8, future assistance policy for the automotive industry should be predicated on what is in the interests of the Australian community as a whole.

'Tariff cuts would squander negotiating coin'

Some participants suggested that linking future reductions in Australia's automotive assistance to reductions in government support in other countries would provide a lever to improve access to overseas markets. However, as discussed in chapter 8, such arguments are not convincing. The Australian vehicle market is small and applied automotive tariffs are relatively low, so that the practical value of any such bargaining coin would be limited.

'Tariff cuts mean less government revenue'

Some participants drew attention to the implications of tariff reductions for government revenue. For instance, the AMWU submitted that:

During the 2000-2010 decade Australia's tariff regime, at the rates applicable in financial year 2000-2001 would generate around \$40 billion in Government revenue in an environment of growth approaching 3.5 per cent per annum. Half of that would come from Auto and TCF. (sub. 42, p. 7)

Given that the policy options centre on post 2005 assistance, there are several dimensions to the tariff revenue issue.

After identifying the magnitude of the revenue loss (net of ACIS)³, it would be important to look to the projected economic growth dividends through to the latter part of the decade and then to ascertain the overall implications for budget outcomes. To the extent that there would be a budget shortfall, reductions in government expenditures would provide one avenue for redress, and increased taxation another.

³ Customs duty, excluding excises, represents about 1.7 per cent of total Commonwealth Government revenue.

However, the latter is not an argument for maintaining tariffs, which are widely accepted as inefficient and discriminatory instruments for raising revenue. Provided they were replaced by more broadly based taxes, efficiency would be enhanced.

'Movements in exchange rates can erode the value of assistance'

The view that assistance policy should be conditional on movements in exchange rates is sometimes advanced — usually when the dollar is rising.

The Commission endorses the position adopted by FAPM on why it would not be appropriate to base tariff rates on currency movements:

The tariff is a long term assistance measure which should not be confused in a policy sense with short to medium term changes in fluctuating exchange rates. To argue that the tariff should be reduced when the Australian dollar is down is to suggest that it should be increased when the Australian dollar is strong. This would not be good policy and would create enormous uncertainty for industry. (sub. 37, p. 80)

10.4 Some implications for future assistance policy

In light of the considerations outlined above, the Commission considers that:

- Further assistance reductions would benefit vehicle consumers and reduce business costs.
- There would also be 'dynamic' benefits — most notably in providing an additional source of pressure on the industry and its employees to address current impediments to greater productivity.
- Features of the automotive industry such as spillovers, while important, are not such as to justify industry specific support measures.
- A decision to maintain the status quo for automotive tariffs or subsidies would send an undesirable signal to other countries about Australia's commitment to trade liberalisation.

The Commission therefore considers that maintaining assistance at 2005 levels for an indefinite period is not a sound option.

Transitional issues are critically important

The industry has shown a strong capacity to adjust to reductions in assistance in recent years. The sorts of reductions now in prospect are much smaller than those that have occurred over the last decade and a half. Indeed, the modelling undertaken

for this inquiry suggests that the transitional costs of the sort of reductions in assistance now in prospect would be relatively modest, particularly in light of the industry's assessment about future growth prospects. However, it would be unwise to dismiss adjustment impacts on the basis of the modelling:

- the models do not include the production characteristics of individual firms and cannot 'anticipate' situations in which adjustment pressures might fall disproportionately on particular firms and/or regions, instead distributing gains and losses at a broad industry level;
- given the time frames involved for post 2005 assistance policies to come to fruition, there is potential for other sources of adjustment pressure to emerge in the interim — for example, the realisation of some of the threats identified in chapter 4; and
- some firm exits are necessary and inevitable if the industry is to achieve long term viability — for example, through further rationalisation.

For these reasons, the Commission is of the view that there might be a need for specific responses to any significant firm or regional adjustment problems that were to arise in the future (see chapter 13).

That said, the prospect of transitional costs is not an argument for maintaining assistance at a particular level indefinitely, but rather bears on the rate of change. Many in the industry accept that they must eventually compete on the same level as other Australian manufacturing activities. As Holden submitted:

The long-term goal of the industry must be to operate without sector-specific assistance, but in an environment that supports the elements necessary for ongoing and sustainable growth. (sub. 72, p. 12)

Given the Government's desire for the automotive sector to achieve long term sustainability, future assistance policy needs to facilitate, rather than hinder, industry adjustment. As discussed in the next chapter, the Commission considers that ACIS could continue as a mechanism to underpin the transition to lower assistance.

Assistance should be transparent ...

In providing options for post 2005 automotive assistance arrangements, the Commission is particularly mindful that they conform with good public policy processes.

Transparency is a fundamental tenet for any program which transfers funds from the broader community to a particular target group. In this regard, ACIS is a relatively

transparent scheme because the quantum of assistance, the criteria for allocating it, as well as the beneficiaries and the extent of their benefit are all known. This is in contrast to some firm-specific assistance provided by State Governments, and to a lesser extent the Commonwealth, where the criteria for and incidence of assistance are not always clear.

... predictable ...

In an already volatile global environment, it is essential that policy settings aim to provide a measure of certainty. For example, firms should have the confidence to commit to new investments in the knowledge that, once announced, policy settings will not be changed in mid-stream. This is particularly important for assistance policy, as firms may change their behaviour in response to the various incentives that policy settings introduce. In this context, the objective of a stable assistance environment is not facilitated by ad hoc measures.

... and aim to minimise compliance costs

Assistance schemes should be designed to avoid undue compliance costs for participants and administration costs for the government. There sometimes can be trade-offs between designing programs which are simple and easy to administer and the potential for ‘gaming’ or undue administrative discretion. That is, compliance and administration costs — including for example, firm audits — may need to be increased where ‘creativity’ in interpretation of the rules results in unintended consequences.

Demonstration effects are also a consideration

Industry assistance can have demonstration effects. For example, the provision of ad hoc assistance to one firm can create expectations by other potential beneficiaries for similar treatment. This has been shown to lead to unproductive diversion of entrepreneurial effort towards seeking preferred treatment — a phenomenon known as ‘rent seeking’.

Such negative demonstration effects can be ameliorated where the government:

- can show clearly that the assisted activity has particular characteristics which justify preferred treatment; or
- provides credible signals that disparities in the treatment of different groups will be eliminated.

FINDINGS ON DIRECTIONS FOR FUTURE ASSISTANCE

- *Assistance to the industry is now much lower than in the past. As a consequence, the purely 'allocative' efficiency gains that would ensue from further assistance reductions are likely to be small and 'dynamic' and other considerations assume greater significance. Thus, the policy calculus is now more complicated.*
- *While the automotive industry has special features, these are not such as to warrant indefinite preferential treatment.*
- *Transitional costs are an important consideration in determining the path to a longer term goal of removing special support.*

11 Tariff and ACIS options

11.1 Balancing industry and community interests

For the reasons set out earlier, the Commission considers that there is a strong case for continuing to reduce assistance to the automotive industry. The key issues relate to the end point for special treatment and the *pace* at which assistance reductions should occur. In setting the transition path, a concern is to facilitate necessary adjustments in a way that avoids precipitating the exit of firms that would have become internationally competitive under more accommodating arrangements.

The fact that assistance is transitional does not diminish the costs borne by vehicle consumers, other industries and the wider community. Just as the benefits of facilitating transition in the automotive industry will flow through the economy, so too will the costs of supporting that transitional process. Hence, in seeking a way forward, the Commission has looked to policy options which balance these interests to give the best result for the community as a whole.

The nexus between the tariff and ACIS

The tariff and ACIS together define the automotive assistance package. There is a direct relationship between these instruments. When announcing ACIS, the Government stated that:

The scheme will provide an incentive for industry to continue its progress towards global competitiveness and a self-sustaining future in the context of trade liberalisation and the globalisation of the car industry. (Fischer and Moore, 1998, p. 2)

This objective is embodied in the *ACIS Administration Act 1999*:

The purpose of this Act is to provide transitional assistance to encourage competitive investment and innovation in the Australian automotive industry in order to achieve sustainable growth ... in the context of trade liberalisation.

To this end, ACIS provides transitional support for the period 2001-05 to prepare the industry for the step down to a 10 per cent tariff in 2005. The Commission considers that, matched to a tariff phasing program, ACIS can continue to play this transitional role after 2005.

11.2 The Commission's preliminary assistance options

The industry sought a ten year time horizon

Firms emphasised the need for the post 2005 assistance regime to establish a policy path for the industry for at least five years and preferably for ten years. Given the long planning and investment horizons in this industry, the Commission regards this as a reasonable expectation. Providing a clear and extended path for assistance policy would serve to reduce at least one significant source of uncertainty. Accordingly, in formulating assistance options, the Commission has sought to specify an assistance regime for the industry for a decade after 2005.

The Commission proposed three tariff options

In its Position Paper, the Commission observed that, with the tariff on passenger vehicles and components (both original equipment and replacement components) falling to 10 per cent in 2005, the disparity with the general tariff rate would be reduced to 5 percentage points. The key policy question was over what period this disparity might be most appropriately removed.

The Commission considered that a 10 year period beyond 2005 would be the longest that could reasonably be contemplated. Within this broad time frame, it settled on the following options:

1. Reduce the tariff by 1 percentage point a year commencing in 2006 so as to achieve a rate of 5 per cent in 2010, with no further reductions before 2015.
2. Leave the tariff at 10 per cent until 2010 and then reduce it in one step to 5 per cent, with no further reductions before 2015.
3. Leave the tariff at 10 per cent until 2010 and then reduce it by 1 percentage point a year so as to achieve the rate of 5 per cent in 2015.

Taking into account a range of factors, including the industry's planning horizon, APEC considerations and ensuring that adjustment pressures would be manageable, the Commission concluded that option 2 would provide the best balance.

And three options for transitional support

The Commission considered that the abrupt withdrawal of ACIS in 2005, in combination with a renewed round of tariff reductions, could be sufficient to precipitate the exit of firms that might have become internationally competitive under more accommodating arrangements. However, it added that ACIS type

funding beyond 2015 would be difficult to justify. By that time, assistance in this form would have been provided for 15 years, in addition to two decades of similar support under previous arrangements.

Accordingly, the Commission saw a continuation of ACIS after 2005 as a means of facilitating a reduction in the tariff to 5 per cent. It settled on the following three broad approaches — involving different profiles for dispensing a given real funding quantum — for extending ACIS support:

1. Funding of \$2 billion to \$2.8 billion, provided over five years, ceasing in 2010.
2. Funding *with an equivalent net present value to option 1*, provided over 10 years at a uniform rate, ceasing in 2015.
3. Funding *with an equivalent net present value to option 1*, provided over 10 years ceasing in 2015, with funding for the second five-year period set at half that for the first five-year period.

The Commission proposed one significant change to the design of ACIS. This involved the creation of two separate capped funding pools — one for the vehicle producers and one for their suppliers. It proposed that funding of the pools should reflect the shares received by each group (including the vehicle producers' uncapped production credits) under the current ACIS. This implied that vehicle producers would receive around 65 per cent of total available funds.

In presenting these preliminary options, the Commission noted that provision of ongoing transitional assistance should be contingent on the introduction of a post 2005 tariff reduction program. It did not arrive at a preferred position, but rather sought participants' views on the pros and cons of providing a higher rate of ACIS funding over a shorter period, versus a lesser rate over a longer time frame.

11.3 Participants' views on the preliminary tariff options

The industry sought an extended tariff pause from 2005

Participants were generally of the view that further tariff reductions should eventually occur. However, most took issue with the tariff options proposed by the Commission. The FCAI, the FAPM, the four vehicle producers, a number of component suppliers, the Victorian and South Australian Governments and the unions argued that the tariff should remain at 10 per cent after 2005 until a range of conditional criteria — many outside Australia's control — were satisfied. Of the Commission's preliminary tariff options, option 3 was (reluctantly) preferred when a view was expressed.

The FCAI specified a checklist of criteria that would need to be fulfilled before Australia further reduced its automotive tariffs:

While not demurring from the ultimate objective of aligning automotive tariffs with that of other manufacturing industries, it would be open to the Australian Government to consider future reductions in automotive tariffs, below 10 per cent, in the context of a range of possible future developments, including the following:

- Progress in reducing barriers to trade in industrial products in the forthcoming WTO round;
- Progress toward implementation of the APEC goals of ‘free and open’ trade and investment throughout the Asia Pacific region;
- Implementation of bilateral free trade agreements, including possible agreements currently being considered with Thailand and the United States;
- Australian involvement in regional free trade agreements, including the development of a future agreement with AFTA; and
- Australia’s competitive standing as a location for international automotive investment. (sub. PP99, p. 10)

The FAPM contended that Australian automotive tariffs should not only be contingent on the actions of other countries, but also that Australia confer any tariff reductions in a selective manner:

The tariff remains, in our view, an effective policy element for multinational companies in winning automotive investment into Australia against competing locations. Principally for this reason FAPM’s position ... is that the long-term general tariff rate for automotive products should be held at 10 per cent post 2005. If and when APEC takes effect in 2010, the specific concessional rate for APEC member countries could perhaps be set lower than 10 per cent, consistent with our international obligations and, in response to reciprocal tariff cuts in other member countries, the non-APEC rate might remain at 10 per cent. (trans., p. 29)

The position of the two peak industry bodies was echoed by the overwhelming majority of their constituents’ submissions (see box 11.1). The unions also supported the industry’s position on this matter. For example, the ACTU said:

... industry assistance measures should be paused at present levels until 2010, and be reviewed in five years time to determine changes to be made beyond 2010. (sub. PP90, p. 50)

Some state governments supported the industry’s position

The governments of Victoria and South Australia — the states in which most automotive activity occurs — mirrored the arguments put by the industry. The Victorian Government submitted that once the tariff had fallen to 10 per cent, it should remain at that level until at least 2010, with any subsequent reduction

occurring only after 'substantive reductions in automotive tariff and non-tariff barriers by other countries' (sub. PP114, p. 22).

The South Australian Government proposed stringent conditional criteria to be met before further tariff reductions are contemplated. In addition to reductions in assistance in other countries, it specified:

- a record of continual growth and investment in the South Australian automotive industry; and
- a clear indication that Australia has been positioned long-term as an attractive automotive investment destination by key global car and automotive component manufacturers. (sub. PP115, p. 4)

Box 11.1 Some responses to the preliminary tariff options

Vehicle producers

Only if significant large scale reductions in international trade barriers occur would it be reasonable for the tariff to fall below 10%. (Toyota, sub. PP95, p. 12)

... the automotive tariff level be held at 10% until adequate market access can be ensured for Australian automotive exports. (Holden, sub. PP101, p. 4)

... the tariff should be maintained beyond 2005. [Ford] does not support a pre-determined and fixed end point in the absence of significant external reforms. (Ford, sub. PP105, p. 10)

Trade negotiations over the next few years in the WTO and APEC, as well as bilateral initiatives being pursued by Australia, will produce a clearer picture of the state of the 'playing field'. ... any unilateral announcement by Australia of a further reduction in automotive tariffs would be a gratuitous exercise in self-abuse. (Mitsubishi, sub. PP112, pp. 5-6)

Component producers

Maintain the tariff rate at 10% beyond 2005, until evidence exists of reciprocal tariff reductions by other APEC member countries. (Robert Bosch Australia, sub. PP125, p. 3)

... it is a mystery to us why we would lower assistance. Either from the level the industry enjoys today, or from the 10% level envisaged in existing government policy (Air International, sub. PP87, p. 2).

... the industry as a whole requires a gradual reduction of tariff barriers ... to prevent sudden disruptive loss of business from import competition. ... For this reason we believe that ... Option 3 is most appropriate. (PBR International, sub. PP86, p. 3)

User groups

AAA supports Options 1 or 2. Both options have advantages for consumers and a target of 5 per cent by 2010 is supported. (Australian Automobile Association, sub. PP122, p. 1)

The RACV supports the [Commission's] second option for tariff reductions for the automotive manufacturing industry ... (Royal Automotive Club of Victoria, sub. PP116, p. 4)

In contrast, the New South Wales Government (sub. PP124, p. 3) submitted its preference for ‘transparent, pre-announced and incremental reductions in the tariff rate from 10 per cent in 2005 to 5 per cent in 2015’ (preliminary option 3).

And, the Western Australian Department of Treasury and Finance supported preliminary option 1 in order to achieve the most rapid reduction in automotive assistance. It contended that:

As a highly export-oriented economy, Western Australia has borne a larger than proportional share of the costs imposed by PMV assistance ...

... leaving the PMV tariff unchanged will unfairly penalise Western Australia (and other states) relative to Victoria and South Australia. Tariffs hold back Western Australia’s world-class mining and mineral processing and agriculture industries, which is to the detriment of Australia as a whole. (sub. PP104, p. 2)

It is also noteworthy that not all groups within the ‘beneficiary’ states endorsed the position of their state governments. For example, the City of Greater Geelong said that it ‘welcomes the Commission’s preferred option of maintaining the 10 per cent tariff until 2010 and then reduce it one step to 5 per cent’ (trans., p. 371). The Royal Automotive Club of Victoria also supported this option (see box 11.1).

11.4 The Commission’s view on tariffs

Notwithstanding consensus that automotive tariffs could be reduced after certain conditions have been met, the industry’s proposal is essentially a call to maintain the status quo after 2005, based on a view that: the gains from further reductions would be small; it would be unfair for Australia to ‘lead the pack’ on tariff reductions when other countries have tariff rates exceeding those in Australia¹; and maintenance of tariffs would help to attract investment capital.

The first two propositions are canvassed in chapter 10. As discussed there, the Commission agrees that the modelling indicates that the ‘static resource allocation’ impacts from further tariff reductions would be negligible — but this is only one dimension of the policy calculus. It is important also to take into account the potential for dynamic gains arising from tariff reductions as well as the interests of private and business consumers of vehicles. Moreover, perceptions about the fairness of different tariff rates across countries cannot constitute a reasonable basis for determining Australia’s industry policy. Hence, the key issue is the claim that

¹ The examples most typically referred to related to developing countries. However, the US tariff on light trucks was raised as a concern. Some also said that, at this stage, developed countries (such as the EU) have not signalled an intention to further reduce tariffs.

the capacity of Australian firms to attract investment capital could be jeopardised if other countries do not also liberalise their trade barriers.

Tariffs are a poor instrument for securing investment

At a broad level, the Commission does not consider that barrier protection is an appropriate tool to seek to secure or entice footloose capital.

- The mobility of global capital in the automotive industry is most strongly influenced by such business fundamentals as the relative costs of doing business in various locations, the logistical advantages of suppliers locating near assembly operations, the desire to establish a production facility in a major and growing market, or the establishment of R&D centres in areas with access to engineering capabilities and sophisticated customers. In this context, the much publicised bidding war between Alabama and Kentucky to attract a Hyundai production facility was of limited relevance for Australia.
- When it comes to policy, it is the overall environment which is most important in securing investment funding. Investment tends to flow to those countries with: open economies; political, economic and social stability; competitive taxation regimes; robust institutional and regulatory environments; good quality economic and social infrastructure; and a flexible and well educated workforce.
 - For example, a recent Commission survey of 200 of Australia's largest firms found that the most important 'foreign government related' factors bearing on decisions to commit to foreign direct investment were the taxation environment and labour market policies (PC 2002a).
 - In this context, it is notable that the Australian CEOs of Ford and Toyota both emphasised the adverse perception held by their parent companies (and customers) about industrial disputation in Australia. As noted in chapter 5, such perceptions can be a significant deterrent to foreign investment.

Hence, it is vital that the Government continues to pursue improvements in these fundamentals and more generally advances the microeconomic reform agenda (see chapter 6). In contrast to such general policy settings, tariffs are a poor instrument to meet investment attraction goals because they impose costs on consumers and penalise non-automotive States and regions and other export-oriented industries.

Nonetheless, a key plank of the industry's argument for a contingent tariff freeze at 10 per cent from 2005 was that a 5 percentage point reduction could make Australia unattractive for new investment.

How important is five percentage points of tariff in attracting investment capital?

The Australian automotive industry has been subject to reductions in assistance for nearly 20 years. Not only has this period seen the removal of mechanisms such as the local content scheme and quantitative import restrictions — with tariff equivalents of over 100 per cent — general automotive tariffs will have fallen by nearly 50 percentage points by 2005. Thus, the direction of automotive policy has been clear for some time.

Despite these ongoing reductions in assistance (which the industry acknowledges have contributed to its transformation and greatly improved performance), there has been little evidence of investment drying up — quite the contrary. For example, Holden has developed new niche products with significant export potential, Ford and Holden have committed to substantial new investments to produce vehicles to gain a share of the 4WD segment, Toyota is increasing its exports of a locally produced world car and Mitsubishi has re-affirmed a presence in Australia after securing a major investment commitment from its parent (although with some government funding). Indeed, total investment by the vehicle production sector has been growing in real terms since the late 1980s (see appendix table B.16). And, as noted in chapter 4, the domestic industry is optimistic about its prospects.

Moreover, around one third of vehicle production is now exported and exports of components have also grown strongly. Even acknowledging that such exports generally require a platform of domestic activity, it would seem that the tariff is declining in importance as an instrument to protect domestic production.

Against this backdrop, when asked at the public hearing how important 5 percentage points of tariff would be for investment attraction, the FAPM said

... I suspect the answer is not great ... movements in the exchange rate are likely to be as significant on a day-to-day basis. ... I'd use the term [the tariff] 'has a symbolic significance'. It is an indication of the government's attitude towards support for the automotive sector. (trans., p. 33)

In short, while very high tariffs in a growing market can have a significant influence on the location of automotive investment, in the case of Australia's established automotive industry, it is hard to sustain an argument that a 5 per cent versus 10 per cent tariff would have a critical impact.

This is not to deny that in particular instances, other forms of assistance may be influential in attracting footloose capital. But this is likely to be true for many Australian industries. If Australian governments wish to intervene to attract footloose capital, there do not appear to be sound reasons why the automotive industry should be treated differently from those other industries. As noted, the

automotive industry has been a beneficiary of funding under the generally available SIC program. This general approach, while not without its own shortcomings, is preferable to one which had domestic assistance policies contingent on the actions of foreign governments.

The industry's proposals could constitute an insurmountable hurdle to further tariff reductions

While there were variations in participants' views on what factors might need to be resolved before Australia further reduced its tariffs, all the proposals would provide a high hurdle. For instance, Ford Australia proposed:

A results-oriented 'action agenda' be established where industry and government can tackle ... challenges, and pave the way for a later determination by Government, of the precise scope and timing of longer term assistance issues. (sub. PP105, p. 3)

In addition to international trade dimensions, Ford's action agenda included reforms such as the creation of a single industry union, comprehensive reform of payroll tax and the early introduction of new fuels. And, as discussed above, the South Australian Government's criteria included 'continual growth and investment in the South Australian automotive industry'.

On international trade issues, the FCAI stated:

... we don't see that there should automatically be a definitive reduction in tariff at a particular year without consideration of the ... international climate, and the industry issues at that time. They particularly relate to the investment movements, the structure of the industry, and the trade issues with our immediate partners; trade, in the sense of the opportunities for further advancement of trade liberalisation, the status of those aspects, the issues with AFTA, and potentially where Australia stands in relation to its activities on bilateral free trade agreements with countries such as Thailand and the USA. ... there needs to be due consideration given to those matters in a wider sense before there should be a particular reduction further in the tariff. (trans., p. 6)

While trade liberalisation has been occurring globally, some countries have not moved as quickly as others — particularly for automotive tariffs (see chapter 8). This variability of outcomes raises questions about the assessment criteria for the industry's proposals. At the public hearings, Mitsubishi sought to explain how a determination would be made that global trade liberalisation trends had reached the point where Australia could move beyond a reactive industry policy stance:

We would have thought that essentially when a level playing field emerges ... would be a judgment call and would not be a matter of great science. We're not hanging out for the tariff in Uzbekistan to come down to 10 per cent. (trans., p. 87)

However, in the decades ahead, there will be newly emerging developing countries and some may seek to establish an automotive industry. As noted in chapter 2, developing countries often seek to attract automotive investment because of its potentially large multiplier effects — the industry’s ability to offer base load to steel mills and the like is often seen as integral to the road to modernisation.

Thus, tariffs in developing countries — which are likely to encompass a changing cohort over time — are always likely to be higher than in Australia. Indeed, the difference in expectations is recognised in the APEC Bogor Declaration which provides for developing countries to achieve free trade by 2020, some 10 years after developed nations. However, under the industry’s proposals, there is a risk that developing country measures would become moving benchmarks for setting domestic industry policy. Consequently, the industry’s checklists would need to be set against very explicit targets, rather than notions of ‘internationally level playing fields’, which could change over time.

The industry’s proposals are also ambiguous in terms of formal processes for determining when domestic reform could proceed. For instance, the FCAI said:

At the end of the day it is the industry working closely with government in terms of the appropriate structure of policy setting, negotiating those settings with government ... the key to all of this is the additional and continuing investment in Australia in manufacturing to sustain the viability of manufacturing in this country. (trans., p. 8)

Such a process, which was also suggested by some other participants, would lack transparency and exclude other interested parties. Perhaps reflecting the difficulties with such a ‘closed shop’ approach, some participants suggested that a further review around 2006 to 2008 could revisit the tariff question based on the sort of criteria proposed by the industry.

Waiting for other countries to liberalise first could be self-defeating

Another drawback with the industry’s proposal to link Australian assistance to that of other countries is that this could itself reduce pressure for further trade liberalisation in the region. As noted in chapter 10, Australia is a prime mover in the APEC forum, and as an APEC leader, its commitment to that process is likely to play a role in conditioning the commitment of others.

The importance for Australia of APEC and the need to expedite its aims was acknowledged by many. For example, the FCAI contended that:

... Australia has been frustrated in terms of some of the other APEC economies committing to firm plans in terms of market liberalisation and tariff reduction. There has been some progress but it is quite slow. Nevertheless, we believe it is essential that

the government maintains its commitment to the APEC process to encourage the other economies to liberalise ... (trans., p. 12)

A decision by Australia to maintain its automotive tariffs at 10 per cent until other countries reduced their trade barriers, could send a signal which might be self-defeating. Some countries might draw comfort from Australia's lead, particularly in the face of lobbying by various industry interests in those countries.

These risks were recognised by some participants. The Department of Treasury and Finance of Western Australia submitted that:

... Western Australia, and Australia generally, benefit from a relatively free and open international trading environment. The PMV tariff imposes costs on our trading partners, damaging our own commitment to free trade and reducing our bargaining position with other countries which we want to reduce their trade barriers. (sub. PP104, p. 2)

Pressure for necessary adjustment could be reduced

The Australian automotive industry has greatly improved its international competitiveness. Reductions in assistance have played an important role in this by creating the conditions for an improvement in resource allocation and promoting more productive work arrangements and other 'dynamic' gains. The reduction in tariffs to 10 per cent in 2005 will continue such pressures on the industry. Even though the 'easy gains' have probably already been appropriated, many participants acknowledged that there is some way to go. For example, Graham Spurling contended that:

... the Australian component sector still has not thrown off the shackles it acquired in the years of protection. Despite substantial rationalisation, the sector ... remains far more fragmented than necessary or appropriate. (sub. 36, p. 9)

And, FAPM said 'there's a general consensus that the process of rationalisation that's going on globally has further to run in Australia' (trans., p. 34).

The achievement of the further necessary gains is unlikely to be advanced by the easing of competitive pressures through an indefinite tariff pause.

An indefinite tariff pause would weaken the case for continuing transitional support

In effectively calling for an indefinite tariff pause beyond 2010, but also seeking a retention of ACIS — which all regard as an important support mechanism — the industry recognised that the established nexus between the tariff and ACIS posed a

difficulty. Hence, participants sought to downplay the legislated role of ACIS, which some had previously accepted.

For example, in its initial submission, FAPM noted that ‘the purpose of ACIS is to improve the automotive industry’s investment and competitiveness in the lead-up to the planned implementation of free trade’ (sub. 37, p. 40). However, in its response to the Position Paper, it indicated that:

... at some point you might want to review the linkage between tariff and ACIS — in other words, it shouldn’t be seen as inevitable that those two things should be coupled in perpetuity. (trans., p. 34)

Others also sought to downplay the transitional role of ACIS and to recast it purely as an investment and innovation program.

In the Position Paper, the Commission stressed that its options for any continuation of ACIS would need to be matched to a tariff phasing program. It has not changed its view (which also accords with the Government’s stated position) that ACIS should continue to be a facilitator of change. The current ACIS package achieves this transitional role prospectively by preparing the industry for the tariff step down in 2005. Were the tariff to remain fixed at the 10 per cent level, the case for continuation of ACIS would be difficult to sustain.

Tariff options

For all of the reasons outlined above, the Commission does not accept the industry’s proposals for what would be tantamount to a tariff freeze at 10 per cent from 2005. It reaffirms the value of the three tariff options put forward in the Position Paper (see section 11.2 above). These are depicted in figure 11.1.

In comparing the merits of these three tariff paths (and the supporting ACIS options outlined below), there are trade-offs in the extent to which each would create credible incentives for improved performance, and facilitate necessary change in the industry, while minimising unnecessary adjustment costs. That said, in these areas, the differences in impact of the three options are likely to be relatively small.

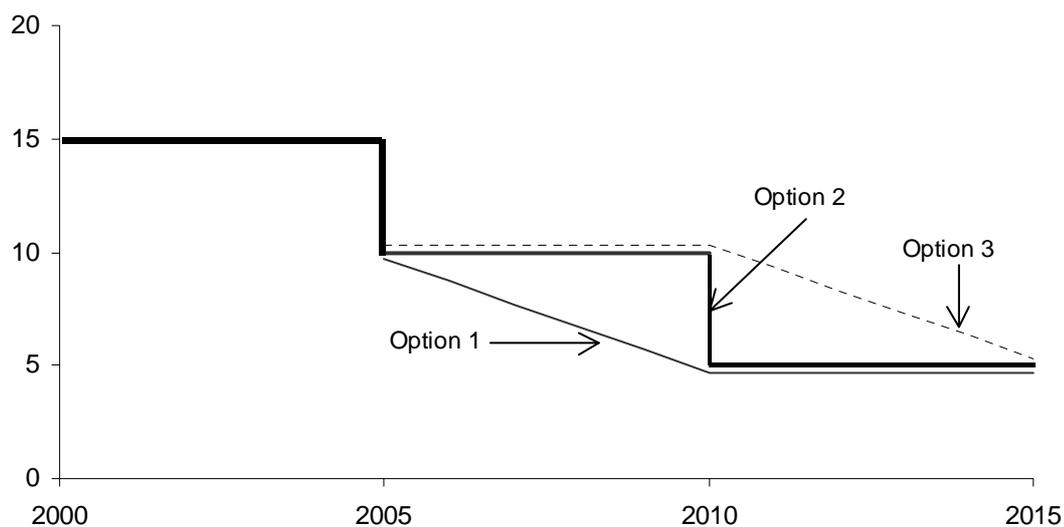
Option 3 provides for a tariff pause to 2010 before commencing phased reductions over the next five years. In the absence of other more generous alternatives, this option was the one most favoured by the industry and some unions. It would impose the least adjustment pressure on the industry, but in so doing it would also:

- weaken the pressure for performance improvement in the industry;
- involve the greatest delay in the benefit to consumers; and

-
- be the least APEC compatible of the three options.

Also, the Commission is not convinced that the industry needs another 10 years after 2005 to prepare itself to operate at the general tariff rate of 5 per cent.

Figure 11.1 **Post 2005 tariff options**
per cent



Both options 1 and 2 would provide consumers with the full benefit of the 5 percentage point tariff reduction by 2010. As such, these options were favoured by users/consumer and non-automotive interests — with some expressing a preference for option 1 which was seen as delivering benefits more rapidly. In addition, both options would convey similar signals about Australia’s commitment to reduce automotive assistance in line with the APEC goal.

However, initiating further tariff reductions immediately after the step down in the tariff to 10 per cent could be an unanticipated development — particularly given the tariff pause precedent of the current regime. Thus, there is some risk that it could impact on investment commitments predicated on a more delayed transition to a lower tariff environment. Having considered all of the points raised in response to the Position Paper, the Commission remains of the view that tariff option 2 would provide the best balance between the competing considerations outlined above.

11.5 Participants' responses to the preliminary options for transitional support

In contrast to the tariff options, participants were broadly supportive of the Commission's preliminary proposals for the continuation of ACIS. In general (but not in all cases), participants:

- expressed a preference for option 1 (that is payment over 5 years); and
- supported the concept of separate funding pools.

FAPM reported that '... the solid view of the membership ... [was a preference for] more money over the shorter period of time' (trans., p. 40).

Representing the views of the vehicle producers, FCAI submitted that:

... renewal of the currently capped elements of ACIS with funding of at least \$2 billion over a five-year period 2006-2010 would be the minimum position supported by the industry. (sub. PP99, p. 17)

In supporting a \$2 billion *capped* scheme, FCAI and the vehicle producers were of the view that the uncapped production credits should continue independently of the capped pool. Participants from the component sector did not object to this proposal, provided it did not lead to a reallocation of funding between the two groups.

A few participants proposed variations to the preliminary options. For example, InterCast & Forge said that to preserve the purchasing power of the \$2.8 billion ACIS for 2001-05, any post 2005 scheme should start from a funding base of around \$3.6 billion. Mitsubishi sought a variation of preliminary option 3 involving maintenance of the current level of funding for the first five years.

More broadly, a number of participants reiterated their view that the funding cap that currently applies to the bulk of ACIS support should be removed.

Vehicle producers and their suppliers had different views on distribution

The component sector broadly endorsed the proposal in the Position Paper for a fully capped ACIS with two pools and an allocation based on 65 per cent for the vehicle producers and 35 per cent to the component sector. That said, FAPM noted that:

... the amounts available to each participating group should be based on a sound economic rationale such as relative contribution to industry value added, rather than on some historical assistance allocation unrelated to economic efficiency. (trans., p. 30)

However, it went on to state that, in the event of any changes to the way that vehicle producers earn duty credits, the creation of separate pools would be imperative to reduce their drain on a single pool. On that basis, it supported the Commission's suggested method of allocating funding across the two pools. Some other suppliers, such as Bridgestone (sub. PP111, p. 5) also considered that there was little justification for providing a greater share of funds to the vehicle producers.

On the other hand, some of the vehicle producers contended that, as well as a continuation of their uncapped entitlement (see above), the capped pool should be split 65:35, rather than the current split of around 50:50 (see section 11.6). For purposes of illustration, if this approach were applied to the current ACIS, around 80 per cent of total funds would go to the vehicle producers.

Vehicle producers argued for continuation of their uncapped production credits

As noted, the vehicle producers contended that the uncapped element of ACIS — the former Duty Free Allowance (DFA) — should, given its history, remain uncapped (see box 11.2). Most pointed to the fact that the automotive industry is ineligible for the Tariff Concession System (TCS) because the 'DFA' ostensibly fulfils a similar role.

Box 11.2 The DFA and uncapped production credits

The DFA, which dates back to the 1960s, was introduced to compensate vehicle producers for the cost penalties from meeting mandatory local content requirements. Broadly it allowed vehicle producers to enter, duty free, imports to the value of 15 per cent of their domestic production for specified PMVs. With the abolition of local content protection, its rationale has partly become to provide vehicle producers with a sector-specific, and more generous, alternative to the generally available TCS.

When ACIS was mooted as a replacement for the Export Facilitation Scheme, it was envisaged that the DFA would continue in its own right. However, it appears that it was repackaged and included in ACIS for reasons of administrative neatness. Indeed, the DFA and ACIS uncapped production credits are analogous. While there are differences in the methodologies used to calculate the benefit, the value of that benefit is identical. (Production for exports under ACIS is treated in the vehicle producers' capped production credits — see appendix E.)

Mitsubishi contended that:

... cars have become increasingly complex from a technology standpoint and the proportion of components that cannot be sourced locally has steadily increased. Based on its own estimates [Mitsubishi] believes that if the industry had access to the [TCS] it would cover components to a value of over 20 per cent of the value of production of

motor vehicles. ... As the [TCS] is uncapped and accessible to most other industries this represents a further ground for not capping the DFA ... (sub. PP112, p. 9)

It further argued that as long as the average level of imported content exceeds 25 per cent, ACIS production credits (including the 'DFA') have a zero impact on the budget because each credit earned on production for the domestic market is matched by a collateral duty liability on imported components.² Based on this logic, Mitsubishi contended that there would be no case to cap the 'DFA' because it is 'self-funding'. Although indicating that the proportion of components that cannot be sourced locally has increased, Mitsubishi did not favour accession to the TCS in lieu of the 'DFA' (see below).

Ford also submitted that the 'DFA' has a compensatory element because the automotive industry is excluded from the TCS. However, both Holden and Ford argued that the *primary* aim of the 'DFA' is to equalise effective assistance between the vehicle production and component sectors. On that basis, they contended that vehicle producers should retain access to an uncapped 'DFA' *and also* be granted access to the TCS. (Mitsubishi disputed that reducing disparities in assistance between the two sectors was a rationale for the DFA.)

There were also requests from vehicle producers to extend the uncapped 'DFA' to export production. For example, Mitsubishi called for the uncapping of all production credits — in essence this would bring exports within an expanded 'DFA'. Holden expressed a similar view. It sought the preservation of the current 'DFA' monetary quantum to offset the impact of the reduction in the tariff to 10 per cent in 2005:

Because the duty rate will by 2006 have fallen to 10%, the \$800 million should be approximately sufficient to permit the traditional DFA rate of 15% to be funded over the period 2006-2010, including export production. (sub. PP101, p. 17)³

² If 25 per cent of production represents imported content, then the government will earn tariff revenue which it will pass back through the 'DFA' (based on 15 per cent of eligible production) and the portion of capped production credits relating to production for the domestic market (based on 10 per cent of eligible production). That said, in arguing that the DFA has a zero net impact on the budget, there is a presumption that tariff revenue raised from an industry should be refunded to that industry, rather than going to consolidated revenue.

³ The \$800m refers to the value of uncapped production credits for 2001-05 (currently estimated at \$842m). The 'traditional DFA rate of 15 per cent' refers to production, not the tariff rate.

Some contended that the distribution of ACIS funds should be decided by the industry and the government

There was also a view, expressed primarily by vehicle producers, that the Commission's role should be only to establish the quantum and time profiles for the ACIS options and that design features of the scheme, including distributional issues, should be left to consultations between the 'industry' and the government.

It was evident from the public hearings that a number of component producers were less than comfortable with this approach, given their fears that the vehicle producers might appropriate an even greater share of ACIS in a 'behind closed doors' process.

Apart from the threshold issues of the distribution of funds between vehicle producers and their suppliers and the 'DFA', participants raised a range of other design matters — such as the extension of ACIS to raw materials suppliers and changes to the basis for earning duty credits. These are canvassed in section 11.7.

11.6 The Commission's view on transitional support

The majority of ACIS funding should remain capped

The Commission maintains its view that a funding cap (and therefore modulation) would be a necessary feature of any future ACIS. It considers that it would be inappropriate to provide a blank cheque for a scheme which has, as its primary function, the need to facilitate the transition of the industry to reduced support. Moreover, an uncapped scheme could result in a funding 'blow-out' given the potential for expansion of R&D and investment claims.

In addition, to facilitate compliance with Australia's WTO commitments, the requirement that no firm receive benefits exceeding 5 per cent of its annual sales in the preceding year would need to be retained.

There is a case for continuation of uncapped production credits (the 'DFA')

The Commission's Position Paper proposed that the motor vehicles producers' uncapped production credits (the 'DFA') should be included in their capped pool. In essence, by capping all funds to maintain relative funding shares based on 2001-2005 levels, the Commission sought to avoid the imposition of a greater adjustment burden on the vehicle production sector. (Owing to the direct link between the tariff rate and production credits, under an ACIS with a shared pool, reductions in the tariff redistribute funding from vehicle producers to their

suppliers.) However, as noted, vehicle producers submitted that this ‘DFA’ element should continue uncapped.

Having considered the arguments put by the vehicle producers, the Commission accepts that, in the absence of the industry’s access to the TCS, there is a legitimate case for some sort of ‘DFA’. But, it does not accept the view that the role of the ‘DFA’ is to equilibrate assistance between vehicle producers and component suppliers so that former should therefore have access to both a ‘DFA’ *and* the TCS. As noted in chapter 9 (and appendix E), in the Commission’s assessment, the effective rates of assistance for vehicle and component production are now broadly equivalent. Moreover, any disparities in effective assistance would not have significant resource allocation effects in the prevailing assistance environment.

In assessing the relative merits of the ‘DFA’ against providing the automotive industry with access to the TCS, it is clear that:

- The 3 per cent revenue duty applying to business inputs under the TCS would erode the benefits to vehicle producers relative to the ‘DFA’.
- Notwithstanding that vehicle producers might import 20-25 per cent of the value of their production, some of this relates to inputs where domestic substitutes are arguably available, which would debar TCS entry. (For example, Holden imports some headlamps and wheels even though these items are locally produced.) Hence, reverting to a TCS might also reduce both, the competitiveness of vehicle producers, and pressures for necessary rationalisation in the component sector.
- The TCS would, in all likelihood, involve a greater compliance burden for the industry and higher administration costs than the ‘DFA’. Certainly, reversion to a TCS would involve significant short term transaction costs during a transition period in which it would be least welcome.
- ‘DFA’ credits also have an advantage that they can be used for purposes other than duty relief on component imports.

On balance, the Commission considers that, at least in the current transitional context, the ‘DFA’ is a more appropriate mechanism for the industry than the TCS.

In accepting that there is some logic to the ‘DFA’, it follows that there is a case for it to continue in its uncapped form. In this separate form it could also be maintained after the capped elements of ACIS had lapsed. This would enable it to provide some longer term support to address any lingering concerns about adjustment pressures. (An continuing ‘DFA’ could also provide some flow-on benefit to the component sector.)

However, after 2015, the Commission considers that it would be appropriate to determine whether the ‘DFA’ should be abolished and the automotive industry granted access to the TCS instead.

Finally, the Commission does not consider that export production credits should be uncapped (through extension to the ‘DFA’). The TRADEX scheme already provides duty relief for imported inputs used in vehicles destined for export markets. Thus, the Commission is of the view that TRADEX in conjunction with (modulated) production credits for exports is sufficient.

Funding for capped elements of ACIS should not exceed \$2 billion

In the Position Paper, the Commission suggested a funding level in the range \$2 billion to \$2.8 billion for its preliminary ACIS options. It also noted that current ACIS funding is not based on any ‘science’.

Not surprisingly, the industry opted for the high end of this range. It argued that funding should be retained at least at current levels to provide equivalent transitional support for a further 5 per cent reduction in the tariff. Alternatively, a case could be mounted that the entire ACIS pool should be reduced in line with the reduction in the tariff — consistent with the reduction in vehicle producers’ production credits. This could be seen to be consistent with seeking to phase down the industry’s reliance on government support overall.

With a continuation of the ‘DFA’, the *maximum* total funding commitment for the ACIS options becomes self-defining, comprising retention of the \$2 billion capped pool plus an uncapped ‘DFA’. This is towards the upper end of the range of values contemplated in the Position Paper.

A capped funding commitment of \$2 billion plus continuation of the ‘DFA’ would amount to a seamless continuation of the current ACIS. Indeed, a cautious approach to transitional support would argue in favour of maintaining such continuity with the current regime.

There should be separate funding pools for vehicle producers and their suppliers

In the Position Paper, the Commission said that, consistent with the transitional objectives of ACIS, there would be little justification for imposing a greater adjustment burden on one particular sector of the industry. With that in mind it proposed two separate pools with total funding (inclusive of the ‘DFA’) allocated on the basis of the shares received by each group under the current ACIS — that is,

a 65:35 split. Given the strong support from all sectors of the industry for separate funding pools, the Commission sees no reason to change its view on this matter.

However, the preservation of an uncapped ‘DFA’ has implications for how the capped pool should be allocated. Mitsubishi submitted that:

... it is the job of the various sectors of the industry to make their own case for future ACIS funding, we also submit that if *cross sectoral equity* is to be restored not less than 65% of the future total capped benefits should be reserved for vehicle producers. (sub. PP112, p. 11, emphasis added)

This restoration of ‘cross sectoral equity’ refers to initial perceptions of how ACIS funds were to have been allocated (broadly in line with the superceded EFS) prior to the scheme actually coming into legislation. But, applying this historical benchmark — which was never realised — for ACIS allocations to the period after 2005 would appear to be at odds with the extent of additional (and anticipated) outsourcing that is now a feature of the automotive industry. This is resulting in component suppliers having to bear greater costs and risks of product development.

Most importantly, for the reasons outlined above — specifically, to avoid imposing differential adjustment pressures — the Commission considers that each pool should be funded at anticipated levels (net of ‘DFA’) under current arrangements — that is 50:50.

Each pool would be subject to separate modulation factors. This would mean that, for the vehicle producers, the impact of tariff reductions in reducing the benefit accruing from capped production credits would be offset by an increase in the modulation factor for their pool — rather than shared with the component sector (as would arise under a single capped pool).

Transitional options

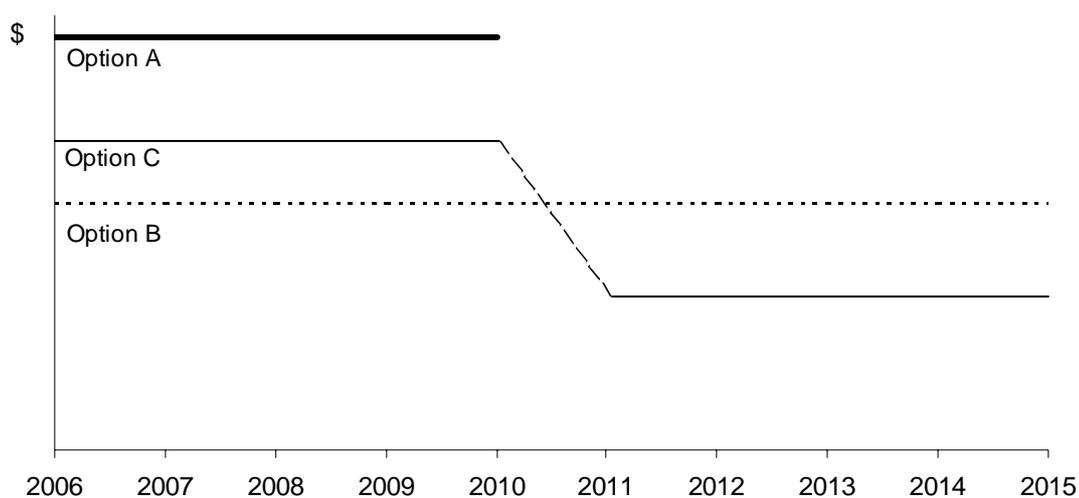
Against this backdrop, the Commission has settled on the following three options for extending ACIS support. Each would involve an equivalent funding commitment in net present value terms. But the time profile (see figure 11.2), and therefore the notional dollar amount of funding, would vary:

- A. Up to \$2 billion in funding allocated equally across two separate capped pools — one for vehicle producers and one for their suppliers — provided over five years, ceasing in 2010.

-
- B. Funding *with an equivalent net present value to option A*, allocated in the same way, provided over 10 years at a uniform rate, ceasing in 2015.⁴
 - C. Funding *with an equivalent net present value to option A*, allocated in the same way, provided over 10 years ceasing in 2015, with funding for the second five-year period set at half that for the first five-year period.

All of these options would involve continuation of the vehicle producers' uncapped production credits (the 'DFA') until 2015, at which time an assessment could be made about whether those arrangements should be terminated and the industry afforded access to the TCS (if still relevant). Also, the overall cap on funding to individual firms (5 per cent of sales) that applies under the current regime should be retained.

Figure 11.2 Time profiles for ACIS options^a
year ending 31 December



^a The net present value of funding for each of these options would be identical. The actual annual dollar amounts payable for each option would therefore depend on the period of funding and the discount rate applied.

The pros and cons of these three approaches involve similar considerations to the three tariff options.

Options B and C, involving ACIS support until the end of 2015, would provide the most extended cushion for adjustment pressures ensuing from a further reduction in the tariff. However, industry wide ACIS funding for a further 10 years would

⁴ In practice, this might require two periods of five years each. This is because, in the early years, it might be difficult to set modulation factors for a ten year scheme based on one or two data points.

stretch the concept of a transitional measure. It might also raise questions in an APEC context.

Option A would see the bulk of ACIS support cease in 2010. But, with the total net present value of funding the same, it would provide for a higher rate of support in the period immediately preceding the reduction in the tariff to 5 per cent under the Commission's preferred tariff option. The industry expressed a preference for this option, reflecting, at least in part, a view that much of the restructuring and positioning for any impending tariff reduction needed to be undertaken sooner rather than later.

Taking into account the various views put forward, the Commission favours option A because it:

- accords more closely with the transitional nature of such an instrument;
- better positions Australia with respect to its international commitments; and
- would deliver the industry a greater capacity to prepare for the 2010 tariff reduction, by concentrating the funding in the first five years.

Option A would mean that funding would cease within a year of the Commission's preferred tariff option. The Commission had this in mind in providing for the continuation of the 'DFA' component of funding support for vehicle producers beyond 2010. This should help to ameliorate concerns that a withdrawal of generalised ACIS support in conjunction with a reduction in the tariff to 5 per cent by 2010, would impose heightened adjustment pressures on the industry at that time.

Nevertheless, were significant concerns to remain about the capacity of the industry to adjust to a 5 percentage point reduction in the tariff in 2010, or for it to be able to continue to attract investment funds after 2010 with a 5 per cent tariff and no ACIS, then options B or C might be favoured over option A.

11.7 ACIS design issues

Various changes to the design of ACIS have been proposed

In providing policy options for post 2005 automotive assistance arrangements, it is important to ensure that they conform with good process — particularly, the need for predictability and certainty (see chapter 10). This has ramifications for arguments for modifying the design of ACIS.

Participants nominated various changes to the basis for distributing ACIS funding, including expanding access to the scheme, changing the basis for earning duty credits and making eligibility conditional on particular outcomes.

Significant changes to eligibility criteria could run counter to the objectives of a transitional scheme

Some smaller (original equipment) component producers and toolers who fall below the minimum production thresholds contended that the eligibility requirements for access to ACIS should be relaxed. Some raw material suppliers and firms supplying components exclusively to the aftermarket made similar requests.

For example, the Plastics and Chemicals Industries Association submitted that ACIS funding should be extended to polymer compounds specifically tailored for the automotive industry because:

... polymer suppliers in particular bring along with them not just the material but a lot of know-how in terms of design, design of the component, the moulding capability and all the other issues. (trans., p. 315)

And, the Australian Automotive Aftermarket Association argued that:

Aftermarket manufacturers are currently penalised through their exclusion from ACIS despite previously being eligible for programs like export facilitation schemes under previous government policy arrangements. We believe that it's inequitable that aftermarket manufacturers are excluded from the current assistance arrangements and it's inconsistent that [automotive component producers] who [also] provide product for the aftermarket can claim ACIS while their competitors can't. (trans., p. 265)

The Commission accepts the force of some of these arguments. Indeed, it is far from clear that the activities of some of the firms that are currently ineligible for ACIS support are less important to the industry's future viability than those of firms which are able to access the scheme.

However, given its transitional role, extension of ACIS to a range of new activities could be counterproductive. In the Commission's view, the role of ACIS is not to introduce new firms or activities to additional industry assistance, but rather to facilitate the transition to lower assistance for currently assisted firms.

Changing the basis for earning credits would create uncertainty

The majority of participants generally supported the basis on which duty credits are earned under ACIS. One area of dissent, expressed by some vehicle producers, related to their inability to earn duty credits for own use R&D.

Vehicle producers can only claim R&D credits for investments in automotive components (other than engines and engine components), machine tooling and services where that R&D is undertaken for third parties. Conversely, component producers can claim for own use R&D — but are ineligible for production credits.

While this might seem anomalous, there is a logic to the arrangements. Were vehicle producers to obtain a benefit for own use R&D *and* production, this would effectively amount to assisting *successful* R&D activity twice (over different time frames) as such R&D would generally translate to a production benefit. On the other hand, where vehicle producers undertake R&D for third parties, they do not receive any consequent production benefit. In such cases, the payment of R&D credits would seem to be appropriate. As Ford acknowledged, benefits for R&D versus production essentially relate to timing:

... if you are going to develop niche products in Australia with a small home market, R &D becomes a critical success factor for the business. ... it's a very much front-loaded exercise. You are spending some of the R&D money at a time when you are unsure about the outcome. (trans., p. 165)

Accordingly, Ford submitted that vehicle producers should be able to claim benefits for a limited range of 'innovative' own-use R&D:

We think that R&D assistance for own use should, through ACIS ... only be directed towards highly innovative products. ... the majority of the R&D expense would continue to be covered by ... the IR&D tax concession at 125 per cent. But the ultra-innovation if you like, would be covered by higher reward rates with some rather stringent tests. (trans., p. 165-6)

In seeking to bring forward assistance in this way, there would need to be an offsetting reduction in production credits. Indeed, it appears that Holden (sub. PP101) sought such a change. It called for 'shifting the links of subsidies from a production emphasis towards R&D and investment initiatives' (p. 15) and 'an appropriately tailored scheme, involving no additional government financial commitment ... but directing a part of those funds into R&D' (p. 19).⁵

The Australian Labor Party, in its response to the Position Paper, advocated:

... a re-design of the post 2005 ACIS to give greater rewards to R&D, training and investment, while not removing assistance to production entirely. (ALP 2002, p. 4)

This position reflects the ALP's concern that production credits go 'straight to the car maker's bottom line'. Thus, it went on to argue that:

⁵ Like Ford, Holden contended that the subsidy for own use R&D should be targeted at highly innovative R&D such as vehicles 'of a type not previously made in Australia'. It added that where the vehicle was a 'world first' it should attract a higher rate of subsidy.

With ACIS simply enhancing the bottom lines of Australian car-making affiliates, there is nothing to stop their global head offices appropriating those enhanced Australian profits for use in other countries on R&D, investment and dividend distributions. (p. 4)

In the Commission's view, however, it does not follow that vehicle producer's own use R&D is deterred because it is an ineligible activity. Given the fungibility of duty credits, it may not matter a great deal whether the basis for earning credits is related to production, R&D or investments in plant and equipment. Indeed, the survey of all of the vehicle producers (DTT 2002), found that, while ACIS does not reward own use R&D activity, 'ACIS benefits are in fact being applied to this activity'. Automotive firms today spend considerably more on training and R&D than their counterparts in many other areas of manufacturing (see chapter 5). For much the same reasons, *whatever* the basis for earning credits, a portion of ACIS funding will eventually benefit shareholders (even if through smaller losses than otherwise) and other stakeholders, including employees and customers.

That said, the Commission agrees that, in principle, where public funds are involved, there is merit in seeking to ensure that the pay-off to the community is maximised through effective program design. This could include more directive approaches to compel firms to undertake certain 'appropriate' activities. For instance, if the objective of ACIS were to address underprovision of socially beneficial R&D, it would seem sensible to target that activity directly.

However, the primary rationale for ACIS is to provide transitional support. It is not a long term plan to underpin automotive R&D — although it does eventually reward *successful* R&D by vehicle producers. In this context:

- The current flexibility afforded by the production based credit earning system allows firms to make investments in plant and equipment and R&D expenditures which best meet their particular needs. For example, Mitsubishi has recently announced a major boost in production for exports which would, in all likelihood, have 'factored in' current rules for earning production credits.
- Thus, changing the basis for earning duty credits could:
 - disadvantage firms which had already brought forward their R&D in response to the current incentives; and
 - have substantial effects on the distribution of assistance among the vehicle producers — probably for this reason, the FCAI was non-committal on the merits of such a change.

Perhaps most significantly, by compelling a redirection of resources towards new R&D, such a change could distort the capacity of some firms to use ACIS funds in a manner which best supported their transition to lower assistance.

Using ACIS to leverage broader goals could lead to unpredicted outcomes

There were numerous proposals to make eligibility for ACIS conditional on the achievement of particular outcomes such as: vehicle producers securing contracts for their component suppliers with their overseas affiliates; better workplace and industrial relations outcomes; and improved safety and environmental features in vehicles. For example, the Australian Greenhouse Office and Environment Australia (sub. 62, p. 22) submitted that environmental performance criteria, and in particular fuel consumption targets, should be incorporated into ACIS.

However, the Commission does not consider that using ACIS as a means to achieve broader goals would be desirable. In the first instance, these objectives would generally be more appropriately met directly through, for example, emissions/fuel standards. Indeed, making ACIS support conditional on the achievement of particular targets could even lead to counterproductive outcomes. (See the Commission's comments on the difficulties associated with using ACIS to 'leverage' industrial relations outcomes in chapter 5.)

Some of the proposals would also be very difficult to administer, whatever their intrinsic merit. For example, the CEO of Air International noted that:

... the vehicle producers ... ability to actually work and assist the component sector to find access to their parent companies, to introduce them, leverage them, encourage that process is less than we would like them to deliver ... I would like to think that we could encourage a commitment from the car-makers here ... (trans., p.51)

However, he went on to acknowledge the difficulties of seeking to mandate such behaviour, adding that 'I don't think you can legislate to do it.'

On balance, it would not be desirable to introduce new uncertainties into ACIS

The Commission remains of the view that foreshadowing changes to a scheme that has been in operation for less than two years would introduce undesirable uncertainty about firms' future entitlements. There is already widespread concern about uncertainty arising from the modulation arrangements used to adjust firms' entitlements. Moreover, some of the proposed changes would add to the complexity of the scheme and could be difficult and expensive to administer.

The Commission considers that considerable weight should be placed on avoiding uncertainty associated with significant changes in scheme design — particularly, changes which could have major distributional consequences. Thus, apart from seeing merit in the creation of separate capped funding pools for vehicle and component producers — which would reduce uncertainty — it does not consider that other changes to the design of ACIS would be beneficial.

11.8 A package to facilitate adjustment

The Commission has put forward various options for reducing passenger motor vehicle and component tariffs from 10 per cent in 2005 to 5 per cent in the period 2010-2015. Regardless of the tariff option chosen, it has argued that there should be no further tariff reductions until after 2015. This is consistent with the industry's own desire for a decade of policy certainty.

The Commission has also seen merit in continuation of ACIS support as a transitional measure linked to the further tariff decline. Once again, it has provided a range of options. Thus, were there to be significant concern about the capacity of the industry to adjust to operating at a 5 per cent tariff in 2010, ACIS options providing for a longer period of support at a lower annual rate might be favoured.

Moreover, the Commission has further proposed that the 'DFA' for vehicle producers continue until 2015, which under its preferred tariff and ACIS options would mean that the 'DFA' would operate for at least five years *after* the tariff had reduced to 5 per cent and other ACIS support had ceased. In this context, the 'DFA' would provide an additional measure of ongoing support.

In addition, to help further ensure a smooth transition, the Commission sees benefits in retaining, for the time being:

- the specific tariff on imported second hand vehicles; and
- government purchasing preferences for domestically produced vehicles (see chapter 12).

A guaranteed assistance regime of this nature and duration would be generous, at least by today's standards. Other industries — including some with similar planning and investment horizons to the automotive industry — face the possibility of losing their tariff protection altogether before 2015 as part of Australia's commitment to APEC. Against these considerations, the Commission's expectation is that:

- the tariff-ACIS package would represent the totality of special government support for the industry over this period; and
- the decade after 2005 would be the last period of preferment for the automotive industry — after that, it should not depend on the community for special support for its operations.

This would be a highly desirable outcome for both the industry and the community as a whole. An automotive industry able to operate successfully in the global market on its own merits, would represent a welcome dividend for the decades of substantial support it has received from the community.

FINDINGS ON OPTIONS FOR POST 2005 AUTOMOTIVE ASSISTANCE

- *A settled path for future automotive assistance policy would serve to reduce one source of uncertainty impacting on investment and production decisions in the industry. To this end, specification of a clearly defined assistance regime for the industry for the decade after 2005 is appropriate.*
- *The Commission has identified three options for reducing tariffs on passenger vehicles and components to the current general rate:*
 1. *Reduce the tariff by 1 percentage point a year, commencing in 2006, so as to achieve a rate of 5 per cent in 2010, with no further reductions before 2015.*
 2. *Leave the tariff at 10 per cent until 2010 and then reduce it in one step to 5 per cent, with no further reductions before 2015.*
 3. *Leave the tariff at 10 per cent until 2010 and then reduce it by 1 percentage point a year so as to achieve the rate of 5 per cent in 2015.*

Of these options, the Commission's preference is for option 2.

- *The Commission sees a continuation of ACIS after 2005 as a means to facilitate a reduction in the tariff to 5 per cent. It has identified three ACIS options:*
 - A. *Up to \$2 billion in funding allocated equally across two separate capped pools — one for vehicle producers and one for their suppliers — provided over five years, ceasing in 2010.*
 - B. *Funding with an equivalent net present value to option A, allocated in the same way, provided over 10 years at a uniform rate, ceasing in 2015.*
 - C. *Funding with an equivalent net present value to option A, allocated in the same way, provided over 10 years ceasing in 2015, with funding for the second five-year period set at half that for the first five-year period.*

All of these options would involve continuation of the vehicle producers' uncapped production credits until 2015, at which time an assessment could be made about whether such payments should be terminated and the industry afforded access to the Tariff Concession System (if still relevant). Also, the overall cap on funding to individual firms (5 per cent of sales) that applies under the current regime would be retained.

Of these options, the Commission's preference is for option A funded at \$2 billion (excluding vehicle producers' uncapped production credits).

- *There are not sufficiently strong grounds to warrant modifying the design of ACIS with respect to its eligibility criteria or the basis for earning duty credits (including any linking of payments to the achievement of particular outcomes, such as environmental and industrial relations objectives).*

12 Other assistance matters

12.1 Certainty and the policy environment

As noted in the previous chapter, industry participants stressed the need for policy certainty for the automotive industry. Reflecting the already uncertain global environment in which the industry operates and its relatively long investment horizons, the Commission concurs with this view. In this light, it considers that ‘second tier’ policy settings need to be consistent with longer term tariff-ACIS objectives. In particular, it considers that it would be important to minimise the prospects of other policy settings for the automotive industry conflicting with these objectives or introducing unwarranted uncertainty.

This chapter therefore discusses assistance matters — beyond the core tariff-ACIS arrangements — which could bear on the performance of the Australian industry. These include the specific tariff on second hand vehicles, the current differential between PMV and 4WD tariffs, government purchasing preferences for locally produced vehicles, developing country preferences, the Tariff Concession Scheme, the recently lapsed Automotive Market Access and Development Strategy and forms of ad hoc assistance. In addition, consideration is given to an industry proposal for the creation of an Overseas Assembly Provision.

12.2 The specific tariff on second hand vehicles

Removing the specific tariff on second hand vehicles would heighten uncertainty

In July 1991, the Government introduced a specific tariff of \$12 000 on imported second hand vehicles to be levied in addition to the prevailing vehicle tariff. It was imposed in response to industry concerns that imports of used vehicles from Japan would have an adverse effect on the local industry.

The specific tariff is effectively a ban on the importation of used vehicles¹ (particularly now that the Specialist and Enthusiast Vehicle Scheme has closed an earlier loophole). Some participants noted that the tariff is a regressive form of taxation as it targets vehicles likely to be sought by those on lower incomes. Many also contended that access to relatively new used cars from Japan would reduce the average age of the Australian car park, leading to better environmental and road safety outcomes. Others, however, suggested that such benefits may be exaggerated, citing a recent increase in the average age of used vehicles (to around 5 to 8 years) being imported into New Zealand (which no longer has restrictions on such imports).

While the potential impact on domestic automotive manufacturing of removing the specific tariff would potentially be significant, the precise effects are unclear:

- Some contended that used vehicles would compete with new imports, or small cars, rather than Australian built vehicles. The implication is that the removal of the specific tariff would be primarily at the expense of new imported vehicles.
- Others pointed to the fact that most Australians who purchase locally made vehicles do so on the second hand market — primarily ex fleet vehicles. Were imported used cars to compete in that market and reduce used car prices, this would lower residual values for fleet vehicles. This could have negative consequences for fleet operators — who purchase around three-quarters of local production — and so could undermine a key underpinning of the vehicle production sector.

At the public hearings, vehicle producers contended that unfettered entry of second hand vehicles into Australia would be very adverse for local vehicle manufacturing. The demise of vehicle assembly in New Zealand was cited as an example of the incompatibility between local assembly and open access to imports of second hand vehicles. Industry participants also argued that punitive forms of barrier protection against second hand vehicles were justified given that such imports primarily derived from ‘artificial’ Japanese domestic policies which effectively force such vehicles to be retired early.

That some in the industry saw the removal of the specific tariff having such a strong impact on local vehicle manufacturing, suggests that consumers would probably purchase significant numbers of second hand vehicles if the prohibitive tariff impost were removed. This implies that the costs to consumers from maintaining such arrangements would be commensurately large.

¹ For a second hand vehicle with a customs value of \$5000, the 15 per cent PMV tariff results in a duty of \$750 which in concert with the specific tariff, leads to a total impost of \$12 750 — an ad valorem equivalent of over 250 per cent.

But, while the Commission recognises that there would be benefits for consumers from removing the specific tariff on imported used vehicles, doing so at this time would have the potential to introduce a destabilising influence into an otherwise structured plan for phased reductions in assistance to automotive manufacturing. It considers that the future of this measure would be better revisited once the transition program attached to the tariff-ACIS options outlined in the previous chapter has concluded.

12.3 Tariffs on four wheel drives and light commercial vehicles

The differential tariff may lead consumers to substitute imported 4WDs for locally produced PMVs

The different tariff treatment between PMVs and 4WDs/LCVs may have unintended effects. In particular, it has been suggested that the lower tariff rate on imports of 4WD vehicles erodes sales of locally produced vehicles by motivating consumers to switch from PMVs to these more lightly assisted vehicles.

In its initial submission, Holden expressed the view that the definition of a 4WD should be changed in a manner which would result in a tariff increase for a significant number of 4WD models:

Holden would support a limited application of a higher tariff for imported 4WD vehicles that do not use Body on Frame construction, at a rate comparable to that used for passenger vehicles. The Body on Frame 4WD vehicles perform a true off-road function, while it can be argued that Monocoque vehicles are not usually purchased for serious off-road use. The imported 4WD vehicles utilising Body Frame Integral construction design are direct substitutes for passenger vehicles and the 4WD features of these vehicles are incidental to the consumers' use of the vehicle. (sub. 72, p. 70)

Prior to the release of the Position Paper, none of the other local vehicle producers requested a change to the tariff on 4WD vehicles, even though it has been reported that they plan to introduce locally produced models to this market segment. However, in response to the Position Paper, Ford mounted a similar argument to that put by Holden:

By deleting the 'off road' category in 'chapter note five' of Chapter 87 of the Act, vehicles would then be classified for tariff purposes in line with their primary purpose of design. For example, a four-wheel-drive all-terrain wagon, such as a Ford Escape, would attract a passenger car tariff in that it was primarily designed for the carriage of people. A four-wheel-drive cab/chassis light truck, such as a Toyota Landcruiser, would attract the same rate as commercial vehicles in that it was primarily designed for the carriage of goods. (sub. PP105, pp. 25-6)

In response to these proposals, Toyota submitted that it saw ‘no reason to change the four wheel drive tariff regime’ (sub. PP95, covering letter). Mitsubishi expressed a similar view (sub. PP112).

The proposals by Holden and Ford could introduce new anomalies

As noted in appendix E, there is no tariff classification that deals specifically with LCVs or 4WDs. Vehicles for the transport of persons attract a 15 per cent duty, whereas vehicles for the transport of goods are subject to a 5 per cent duty. The determination of vehicles as either people or goods transporters is made by Customs based on Australian Design Rule criteria. 4WD vehicles are delineated in terms of seating capacity and features such as a four wheel drive system, appropriate approach, breakover and departure angles and ground clearance. Using such criteria, where a 4WD is deemed to be a passenger vehicle — such as a Subaru Liberty — it attracts the PMV tariff.

In essence, the definitional changes proposed by Ford and Holden would provide an increase in protection for their forthcoming locally produced 4WD variants. The thrust of their argument is that ‘bona fide’ truck chassis 4WDs are goods vehicles and 4WDs built on a monocoque platform are passenger vehicles with incidental off-road capabilities.

However, such arbitrary distinctions could introduce new anomalies. For example, the Mitsubishi Pajero — arguably a ‘serious’ off-road vehicle (several times winner of the Paris to Dakar rally) — has recently moved from a backbone chassis to a monocoque construction. This highlights the risks under the sorts of tariff approaches proposed by Holden and Ford of regulatory definitions having to keep up with changes in technology.

More generally, simply judging vehicles by their perceived primary use (passenger or goods) would be no less arbitrary than the current approach. For instance, it is debateable whether, say, a Toyota Landcruiser is primarily designed, or used, for the movement of goods.

No change to 4WD and LCV tariffs is warranted

The Commission acknowledges that in the absence of having end-use criteria attached to each individual imported 4WD vehicle, current (and proposed) definitions of 4WDs will create some anomalies and lead to some substitution away from more highly protected passenger vehicles.

However, in an environment in which tariffs are declining, a temporary increase in 4WD tariffs to achieve allocative gains of questionable significance has little merit. The Commission therefore reiterates its view in the Position Paper that:

- Such substitution does not constitute a strong case for increasing the tariff on 4WDs and their components. The desirable goal of uniformity in tariffs for PMVs and for LCV/4WD vehicles would be better achieved through the reduction in the former, rather than by a temporary increase in the latter.
- Equalising tariffs by raising those on 4WDs would potentially impose double adjustment costs. Some local producers would receive an increase in assistance and, importantly, consumers would face a doubling of the tax impost on their vehicle purchases, followed by a readjustment back to current levels as the tariff was phased back down.

12.4 Other tariff related issues

The efficacy of developing country preferences in a low tariff environment

Developing country (DC) preferences apply to certain automotive imports. The country of most relevance today for Australia's automotive sector — South Korea — receives a preferential rate set at 10 per cent on some components (such as tyres), but not on vehicles. This preference will become redundant in 2005 when the general tariff on those components also falls to 10 per cent.

The DC preference issue was raised in a joint presentation at the public hearings by the Australian Tyre Manufacturers' Association (ATMA), South Pacific Tyres and Bridgestone. Bridgestone noted that:

At the moment developing countries receive certain preferential tariff treatment for imports into Australia. It seems illogical to us as many of these countries have manufacturing bases which are very significant and certainly cause us problems when we have imports coming from countries like Korea and Thailand ... We can't export tyres to those countries because of their protection, but it seems that imports from those countries get concessional treatment when they come into Australia. ... That also prejudices investment in Australia as far as a manufacturing base. (trans., p. 66)

However, ATMA confirmed its understanding that once the PMV and related tariffs fall to 10 per cent, the preference margin will become redundant for all developing countries currently exporting tyres to Australia:

... the department has written back and ... that's our present understanding. It perhaps needs to be emphasised that present understandings sometimes change ... (trans., p. 80)

Hence, it appears that the issue as it relates to the automotive industry will be rectified in 2005. In the interim, the Commission does not consider a temporary change to DC preference arrangements applying to one particular industry for the period 2002 to 2005 is warranted.

That said, it could be argued that, with tariffs of 10 per cent or lower throughout the economy in 2005 (with the exception of clothing and finished textiles), the appropriateness more generally of continuing to provide DC preference margins becomes less clear. However, this is a broader trade and foreign policy issue which extends beyond the scope of an inquiry into the automotive industry.

The Commission has previously examined the Tariff Concession System

A number of firms supplying raw materials to automotive producers said that remaining ‘nuisance’ tariffs and the Tariff Concession System (TCS) itself reduce their competitiveness relative to imports. (The TCS provides for duty free entry of goods not produced in Australia. However, a 3 per cent duty is applied to business inputs under the scheme).

The ATMA said that the 3 per cent duty on imported business inputs was ‘a gross, unnecessary and embarrassing impediment to the profitability of local tyre manufacturers’ (sub. PP109, p. 14).

Marplex submitted that:

Australian suppliers of plastics moulding machines are ... caught in the net — there are no Australian manufacturers of most of the machines, yet they cop a 5% or 3% duty ... (sub. 3, p. 2)

The Plastics and Chemicals Industries Association stated that:

... most of the engineering plastics ... are coming in at 5 per cent. There’s a small number of products that are coming in in this area at 3 per cent. ... we are taking issue on the TCO [Tariff Concession Order] issue with government right now. (trans., p. 314)

These comments highlight two inter-related issues.

The first is the issue of ‘nuisance’ tariffs which relates to inputs subject to the 5 per cent general rate (that is, deemed ineligible for the TCS) even though the user considers that the good, or a satisfactory substitute, is not manufactured in Australia. The Commission is not in a position in this inquiry to determine if there are deficiencies in the TCS criteria, which seek to balance the interests of both users and domestic manufacturers when determining whether particular goods should be granted concessional entry.

The second issue relates to the 3 per cent duty on business inputs which *are* accorded entry under the TCS. The Commission has previously recommended that this duty be removed, arguing that the arrangement disadvantages Australian manufacturers and imposes unnecessary costs on their customers (PC 2000, p. xxv). These observations remain valid today.

12.5 Government purchasing preferences

The impacts of government purchasing preferences are unclear

Government fleet purchases account for some 25 per cent of total domestic demand for locally produced vehicles. In addition, sales to government of vehicles imported by the domestic vehicle producers are also significant. This government business is supported by local preference policies applying to Commonwealth, State and Territory and local government entities.

In assessing whether such arrangements are in the interests of the community, relevant factors include:

- The preferences are potentially in breach of the WTO agreement on government procurement. However, Australia is not a signatory to this agreement and no participant submitted that failure to accede to it was having adverse consequences for Australian firms seeking government contracts offshore.
- Local producers and, significantly, importers (not aligned to the local vehicle producers) contend that supply to governments is a low margin business. It appears that the main benefit to local producers is through a significant contribution to scale economies and hence lower production costs.

Thus, the costs to the community from such arrangements could be relatively small.

The Commission considers that, while government purchasing preferences can be a source of inefficiency, this is another area in which policy changes at this time would create uncertainty for the industry during its transition to a lower assistance environment, without sufficient offsetting benefits for the community.

12.6 Automotive Market Access Development Strategy

The Automotive Market Access and Development Strategy (AMADS, see box 12.1) terminated at the end of June 2002. The decision not to extend AMADS followed an interdepartmental review of the Strategy.

Box 12.1 Key elements of AMADS

AMADS, which commenced in 1998, involved funding to:

- Foster international business development and industry collaboration, including through showcasing Australia's automotive engineering and manufacturing capabilities through the aXcess Australia Concept Car;
- Encourage strategic alliances with overseas vehicle and component producers that provide access to technology; and
- Develop opportunities for international collaborative research with priority given to developing Australia's capabilities in alloys and casting for lightweight metals.

Also, as part of the strategy, Invest Australia was responsible for encouraging investment by overseas companies, and a Prime Ministerial Special Automotive Envoy led initiatives to improve access for Australian automotive products to global vehicle platforms and to secure new contracts for Australian automotive firms. Funding over the four year life of the program amounted to a little over \$20 million (see appendix E).

Some would like AMADS re-activated

Some industry participants, particularly component suppliers, requested continued funding support for automotive export market development. For example, Air International stated that 'AMADS was not substantial enough to make a significant change to market access. ... the industry needs to find a mechanism to replace this program' (sub. PP87, p. 5).

The FAPM also supported a continuation of AMADS but with a changed emphasis:

... the industry ... ratified the decision after the second concept car that that method of promoting the industry was no longer required. That did not mean that there was no promotional effort required ... something is required to be done, more targeted, more focused, recognising the different market circumstances that prevail now. (trans., p.40)

The City of Geelong (trans., p. 373-4) and the Australian Automotive Aftermarket Association (sub. PP93) also called for a continuation of the program.

The case for a new AMADS type program is not strong

In the Commission's view, however, much of the work carried out under the strategy could continue without re-activating AMADS. In particular, the Commonwealth Government will continue to:

- pursue avenues to improve market access for all Australian goods and services;
- fund Austrade's services; and

-
- provide access to a range of general assistance programs that aim to assist smaller firms to enter export markets — such as the generally available Export Market Development Grants scheme.

Moreover, via the peak associations, there is no reason why the industry could not also fund some of its own promotional initiatives.

Accordingly, the case for yet more industry specific support via a renewed AMADS is far from clear.

12.7 An Overseas Assembly Provision for the automotive industry?

There is an in principle case for overseas assembly provisions

An overseas assembly provision (OAP) scheme would provide for concessional entry of goods that have been exported from, and subsequently re-imported back into, Australia. Its rationale would be to avoid collection of duty on locally produced goods.

In commenting on the benefits of an OAP scheme for its operations, Holden noted that in 2001, it:

... exported more than 12,000 Australian-made engines that were subsequently re-imported in finished vehicles into the domestic market. While the engine exports provided considerable revenue and a positive benefit to Australia's balance of trade, the full value of the re-imported finished vehicles (predominantly in Daewoo vehicles) attracted the import tariff. The significant duty paid on the re-imported Australian engines constitutes a large burden on export trade. The introduction of an OAP — that allowed concessional entry of Australian components within finished goods — would bolster the export opportunities for Holden's engine production. Likewise, other component manufactures can benefit from the potential of increased exports via the initiation of a well-designed and implemented OAP. (sub. PP101, p. 25)

While this matter was not raised by other vehicle producers, component suppliers or the key automotive industry associations, the Commission is aware that this issue would also be relevant to other automotive firms — such as BTR which exports automatic transmissions to Korea, some of which return in imported vehicles.

Compliance cost considerations suggest that an OAP would be most likely to yield net benefits where industries are protected by tariffs in excess of the general rate. In this regard, an industry-specific OAP scheme operates for the TCF industries. It provides duty concessions to firms that assemble garments and footwear overseas

from predominantly Australian fabric and/or leather and import them back into Australia for local consumption. This ‘experimental’ scheme was to lapse in 2000, but was continued in an expanded form following a recommendation from the Industry Commission during its review of the TCF industries (IC 1997b).

The benefits of such a scheme are apparent for TCF because the same entities export the semi-processed product, assemble them overseas and re-import the finished goods. Hence, the TCF scheme caters to a very high proportion (if not all) of the exported product being imported back into Australia.

In contrast, for automotive products, only a relatively small proportion of the exported product would be re-imported into Australia after it had been embodied into a final good by, in most cases, a separate entity. Therefore, the introduction of an automotive (or, indeed, generally available) OAP would raise a number of complex issues, such as:

- whether the concessionally treated domestic content should extend beyond intermediate inputs to raw materials and intellectual property; and
- the significance of the compliance costs associated with, for instance:
 - tracking a relatively small volume of re-imports from potentially different sources;
 - measuring the appropriate value of domestic content in imported goods, particularly where goods have been transformed; and
 - the claims threshold — inclusion of nuts and washers could lead to costly processes.

The case for an automotive-specific OAP does not appear compelling

The Commission considers that the OAP concept has some merit in a high tariff environment. However, in the time available for an inquiry which has the future of automotive tariffs and ACIS arrangements as its primary focus, it has not been able to assess the relative costs and benefits of an OAP scheme for the automotive sector, let alone for all industries. That said, it would appear that such a scheme would be far more complex to administer than the OAP for TCF. More generally, it would be difficult to justify the introduction of another sector specific scheme given that the automotive tariff will shortly fall to 10 per cent — at which time, compliance and administration costs associated with an OAP would appear to loom large relative to the small potential benefits.

12.8 Ad hoc assistance

Greater transparency is needed

As discussed in chapter 9, a number of firms in the industry have benefited from significant ad hoc support from either the Commonwealth or State Governments and sometimes both. Yet information on the rationales for such support and its nature and level is often limited at best.

The lack of transparency gives rise to uncertainty for all in the industry, as well as raising accountability concerns. For instance, without transparency it is difficult to determine:

- the objectives being pursued through ad hoc assistance;
- the efficacy of those objectives; and
- whether the support is assisting or hindering necessary industry adjustment — for example, whether it conflicts with broader automotive assistance objectives.

Furthermore, it is important that the criteria for ad hoc assistance not only be transparent, but also be applied consistently. In this context, the Commission has been unable to determine the criteria underpinning the recent Commonwealth grant to Mitsubishi — in contrast to the more transparent and generally robust criteria used for dispensing SIC grants (see appendix E). This is a concern given that the grant (and perhaps others before it) provides preferential treatment for one competitor within the industry.

Also of concern is that, at the State level, there are indications that the South Australian and Victorian Governments have been competing for particular automotive activities via offers of ad hoc assistance packages. Such behaviour is unlikely to have contributed to a more efficient industry overall and could even have detracted from this goal (see chapter 9). In response to these matters which were raised in the Position Paper, neither state government provided details of its respective ad hoc packages. The South Australian Government observed only that it accepted the need for transparency on a case-by-case basis, subject to commercial in confidence principles (sub. PP115, p. 10).

The Commission acknowledges that the need to protect commercially sensitive information means that it would not be appropriate to disclose all facets of firm-specific assistance (for example, a firm's cost structures or strategic direction). However, commercial in confidence reasons for withholding information can be overused. It would seem, for example, that the criteria used to select recipient firms

and the amount of funding involved could be disclosed without breaching commercial in confidence principles.

In seeking to facilitate greater transparency, the Commission explored the possibility of making receipt of ACIS benefits conditional on the jurisdictions in which firms are located publishing details of any ad hoc assistance received. However, as with other proposals to ‘leverage’ ACIS, the Commission does not consider that this would be an appropriate strategy — for instance, recipient firms would face added uncertainty because their entitlements to ACIS support would be contingent on the activities of government which were beyond their control.

In the Commission’s view, higher level solutions are required involving protocols between the governments concerned. In this regard, an arrangement agreed to by the New South Wales and Victorian Governments — to meet annually to review the effectiveness of investment incentives (see box 12.2) — could provide a useful intermediate step towards developing a model to avoid investment bidding wars. Even at this early stage, a similar approach between the two vehicle producing States would appear to have merit.

Box 12.2 Commonwealth, State and Territory cooperation on investment incentives

In February 2000, the Commonwealth Government indicated that it had reached a non-prescriptive agreement with State and Territory governments to cooperate on investment attraction activities. All the governments are signatories to the *Operating Guidelines for Commonwealth, States and Territories on Investment Promotion, Attraction and Facilitation*. Under this agreement, the parties are to meet annually to review the efficiency and effectiveness of investment incentives.

In March 2001, the NSW and Victorian Governments announced that they had established a joint working party on investment. This process is intended to ‘eliminate unnecessary bidding wars and will work to contain fiscal incentives’.

Source: PC (2001b).

At the very least, acceptance by all governments of the need to make more information publicly available on ad hoc support provided to automotive (and other) firms would be an important step in helping to assure the community that such support was appropriate.

- *Removal of the \$12 000 tariff on second hand vehicles, and government preferences for vehicles manufactured or sold by the local vehicle producers, would appear at this stage not to be warranted when weighed against the possibility that such action could destabilise the structured plan for reductions in automotive assistance.*
- *The 3 per cent revenue duty imposed under the Tariff Concession System disadvantages Australian manufacturers — including automotive firms — and imposes unnecessary costs on their customers.*
- *The automotive industry will continue to have access to the services of Austrade and to general assistance programs designed to help exporters. In this light, the case for a successor to the industry-specific Automotive Market Access and Development Strategy is not strong.*
- *There is a need for more information to be made publicly available on ad hoc support provided to automotive (and other) firms. Greater transparency would help to assure the community that such support was appropriate. Moreover, there would be value in relevant jurisdictions developing protocols in this area to avoid costly interstate ‘bidding wars’.*

13 Broader adjustment issues

13.1 General perspectives

Giving the industry time to adjust is integral to the Commission's assistance options

The options for post 2005 tariff and ACIS arrangements specified by the Commission in chapter 11 would, if implemented, provide a number of benefits to the wider economy:

- A reduction in the passenger vehicle tariff to 5 per cent would put downward pressure on vehicle prices, providing benefits to vehicle consumers and business users.
- Further tariff reductions would also maintain an important additional source of pressure on the industry to improve its productivity and undertake necessary rationalisation. Such productivity improvement would in turn help firms to cope with the lower assistance levels; enhance the industry's capacity to attract the capital necessary to secure its longer term future; and increase its contribution to the economy and community well-being more generally.
- The reduction in the tariff to 5 per cent, in combination with the future termination of the bulk of ACIS funding as early as 2010, would send an important broader signal about Australia's commitment to further trade liberalisation. In so doing, it could help to maintain pressure for liberalisation elsewhere in the region that would bring considerable benefits to Australia.

However, in pursuing these sorts of benefits, a key consideration for the Commission has been to give the industry adequate time to adjust to a lower assistance environment. Thus, the Commission sees the combination of any of the individual tariff and ACIS options nominated in chapter 11 as providing for an appropriate balance between the needs of the wider community and the industry's need for a gradual and manageable transition process.

For much the same reason, the Commission has also suggested that changes to the tariff on second hand vehicles or to government purchasing arrangements would not be appropriate at this time. And it has argued that changes to environmental policies impinging on the industry must continue to have regard to the capacity of firms and the industry to make the necessary alterations to their operations.

There is reason for optimism about the industry's future

Over the past decade and a half, the industry has demonstrated its capacity to adjust successfully to much larger reductions in assistance than are now in prospect. Of course, as assistance gets lower, some of the required adjustments necessary to accommodate further reductions in support become harder — in effect, firms must achieve performance levels much closer to the world's best to survive and prosper. Nonetheless, given the industry's demonstrated adjustment capacity, and the delayed nature of the reductions in government support entailed in the Commission's post 2005 assistance options, implementation of those options would, in the Commission's view, minimise the risk of significant industry wide adjustment problems.

In fact, the industry's assessments of its prospects under the continuation of the assistance regime prevailing in 2005 suggest that implementation of any of the Commission's assistance options might simply reduce the rate of growth in the industry's output, rather than lead to a contraction in aggregate activity. The quantitative modelling undertaken for the inquiry lends support to this view (see below and appendix F). Moreover, despite the possibility of reductions in assistance after 2005, major new investment in the industry has recently occurred or is in prospect.

But the possibility of disruptive adjustment cannot be ruled out

Like other industries, the automotive industry faces various broad and ongoing adjustment pressures. Indeed, pressures for change associated with such forces as the globalisation process, shifts in consumer tastes and heightened environmental expectations, are intensifying. Similarly, PBR International (sub. PP86, p. 1), said that the pressures associated with advances in technology are very considerable and will further heighten the adjustment task. The sort of external threats identified in chapter 4 are a further potential source of adjustment pressure.

Clearly, it is in the interests of the industry and the community that necessary adjustment proceeds, even if there are accompanying costs. Thus, many in the industry acknowledge that further rationalisation is necessary to build on the advances made over the last decade and a half. As Holden said:

... the car industry is in the latter stages of making a difficult adjustment from local and uncompetitive, to globally focused and, within its niche, globally competitive. While this transition is not complete, it is so far advanced that it is appropriate to assert that it can be completed. We believe the focus of post-2005 should be quite intently on facilitating this completion. (sub. PP101, p. 11)

Nonetheless, some changes required in the Australian industry to secure its longer term viability could potentially have significant adjustment implications for individual firms and their employees and particular regions. For example:

- Efforts to realise greater economies of scale will almost certainly require further rationalisation in the industry, much of which still operates at output volumes that are low by international standards.
- Lean manufacturing requirements and associated developments such as modularisation will require some major component suppliers to locate closer to the vehicle producers.
- The development of an industry able to compete without special government support will require further changes in workplace practices and attitudes.
- And continuing reductions in employment across the whole of the industry also seem inevitable whatever the post 2005 assistance environment. In this regard, the modelling projections suggest that year on year employment reductions of more than 3 per cent are probable. However, this seems overly pessimistic in the light of recent employment experience in the industry.

The implication is that irrespective of what assistance arrangements are put in place after 2005, the possibility of potentially disruptive adjustment at the firm and regional level cannot be ruled out.

Were a vehicle manufacturer or one of the larger component producers to exit, the adjustment ramifications could be particularly significant. There would be costs for the firm concerned, employees and their families and the surrounding regional economy (see box 13.1). Further, in the case of an exit by a vehicle producer, the reduction in total domestic vehicle output could have knock-on effects for component suppliers and ultimately the remaining vehicle producers (see below).

Firm and regional adjustment costs were a concern for many

A number of participants suggested that firm and regional level adjustment costs of exits from the industry could be large. Such concerns were most pronounced in a South Australian context, particularly were Mitsubishi to cease operations. The United Trades and Labour Council, for example, said that the loss of Mitsubishi

would have serious impacts on the South Australian economy and local employment (trans., p. 107). Similarly, the South Australian Government, said that:

... the loss of one of the two assemblers in South Australia would have significant consequences for the South Australian economy as a whole. This loss would in turn have serious negative impacts on the automotive industry throughout the Australian economy. (sub. 60, p. 59)

And the Victorian Government argued that adjustment costs:

... could be very substantial, particularly if one manufacturer, that has significant presence in a regional centre, left the industry. (sub. PP114, p. 17)

Box 13.1 Some adjustment costs associated with firm closures

The process of adjustment which follows a firm closure takes time and involves costs. For example, following a closure, employees do not usually find new jobs immediately. Moreover, some employees may not return to the workforce and firm-specific capital may become permanently idle. Such unemployment or underemployment of resources detracts from national output — at least to the extent that it is not offset by a consequent uptake of spare capacity elsewhere.

In addition, firms will incur some specific exit costs associated with site clearance, the payment of redundancy entitlements etc. And in seeking new jobs, displaced employees will incur various 'search costs' and expenses associated with relocating or acquiring new skills necessary to secure alternative employment. They will also suffer an earnings loss while unemployed and possibly in their new jobs.

Employees who are displaced for prolonged periods of time can suffer from skill deterioration, loss of confidence and stress. These sorts of effects can in turn have significant ramifications for families and the community more generally. For example, a recent study on the impact of a downturn in manufacturing on people in the Hunter region, found that many unemployed people experienced a deterioration in their health and personal relationships, lower levels of well-being and a loss of self esteem and sense of belonging to the community (Davis-Meehan, 2001).

Potentially significant adjustment issues were also envisaged at the regional level. In commenting on the potential implications of any decision by Mitsubishi to cease production, the Cities of Marion, Mitcham and Onkaparinga (sub. 12, p. 2) emphasised that it was important to look at the likely impacts for the Southern Adelaide region, as well for Adelaide and the State as a whole.

And the City of Greater Geelong contended that:

... the closure of any one of Geelong's major automotive employers as a result of changes to industry assistance would have severe unemployment consequences for the region. (sub. 17, p. 9)

That said, at the public hearings, representatives from Geelong expressed support for the Commission’s tariff assistance option 2, observing that under such an option they did not envisage significant adjustment problems for the Geelong region (trans., p. 371).

Governments can help to ameliorate the costs of necessary adjustment in the industry

Governments have a number of roles to play in helping to ensure that necessary adjustment in the industry occurs in a manageable way:

- The evolution of the assistance regime must achieve an appropriate balance between providing incentives for improved performance and giving firms and their employees time to make the required changes. As noted, achieving such balance has been integral to the package of post 2005 tariff and ACIS options put forward by the Commission in chapter 11.
- More broadly, improvements to workplace institutions and frameworks, continuing tax and microeconomic reform, and the provision of appropriate general support measures for R&D, will help the industry to make the necessary further changes to its operations. Sensible application of broader regulatory requirements is also important. Thus, as noted, changes to environmental regulation impinging on the automotive industry must take account of the adjustment capacity of firms. And, application of competition regulation should not inhibit necessary further rationalisation in the supplier base — particularly given the competitive discipline resulting from the scope for vehicle producers to import components from a variety of sources.
- Governments may also need to consider providing specific adjustment support in the event of potentially disruptive firm or regional-level adjustments in the industry. Indeed, the need for governments to have in place appropriate strategies to deal with significant firm or regional-level adjustment problems was a prominent theme in a number of submissions.

13.2 How much adjustment capacity is there at the firm and regional level?

Past adjustment experiences are encouraging

In assessing the capacity of automotive firms and regions to deal with significant adjustment pressures in the future, historical experiences can provide some insights.

As noted, there have been major adjustments at the firm level over the last decade and a half. At the start of the Button Plan in 1985, there were five vehicle manufacturers operating eight plants and producing 13 vehicle models. Today, the four manufacturers operate four plants and produce five models. And, over the same period, the number of significant component producers and raw material suppliers has fallen from around 500 to a little over 200. As a result of these changes and the accompanying growth in productivity, total employment in the industry has fallen by more than 25 000, or some 38 per cent, over the last decade.

Such changes have not been easy and have involved some significant costs for the firms and individuals concerned. Nonetheless, while bearing in mind that there are limits to how much can be inferred about the future from the past, the impression conveyed to the Commission in its discussions with firms, unions and State and local governments is that the change process has generally occurred without manifest disruption at the broader industry or community level.

Some of the particular adjustment experiences over this period also provide insights into the possible impacts of future firm exits from the industry, and on the nature of specific measures that might be useful if there were significant accompanying adjustment problems. Of particular relevance in this regard are the impacts of Nissan's exit from local vehicle production in 1992 (see below).

There have been significant improvements in the skills of the workforce

As discussed in chapter 5, 'entry level' skills in the Australian automotive industry have increased in recent years. More importantly, intensive on-the-job training has led to very significant improvements in the industry-specific skill base. That skill base is widely regarded as a key contributor to the industry's growing innovativeness and flexibility, and to the improvements in productivity and quality achieved over the last decade. In turn, this suggests that the capacity of employees displaced from the automotive industry to find alternative employment will be greater than in the past.

Some participants questioned whether the industry's skill base is readily transferable to other industries. For some very highly specialised activities in the industry, this may well be true.

However, many of the industry's skills would be relevant to a range of other activities. As Holden remarked:

[Through the Vehicle Industry Certificate, production] employees are provided with a range of skills that would be suited to a wide range of industries in the manufacturing sector.

The trade employees have been trained to a high standard in the industry and most have achieved post-trade accredited qualifications along with their extensive on-the-job experience. As a result they are considered to be relatively mobile across the industry and their trade function'. (sub. 72 , p. 91)

And the South Australian Government (sub. 60, p. 43), commenting on the significant improvement in training in the industry in recent years, said that 'the result is a growing pool of highly skilled people available to other manufacturing industries'.

Regional dependence on the industry has diminished

As discussed in chapter 3, the automotive industry is of considerable overall importance to the South Australian and Victorian economies. As the South Australian Government said:

South Australia and Victoria will be hardest hit by any contraction in the industry. For South Australia in particular, where the automotive industry is a proportionally larger contributor to the State economy, the issue of adjustment is of major importance. (sub. PP115, p. 7)

And in elaborating on the significance of the industry to the Victorian economy, the Victorian Government said that its State is the 'engine room' of the Australian automotive industry, noting that it is Victoria's largest manufacturing industry, directly employing over 50 per cent of the automotive industry's workforce and incorporating 70 per cent of all component manufacturers (sub. PP114, p. 8).

Moreover, for particular regional economies within South Australia and Victoria, and for some regional centres in other States, the industry's significance is greater again. For example, it is one of the major employers in southern and northern Adelaide, Geelong, Albury Wodonga, Ballarat, Launceston and Taree.

That said, diversification in some of the major automotive producing regions has reduced their economic dependence on the industry. For example, in the Geelong (Barwon Western) region, the industry now accounts for around 17 per cent of manufacturing employment and 2.6 per cent of total employment, compared to 26 per cent and 6 per cent in 1990 (see table 13.1).

Such diversification will have enhanced the capacity of these regions to cope with the adjustment pressures that would arise were particular automotive plants to close or scale back their operations. Indeed, the impression conveyed in the Commission's meetings with regional representatives in centres like Geelong and Albury Wodonga was that while automotive production is still very important to

these regional economies, it is no longer the ‘be all and end all’ of their manufacturing bases.

Table 13.1 The regional significance of the automotive industry, 1990 and 2000
per cent

<i>Region</i>	<i>Share of manufacturing employment</i>		<i>Share of total employment</i>	
	<i>1990</i>	<i>2000</i>	<i>1990</i>	<i>2000</i>
Melbourne	11.8	10.6	2.3	1.8
Barwon-Western ^a	26.5	16.7	5.6	2.6
Adelaide	19.2	17.8	3.4	2.5

^a This region includes Geelong and some areas around it.

Source: ABS (unpublished data).

The AMWU (sub. 108, p. 19) expressed concern that workers displaced from high-skill jobs in the automotive industry have been re-employed in low-skill, part-time service jobs. However, at least in relation to the Geelong region, the City of Greater Geelong provided a more positive perspective on opportunities for skilled workers who might be displaced from the industry. It indicated that full-time jobs in the Geelong region are growing at around the same rate as part-time jobs and that many of the new service sector jobs in the region are highly skilled (trans., p. 378).

More generally, a Productivity Commission staff research paper (McLachlan, Clark and Monday, 2002), found that while service jobs are often viewed as being poorly paid, low-skilled and mainly part-time, the reality is quite different. In fact:

- service jobs are, on average, more highly paid than jobs in the manufacturing sector, although earnings vary among service industries;
- the skills of service sector employees compare favourably with those of employees in other parts of the economy; and
- over 70 per cent of service jobs are full-time. Indeed, since the mid 1980s, all the growth in full-time jobs has occurred in the service sector.

But other factors will limit firm and regional adjustment capacity

- Self evidently, regions with high unemployment will find it more difficult to accommodate adjustment pressures stemming from plant closures or significant contractions in firms’ production levels. Unemployment rates in the key automotive producing regions are variable. For example, in Melbourne, Geelong and Albury Wodonga the rates were below the national average in March 2002. However, centres such as Adelaide and Ballarat have relatively high unemployment rates. Moreover, the local government areas in which the vehicle

assembly plants are located generally have higher unemployment rates than the average for the state in which they are based.

- While the average educational attainment of employees in the industry has increased (see table 5.1), around 40 per cent have no formal post-school qualifications. This group of employees could experience difficulties in securing alternative employment were they to be displaced from their current jobs — although, many of these are production employees who Holden argued could no longer be regarded as unskilled (see chapter 5).
- The industry still employs a relatively high proportion of employees from a non-English speaking background — around 26 per cent of the current automotive workforce was born in a non-English speaking country, compared to 22 per cent for manufacturing and 14 per cent for the economy as a whole. Moreover, while the age profile of employees in the industry in aggregate is broadly comparable with the rest of manufacturing, age (and ethnicity) profiles vary between firms. Hence, age-related adjustment difficulties could be relevant were particular firms to exit the industry.
- Much of the plant and equipment in the automotive industry is specific to the industry and, in some cases, to particular plants or even vehicle models or individual components. Thus, its value to other industries, or to other automotive producers, may often be limited. Moreover, were one of the vehicle producers to exit the industry and revert to importing, the option of transferring capital to a competitor in the market may not be commercially attractive.
- In the past, high labour turnover has provided a means for firms to accommodate necessary labour shedding through natural attrition. In recent years, however, labour turnover rates in the industry have declined, thereby reducing the scope to manage adjustment pressures in this way.

More information on workforce and regional characteristics impinging on the industry's adjustment capacity is presented in appendix C.

The quantitative modelling sheds some light on the regional adjustment burden arising under the Commission's preferred tariff/ACIS package

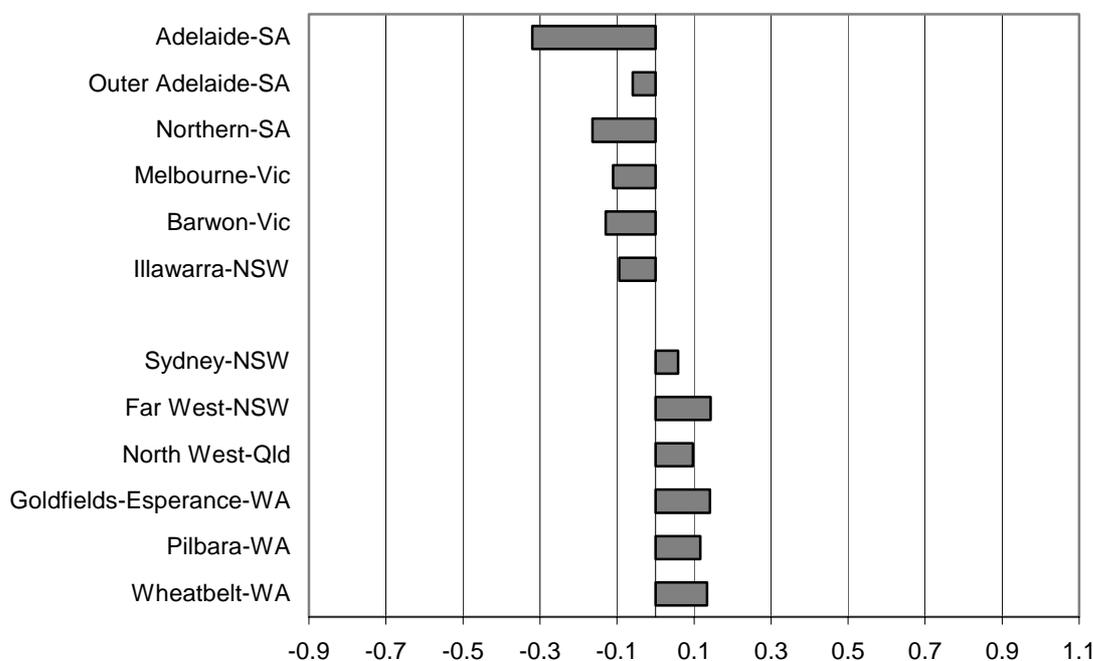
As set out in appendix F, the MONASH modelling undertaken by Commission staff provides projections of the economy-wide and regional impacts of implementing the Commission's preferred post 2005 tariff/ACIS package. Amongst other things, these projections indicate that:

- The static economy wide effects would be very small. As discussed in chapter 10, improvements in resource allocation primarily stemming from the reduction

in the tariff to 5 per cent would be offset by a decline in Australia's terms of trade.

- In 2016, aggregate output and employment in the industry would both be about 9 per cent lower than under the base case scenario (maintenance of the tariff and ACIS arrangements applying in 2005). In absolute terms, this would still allow cumulative growth in aggregate output of 22 per cent over the period, or about 1.8 per cent a year, rather than the 2.7 per cent annual growth achieved in the base case. In regard to employment, the impact would be to increase the projected annual decline from 3.9 per cent a year under the base case to 4.7 per cent a year. In absolute terms, this equates to an additional reduction in industry employment of around 400 jobs a year.
- These adverse impacts would be concentrated in the automotive producing regions such as Melbourne, Adelaide and Geelong, or those with strong linkages to these regions, for example the Illawarra region in New South Wales (see figure 13.1).
- However, in all cases aggregate regional employment would still grow over the period to 2016.

Figure 13.1 Effects on regional employment of the Commission's preferred post 2005 tariff/ACIS package
percentage deviations from base case in 2016



Data source: MONASH model projections for selected regions.

In commenting on similar though not identical regional modelling projections reported in the Position Paper, the Victorian Government (sub. PP114) contended that the adverse impacts on the Victorian economy would be somewhat more pronounced. To support this contention it reported that:

- modelling it had undertaken using the MMRF-GREEN model projects that a reduction in tariffs to 5 per cent, while increasing national economic welfare by \$1.50 per person a year, would see Victoria ‘suffer welfare losses of \$4 per person per annum, and up to 6500 jobs’ (p. 9); and
- modelling undertaken by the National Institute for Economic and Industry Research (NIEIR) suggests that, with reductions in automotive assistance, a ‘large proportion of Victorian Local Government areas would experience a significant decline in [Gross Regional Product]’ (p. 20).

However, the detailed modelling was not made available for scrutiny by the Commission or other inquiry participants. Moreover, the Victorian Government indicated that it intends to undertake further modelling ‘based on more realistic assumptions’. The results of this new modelling are to ‘be presented in a report to Federal Ministers’ (sub. PP114, p. 9), presumably after the conclusion of this inquiry.

The Commission notes that concerns expressed by the Victorian Government about particular assumptions in the modelling work conducted for the Position Paper — such as the selection of appropriate export demand elasticities and the treatment of aggregate employment and adjustment costs — have already been addressed in the modelling projections reported above and in appendix F. That said, *the Commission would welcome the opportunity to comment on any new material that may be prepared once it has been made available to the Commonwealth.*

The non-availability of the modelling work referred to by the Victorian Government means that the Commission has been unable to clarify precisely why that modelling work is projecting a somewhat larger impact on the Victorian economy than the MONASH modelling. (The projection of 6500 job losses in the MMRF-GREEN model represents a reduction of 0.27 per cent in Victorian employment below the base case, compared to a projected reduction of 0.19 per cent below base case in the MONASH model simulations.) That said, in either case, total employment in Victoria would still show significant absolute growth.

Moreover, the Commission understands that the NIEIR study includes projections for a tariff cut from 15 per cent to 10 per cent — which is already in legislation — rather than the post 2005 policy options under reference in this inquiry. It was precisely to avoid such confusion, and to facilitate comparisons of the modelling of

a common set of options, that the Commission organised a modelling workshop prior to the release of the Position Paper (see appendix F).

13.3 What would be the impact of the exit of a vehicle producer?

Given that the automotive industry is one of the major employers in parts of both Adelaide and Melbourne and in various regional centres (see above), the exit of any one of a number of major firms in the industry could give rise to a significant adjustment problem.

However, as noted, most concerns in this regard centred on the possibility of the exit of one of the vehicle producers. This reflects the fact that the four vehicle producers are not only the largest individual employers in the industry, but also the source of much of the demand for the outputs of the component and tooling sectors. Indeed, a number of component producers said that any significant loss of ‘critical mass’ resulting from the exit of a vehicle producer might cause them to reassess the viability of their operations in Australia. They further argued that any loss of economies of scale for suppliers that continued in business would result in higher costs for the remaining vehicle producers, in turn undermining their competitiveness. Some described this sequence of events as akin to a domino effect.

Participants envisaged significant demand leakage in the event of an exit

Underpinning these concerns was the perception that if a vehicle producer were to close:

- most or all of its export business would be lost; and
- there would be a substantial leakage of its domestic sales to imported vehicles.

In support of the latter contention, participants referred to the experience of the Nissan closure where more than 80 per cent of the company’s sales were said to have been lost to imports. They went on to suggest that demand leakage could be particularly high were either Mitsubishi or Toyota to exit, given that the vehicles these firms produce in Australia are very similar to those available from overseas subsidiaries of their respective global groups.

But some factors would operate to limit leakage in the domestic market

There can be little dispute that in most export markets, the business of an exiting vehicle producer would not flow to remaining Australian producers. Perhaps the

only exception would be in New Zealand, where there is likely to be a relatively high degree of substitution between Commodores and Falcons which currently compete in that market.

However, the export propensity of the four vehicle producers varies, meaning that the significance of lost exports would depend on which of them were (hypothetically) to cease business in Australia.

Moreover, in the domestic market, at least two factors could operate to mitigate the loss of sales to imports:

- As participants acknowledged, not all of the locally produced vehicles have close imported substitutes. Thus, were either Holden or Ford to cease operations, many of their domestic sales to private consumers might flow to remaining local producers.
- The cessation of small vehicle production in Australia — in part attributable to the Nissan closure — has significantly increased the proportion of locally produced vehicles sold to the fleet market (from around 50 per cent of domestic sales at the time of the closure, to around 75 per cent at present). As noted elsewhere in the report, private fleet purchasers have long demonstrated a preference for large, locally produced vehicles. And, there are formal policies in place requiring government entities to source their fleet requirements locally. Again, this suggests that were any of the current vehicle producers to cease operations, a significant part of their domestic market share might flow to the remaining producers.

Hence, the likely severity of the adjustment impacts is difficult to judge in advance

In addition to uncertainty about the extent to which an exiting vehicle producer's domestic sales would leak to imports, and differences in individual producers' export propensities, there are other factors that serve to cloud the likely magnitude of the ensuing adjustment problems:

- It is conceivable that some of the rationalisation in the supplier base precipitated by the exit of a vehicle producer might increase rather than detract from the industry's competitiveness. Also, as alluded to above, any additional business flowing to the remaining vehicle producers would allow them to realise additional economies of scale. The notion that reductions in the number of vehicle producers would increase rather than reduce the viability of the industry was a central, and widely accepted, tenet of the Button Car Plan — although the industry is now very different from when that plan was formulated.

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- Further, while a short term reduction in total industry output would be almost certain, over the medium term, planned expansions by the remaining producers (see chapter 4) might more than offset this reduction. The prospect of increased business in the future might in turn be sufficient to prevent some flow-on closures in the component sector in response to the initial contraction in demand.

This is not to deny that the exit of a vehicle producer might be the source of significant disruption in the industry and for the regional economies concerned.

However, the preceding discussion suggests that recent assessments of the implications of such an exit (see box 13.2) may be overly pessimistic. Moreover, the likelihood of such an exit, at least in the foreseeable future, now seems low. At the public hearings, Mitsubishi, the vehicle producer which had been reported as being under most pressure, expressed considerable optimism about its future. Amongst other things, it has received the go-ahead for a new model and for this model it has secured a contract to export 25 000 vehicles to the United States (trans., p. 84). This contract alone would augment the company's current production volume by over 50 per cent.

13.4 Firm and regional-specific adjustment assistance

Some general principles

Where firms and regions are experiencing major adjustments, the issue arises as to whether governments should be providing specific support to facilitate the adjustment process. While phasing of assistance reductions, or delayed implementation of those reductions, is relevant in this regard, specific adjustment assistance is quite different in nature from tariffs, subsidies and the like. As discussed below, a key characteristic of such assistance is that it is explicitly linked to the movement of resources between firms, activities and regions. Moreover, it may sometimes have a role to play in industries that do not receive tariff or similar assistance, but which for one reason or another are facing a major adjustment problem.

In assessing the need for specific adjustment assistance, it is important to have regard to the range of generally available measures aimed at helping individuals or firms to cope with significant adjustment pressures. For example:

- The social security system provides a minimum level of income support for people displaced from their jobs.

Box 13.2 The impacts of Mitsubishi ceasing production in Australia

Mitsubishi recently received a special assistance package (reportedly worth around \$85 million) from the Commonwealth and South Australian Governments to underwrite its continued operation in Australia. Avoiding disruption to the South Australian economy, and the Southern Adelaide region in particular, was ostensibly central to the decision to provide this assistance.

The likely impacts of a contraction in, or cessation of, Mitsubishi's operations have been the subject of some recent quantitative analysis:

- The Cities of Marion, Mitcham and Onkaparinga (sub. 12) submitted the results of a study commissioned from the University of Adelaide's Centre for Labour Research. This 'input-output' study indicated that closure of Mitsubishi would result in the loss of more than 22 000 jobs across the State and reduce value added in the South Australian economy by nearly \$2 billion. However, as the authors of the study acknowledged, input-output analysis simply measures the first round effects of policy changes and thus greatly overstates the longer term impacts. More importantly from an adjustment perspective, the study effectively assumed total loss to Australia of Mitsubishi's production in the domestic as well as the export market. For the reasons spelt out in the text, such an assumption seems unrealistic.
- As reported at the modelling workshop (see appendix F), the Allen Consulting Group recently used the MONASH model to project the longer term impacts of the closure of Mitsubishi. This modelling work, which is not publicly available, reportedly formed part of Mitsubishi's case for special government support.

For this inquiry, Commission researchers also used the MONASH model to assess the potential impacts of Mitsubishi's closure under a variety of assumptions regarding demand leakage and the effects of closure on the realisation of economies of scale by remaining vehicle producers. As described in appendix F:

- If all of Mitsubishi's export sales and most of its domestic sales were lost, there would be a small projected reduction in Australia's real household consumption and a significant contraction in output and employment in the automotive industry.
- Conversely, under a scenario which assumed that the bulk of Mitsubishi's domestic fleet business flowed to the remaining vehicle producers, the negative projected impacts for industry activity and employment are greatly diminished and the economy-wide impacts are effectively neutralised.

Under this latter scenario, most of the adjustment task would arise from a projected relocation of some automotive activity from South Australia to Victoria, rather than from a decline in the overall size of the industry. This of course is not to downplay the significance of such an adjustment requirement for the South Australian economy.

However, there appears to be little likelihood of Mitsubishi exiting the industry in the foreseeable future. As noted in the text, the company has now expressed considerable optimism about its future, noting that major new production contracts have been secured.

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- There are a number of generally available programs to help displaced workers find alternative employment (including job placement services, training programs and career counselling).
 - And there are various business and regional assistance programs which are relevant in this context.

These general measures have distinct advantages — they treat individuals in similar circumstances equally; they target assistance to those in genuine need whatever the cause; and they support individuals and families rather than a particular industry or activity.

They are not, however, able to handle all contingencies. Hence, there are some circumstances in which additional targeted adjustment assistance will be justified. In a recent report looking specifically at these issues, the Productivity Commission (2001a) argued that the ‘in-principle’ case for such assistance is likely to be strongest where, amongst other things, adjustment:

- imposes a clear and sizeable burden on a specific group in the community; and/or
- is largely unanticipated.

The closure of significant automotive plants might warrant the provision of specific adjustment assistance

As noted above, the Commission’s post 2005 assistance options are explicitly designed to minimise the risk of significant industry wide adjustment problems. But as the Commission has also acknowledged, it would be very difficult to completely remove this risk. To do so, would effectively involve the Government providing an open cheque to the industry — an approach which would manifestly fail the requirements of good public policy. Moreover, as outlined earlier, significant adjustments are necessary at the firm level if the industry is to become internationally competitive without substantial and ongoing government support.

If, as part of this adjustment process, large and/or regionally significant producers were to exit the industry, the first of the two criteria noted above for judging whether specific adjustment assistance is warranted might be met. In this context, the characteristics of the affected region and those of displaced employees would have an important bearing on assessments of whether generally available measures would be effective in ameliorating the adjustment burden.

Various specific adjustment assistance initiatives might be appropriate

If industry-specific responses were judged to be necessary, a menu of approaches would be available to policy makers:

- There is evidence that better managed support during critical transition periods can substantially raise the effectiveness of generally available labour market programs (BCA 2000b). Analysis of the experiences of displaced employees highlights the importance of early profiling to identify employees who are at high risk of entering the ranks of the long term unemployed. Fast tracking job placement and training assistance can also enhance the probability that displaced employees will find alternative employment.
- Another option would be to alter the design and delivery arrangements of general programs to better suit the particular circumstances. One example of this approach was the tailored assistance package provided to the 1800 employees retrenched when Nissan closed its plant in 1992. In cooperation with Nissan and the Federation of Vehicle Industry Unions, the former Commonwealth Employment Service established an assistance centre at the plant to assist these retrenched employees. In view of the multicultural nature of Nissan's workforce, information about assistance programs was provided in several languages. Along with the fact that most retrenched employees lived nearby and could therefore readily access the centre after the plant closed, this tailoring of support to the specific needs of the Nissan employees was seen as having made it much more useful (IC 1997a).
- Industry specific labour market programs for retrenched employees would be a further option. Such programs are typically implemented where specific characteristics of displaced employees — for example, age, low skill levels or ethnicity — suggest they will experience difficulty in securing alternative employment. Assistance provided typically includes wage subsidies, training (including English language training) and relocation assistance. Industry specific programs have previously been used in the automotive industry and also in the textiles, clothing and footwear industry.
- Specific regional employment assistance could be used to augment generally available regional measures if exits from the industry were to place considerable strain on particular communities.

These initiatives should meet some general criteria

Such measures are not without their problems. Indeed, analyses of some previous industry specific adjustment programs suggest that they do not always result in significantly better outcomes for participants than generally available measures. For

example, the Textiles Clothing and Footwear Labour Adjustment Package — which operated during the 1990s — delivered inferior employment outcomes to general training programs, including for its primary target group of overseas-born female employees (IC 1997b). And the Passenger Motor Vehicle Labour Adjustment Program, which operated over the same period, was found to have mainly benefited those least in need of assistance (IC 1997a).

To maximise its likely effectiveness, any future specific adjustment support for the automotive industry should therefore:

- facilitate, not hinder, necessary change;
- target individuals for whom adjustment pressures are most acute and who are unlikely to be able to cope without additional assistance;
- be of limited duration so as to encourage transition;
- be as simple as possible to administer; and
- be compatible with general ‘safety net’ arrangements.

FINDINGS ON ADJUSTMENT ISSUES

- *Continuing adjustment in the Australian automotive industry is both inevitable and necessary. Such adjustment should be facilitated by significant recent improvements in the skills of the industry’s workforce and reduced regional dependence on the industry.*
- *The Commission’s preferred post 2005 assistance options have been designed with the intention of avoiding significant industry wide adjustment problems.*
- *Irrespective of what assistance arrangements are put in place after 2005, the possibility of potentially disruptive adjustment affecting individual firms and their employees and particular regions cannot be ruled out.*
- *The adjustment consequences of the exit of a vehicle producer would depend on a range of factors, including the exiting firm’s export volumes and the degree of leakage of its domestic sales to imports.*
- *Firm or region-specific adjustment assistance could be warranted if firm exits have the potential to cause major disruption. However, as well as facilitating necessary change, any such assistance should:*
 - *target individuals for whom adjustment pressures are most acute and who are unlikely to be able to cope without additional assistance;*
 - *be of limited duration so as to encourage transition;*
 - *be as simple as possible to administer; and*
 - *be compatible with general ‘safety net’ arrangements.*

A Inquiry processes and information sources

Given the short reporting period for the inquiry, the Commission took various steps to streamline and expedite its inquiry processes. Among other things, it:

- dispensed with a comprehensive Issues Paper. Recognising the familiarity of the major interest groups with both the inquiry process and key inquiry issues, it instead provided a listing of some key matters on which it was seeking input in the initial inquiry circular;
- produced a Position Paper, rather than a full Draft Report, concentrating on its preliminary findings on post 2005 assistance options — the principle focus of the inquiry;
- elected not to hold public hearings prior to releasing the Position Paper. Rather, in preparing that paper, it relied on information garnered from an extensive program of industry visits and discussions, and from initial written submissions (see below); and
- ‘front-loaded’ the inquiry timetable to maximise the time for participants to prepare initial submissions and to facilitate thorough analysis of the various policy issues and options that are canvassed in this report.

Industry visits

During March, April and May, the Commission met with around 60 interested parties. They are listed below.

Submissions

At the outset of the inquiry, the Commission indicated that it was seeking written submissions on the matters under reference. Prior to the release of the Position Paper, the Commission received more than 80 submissions. A further 44 submissions were subsequently received commenting on the analysis and preliminary findings in the paper. A full listing of those who made submissions to the inquiry is provided below.

Public hearings

To elicit views on the analysis and preliminary findings in the Position Paper, the Commission held public hearings in Adelaide on 25 and 26 July, and in Melbourne on 29, 30 and 31 July 2002. Some 24 organisations and 2 individuals participated in discussions with the Commission at those hearings. They are listed below.

Consultancies

The Commission engaged two organisations — Econtech and the Centre for International Economics — to provide modelling services to the inquiry (see appendix F). The contracts for these consultancies were posted on the inquiry website.

In addition, the Commission employed the Melbourne Institute to undertake a scoping study of information available to help assess the capacity of displaced automotive workers to find alternative employment. (The outputs of this study helped to inform the discussion in chapter 13 of the report on the adjustment consequences of firm exits from the industry.)

Modelling workshop

A workshop to discuss the various modelling inputs available to the inquiry was held in Canberra on 27 May 2002. As well as the modellers, representatives from the industry, Commonwealth and State governments and academia also attended the workshop (see below). The Commission placed a summary of the workshop proceedings and papers on its inquiry website.

List of meetings with interested parties

Industry associations

Australian Automotive International Business Group (part of FAPM)

Australian Industry Group

Automotive Training Australia

Federation of Automotive Products Manufacturers

Federal Chamber of Automotive Industries

Plastics and Chemicals Industries Association

Tooling Industry Forum of Australia

Labour associations

Australian Council of Trade Unions
Australian Manufacturing Workers' Union

Vehicle producers

Ford Motor Company of Australia
Holden
Mitsubishi Motors Australia
Toyota Motor Corporation Australia

Vehicle importers

Daimler-Chrysler
Hyundai Automotive Distributors Australia
Mazda Australia
Nissan Motor Company Australia
Subaru Australia

Component suppliers

aiAutomotive
Air International Group
Autoliv Australia
Automotive Components Limited
Bendix-Mintex
Berklee
Bridgestone Australia
BTR Automotive (Drivetrain Systems)
Castalloy
CMI Operations
Cooper-Standard Automotive Australia
Delphi Automotive Systems Australia
Hella Australia
Hendersons Automotive Group
K&K Fasteners

PBR International
Robert Bosch Australia
ROH
Schefenacker Vision Systems Australia
Spicer Axle Australia
Tenneco Automotive (Walker)
TI Automotive
Tristar Steering and Suspension Australia
Venture Australia Group

Materials and services suppliers

Deloitte Touche Tohmatsu
Metro Tool and Die (Venture Mould & Engineering Australia)
OneSteel Market Mills

Commonwealth Government

Austrade
Australian Greenhouse Office
Department of Foreign Affairs and Trade
Department of Industry, Tourism and Resources
Department of Transport and Regional Services
Environment Australia

State Governments

South Australian Government
Victorian Government

Regional associations

Australian Industry Group (Albury Wodonga and Ballarat regions)
Ballarat Council
City of Greater Geelong
Geelong Chamber of Commerce
Geelong Manufacturing Council
Investment Albury Wodonga

Public hearing participants

Adelaide, 25 and 26 July 2002

Federal Chamber of Automotive Industries
Federation of Automotive Products Manufacturers
Air International Group
South Pacific Tyres
Bridgestone Australia
Australian Tyre Manufacturers' Association
Mitsubishi Motors Australia
United Trades and Labour Council, South Australia
Mr Tom Weir

Melbourne, 29, 30 and 31 July 2002

Ford Motor Company of Australia
Toyota Motor Corporation Australia
Holden
Australian Council of Trade Unions
Australian Manufacturing Workers' Union
Robert Bosch Australia
Marplex Australia
Australian Automotive Aftermarket Association
Australian Productivity Council
BHP Steel
Australasian Railway Association
Plastics and Chemicals Industries Association
Society of Automotive Engineers
NIETL/North Link
City of Greater Geelong
Australian Industry Group (and the Engineering Employers Association, South Australia)
Mr Alan Hingston

Modelling workshop participants

Access Economics

Allen Consulting Group

Centre for International Economics

Centre of Policy Studies

Department of Industry, Tourism and Resources

Department of Innovation, Industry and Regional Development, Victoria

Department of Industry and Trade, South Australia

Econtech

Federation of Automotive Products Manufacturers

Federal Chamber of Automotive Industries

Monash University

Queensland Treasury

List of submissions

<i>Name</i>	<i>Sub. No.</i>
Berklee	1
HST Developments of U.K.	2
Marplex Australia	3
Dr Paul Oslington, ADFA University of NSW	4
Schefenacker Lighting Systems Australia	5
Teson Trims	6
Australian Automotive Technology Centre	7
aiAutomotive	8
Numetric Manufacturing	9
Australasian fleet Managers Association	10
Schefenacker Vision Systems Australia	11
Joint submission by Cities of Marion, Mitcham and Onkaparinga	12
Mackay Consolidated Industries	13
South Pacific Tyres	14
Premoso	15
Joint submission by Cities of Playford and Salisbury	16
City of Greater Geelong	17
Australian Consumers' Association	18
Spicer Axle Australia	19
Motor Trades Association of Australia	20
CMI Operations	21
Insurance Australia Group	22
BASF Australia	23
Flexible Drive Agencies	24
Cooper-Standard Automotive Australia	25
Autofab Australia	26
Diver Consolidated Industries	27
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Geelong and Region Trades and Labour Council	29
Queensland Transport (Land Transport and Safety Division)	30
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Intercast & Forge	35
Mr Graham Spurling	36
Federation of Automotive Products Manufacturers	37
Mitsubishi Motors Australia	38
Toyota Motor Corporation Australia	39
Federal Chamber of Automotive Industries	40
Ford Motor Company of Australia	41
Australian Manufacturing Workers' Union	42
Australian Industry Group	43
Australian Tyre Manufacturers' Association	44
Plastics and Chemicals Industries Association	45
Royal Automobile Club of Victoria	46
Robert Bosch Australia	47
Australian Productivity Council	48
Prof. Peter Hodgson, Deakin University	49
Palm Plastics and Palm Tooling	50
PolyPacific	51
BASF Akzo Nobel Automotive and Azko Nobel Australia	52
Trico Products	53
Hella Australia	54
Bridgestone Australia	55
Air International Group	56
Geelong Manufacturing Council and CARnet-Geelong Automotive Industry Network	57
MTM	58
Engineering Employers Association, South Australia	59
South Australian Government	60
Chamber of Commerce and Industry, Western Australia	61
Australian Greenhouse Office and Environment Australia	62
PBR International	63
National Farmers' Federation	64
Department of Innovation, Industry and Regional Development	65

List of submissions (continued)

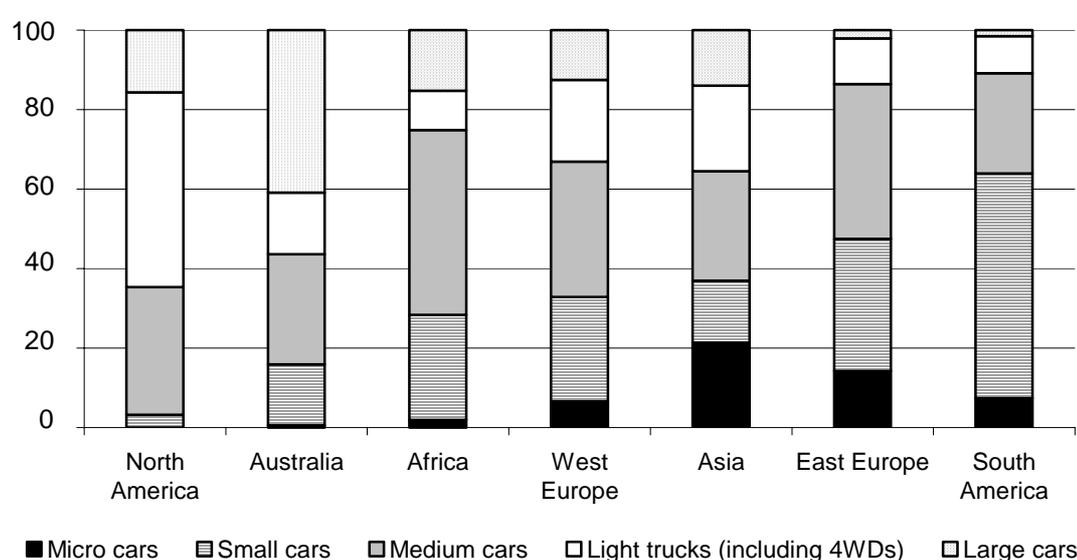
<i>Name</i>	<i>Sub. No.</i>
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Australian Automobile Association	70
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Automotive Training Australia	76
Transport Accident Commission, Victoria	77
Tooling Industry Forum of Australia	78
Department of Employment and Workplace Relations	79
Mr Robert Copley	80
HST Developments of U.K.	81
Mr Garry E. Scarf	PP82
Australasian Railway Association	PP83
Insurance Australia Group	PP84
Exhaust Systems Professional Association	PP85
PBR International	PP86
Air International Group	PP87
Australian Greenhouse Office and Environment Australia	PP88
Mr Joel Thompson	PP89
Australian Council of Trade Unions	PP90
Assoc. Prof. Philip Laird. PhD	PP91
South Pacific Tyres	PP92
Australian Automotive Aftermarket Association	PP93
Australian Industry Group	PP94
Toyota Motor Corporation Australia	PP95
Mr Neal Helyar	PP96
Mr Peter A Jarrod	PP97
Intelligent Transport Systems	PP98

List of submissions (continued)

<i>Name</i>	<i>Sub. No.</i>
Federal Chamber of Automotive Industries	PP99
Engineering Employers Association, South Australia	PP100
Holden	PP101
Automotive Training Australia	PP102
Autoliv Australia	PP103
Department of Treasury and Finance, Western Australia	PP104
Ford Motor Company of Australia	PP105
Joint submission by Cities of Marion, Mitcham, Onkaparinga	PP106
City of Greater Geelong	PP107
Australian Manufacturing Workers' Union	PP108
Australian Tyre Manufacturers' Association	PP109
United Trades and Labor Council	PP110
Bridgestone Australia	PP111
Mitsubishi Motors Australia	PP112
Intercast & Forge	PP113
Victorian Government	PP114
South Australian Government	PP115
Royal Automotive Club of Victoria	PP116
Plastics and Chemicals Industries Association	PP117
Society of Automotive Engineers	PP118
BHP Steel	PP119
Australian Business Limited	PP120
Marplex Australia	PP121
Australian Automobile Association	PP122
Intercast & Forge	PP123
New South Wales Government	PP124
Robert Bosch Australia	PP125

B Selected automotive statistics

Figure B.1 Demand profiles in selected automotive markets
per cent



Data source: Wormald (2002).

Table B.1 Passenger vehicle sales growth, 1990 to 1998^a, selected countries and regions
per cent per year

China	30.4
Argentina	19.5
Vietnam	16.2
Brazil	10.5
India	9.6
Indonesia	3.3
Korea	-1.1
North America	-1.5
Japan	-2.6

^a Excludes pickups and light commercials.

Source: just-auto.com (2002).

Table B.2 Foreign direct investment flows, vehicle and other transport equipment, selected OECD countries, 1990-1999

\$US billion, cumulative totals

<i>Country</i>	<i>Inflow</i>	<i>Country</i>	<i>Outflow</i>
United States	52	Germany	54
United Kingdom	14	United States	27
Canada	11	Japan ^a	18
Mexico	10	France	17
France	5	United Kingdom	8
Spain	4	Canada	8

^a Data for Japan refers to the period 1993-1999.

Source: OECD (2000).

Table B.3 Exports of automotive products, by country^a, 1990 and 2000

<i>Country</i>	<i>1990</i>		<i>2000</i>	
	<i>\$US billion</i>	<i>% share</i>	<i>\$US billion</i>	<i>% share</i>
Germany	70.0	21.9	92.2	16.1
Japan	66.2	20.8	88.1	15.4
United States	32.6	10.2	67.9	11.9
Canada	28.4	8.9	60.7	10.6
France	26.2	9.2	39.9	7.0
Mexico ^b	4.7	1.5	30.7	5.4
Spain	11.7	3.7	28.1	4.9
United Kingdom	14.1	4.4	25.6	4.5
Belgium	-	-	25.0	4.4
Italy	13.0	4.1	18.4	3.2
Korea	2.3	0.7	15.4	2.7
Sweden	7.7	2.4	10.8	1.9
Australia	0.8	0.3	2.5	0.4
Other	41.2	12.9	66.3	11.6

^a Includes vehicles and components. ^b Includes significant exports from processing zones.

Sources: Data for Australia is from table B.14, converted to \$US using average exchange rate data from ABS, DX database table 5302.38. All other data is from WTO (2001).

Table B.4 Imports of automotive products, by country^a, 1990 and 2000

Country	1990		2000	
	\$US billion	% share	\$US billion	% share
United States	79.3	24.7	172.7	29.4
Canada ^a	24.6	7.7	46.3	7.9
Germany	30.9	9.6	42.2	7.2
United Kingdom	22.8	7.1	36.1	6.1
France	21.6	6.7	30.5	5.2
Spain	10.1	3.2	26.3	4.5
Italy	18.1	5.6	25.3	4.3
Belgium	-	-	23.6	4.0
Mexico ^{b, c}	5.3	1.6	18.8	3.2
Netherlands	8.2	2.6	12.6	2.1
Japan	7.4	2.3	10.0	1.7
Australia ^b	3.8	1.2	8.0	1.4
Other	89.1	27.7	135.1	23.0

^a Includes vehicles and components. ^b Imports are valued f.o.b. ^c Includes significant imports into processing zones.

Source: WTO (2001).

Table B.5 Profit (after tax) margins for major global vehicle producers^a, 1995 to 2001

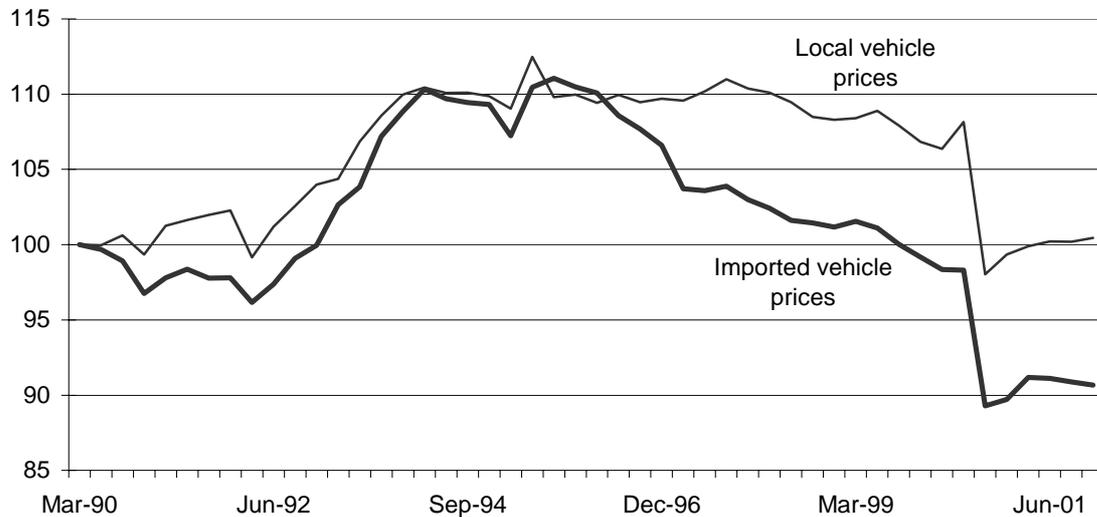
net profit as a per cent of global sales

Year	General Motors	Ford	Toyota ^b	Volkswagen	Daimler-Chrysler	Renault
1995	4.4	1.9	1.6 ^c	0.4	na	1.2
1996	3.1	1.4	2.4	0.7	4.0	(2.9)
1997	3.9	3.8	3.2	1.2	5.6	2.6
1998	1.9	4.0	3.9	1.7	3.7	3.6
1999	3.4	4.2	3.5	1.1	3.8	1.4
2000	2.4	2.6	3.8	3.1	4.9	2.7
2001	0.8	(4.7)	3.5	3.3	5.8	2.9
Average	2.8	1.9	3.1	1.6	4.6	1.6

^a Refers to group operations not just automotive division. ^b Year ended 31 March. ^c 9 months of operations.

Source: Company annual reports.

Figure B.2 Real vehicle prices in Australia, March 1990 to December 2001
Index, March 1990 = 100



Data source: AAI (various issues).

Table B.6 Comparisons of vehicle affordability

Four cylinder Camry, standard model

Country	Retail price in \$A	Index of vehicle cost relative to pre-tax average earnings
United Kingdom	35 080	90.1
United States	37 560	97.8
Australia	27 900	100.0
Germany	32 360	101.9
Canada	30 120	102.2
Sweden	45 090	164.5

SAAB 9-5 Linear Sedan, standard model

Country	Retail price in \$A	Index of vehicle cost relative to pre-tax average earnings
Germany	60 449	55.7
Sweden	54 288	57.1
Belgium	62 692	62.9
Japan	68 025	65.5
United States	67 865	72.4
Canada	55 391	72.6
United Kingdom	69 649	92.9
Australia	66 830	100.0
Korea	93 425	243.3

Sources: Camry data derived from Toyota Australia, sub. 39, p. 53. SAAB data derived from Holden, sub. 72, p. 38 and converted to \$A using Reserve Bank of Australia exchange rate data for March quarter 2002.

Table B.7 Australian vehicle sales by segment, 1991 to 2001

Number of vehicles

<i>Year</i>	<i>Small</i>	<i>Medium</i>	<i>Large</i>	<i>Luxury</i>	<i>All terrain wagons</i>	<i>Other light commercial</i>	<i>Heavy commercial</i>
1991	141 351	93 162	108 287	46 122	35 272	74 622	14 417
1992	137 943	86 020	131 855	50 609	42 229	78 860	14 561
1993	135 218	72 798	157 413	48 996	44 643	81 335	14 903
1994	146 316	74 957	182 576	56 489	45 533	91 719	18 336
1995	171 132	64 437	194 576	58 227	45 706	90 743	17 736
1996	183 377	51 925	198 906	57 850	50 269	92 561	15 161
1997	228 178	49 139	199 294	63 742	71 268	94 443	16 578
1998	251 389	51 241	217 364	64 366	96 551	107 390	19 368
1999	229 719	45 266	208 123	64 467	104 055	114 793	20 277
2000	244 027	40 628	198 766	70 252	105 510	108 332	19 585
2001	228 988	38 293	190 303	71 868	116 236	108 034	18 959

Source: AAI (2002).

Table B.8 Local and imported share of the domestic PMV market by segment, 1991, 1995 and 2001

<i>Vehicle type</i>	<i>1991</i>		<i>1995</i>		<i>2001</i>	
	Units	% share	Units	% share	Units	% share
Light/small	141 351	100.0	171 132	100.0	228 988	100.0
<i>Locally produced</i>	77 144	54.6	26 020	15.2	0	0.0
<i>Imported</i>	64 207	45.4	145 112	84.8	228 988	100.0
Medium	93 162	100.0	64 437	100.0	38 293	100.0
<i>Locally produced^a</i>	72 960	78.3	45 634	70.8	18 256	47.7
<i>Imported</i>	20 202	21.7	18 803	29.2	20 037	52.3
Large	108 287	100.0	194 576	100.0	190 303	100.0
<i>Locally produced</i>	105 704	97.6	191 940	98.6	183 567	96.5
<i>Imported</i>	2 583	2.4	2 636	1.4	6 736	3.5
Luxury and sports	46 122	100.0	58 227	100.0	71 868	100.0
<i>Locally produced</i>	6 320	13.7	11 161	19.2	8 149	11.3
<i>Imported</i>	39 802	86.3	47 066	80.8	63 719	88.7
Total	388 922	100.0	488 372	100.0	529 452	100.0
<i>Locally produced</i>	262 128	67.4	274 755	56.3	209 972	39.7
<i>Imported</i>	126 794	32.6	213 617	43.7	319 480	60.3

^a In 1991 locally produced medium cars included the Camry 4, Apollo 4, Magna 4, Pintara and Skyline. In 1995, this group included the Camry 4, Apollo 4, and Magna 4. In 2001, the Camry 4 was the only locally produced medium car.

Sources: DISR (1999), DITR (2001, unpublished data).

Table B.9 Domestic vehicle production, 1990 to 2001

Number of vehicles

<i>Year</i>	<i>Small</i>	<i>Medium/Large</i>	<i>Total</i>
1990	137 706	238 669	376 375
1991	93 219	197 451	290 670
1992	71 032	209 503	280 535
1993	48 364	246 456	294 820
1994	37 029	288 811	325 840
1995	24 377	288 531	312 908
1996	23 198	302 433	325 631
1997	22 221	297 045	319 266
1998	23 968	329 924	353 892
1999	14 341	333 482	347 823
2000	0	359 686	359 686
2001	0	344 524	344 524

Sources: DISR (1999), DITR (2001, unpublished data).

Table B.10 Local sales of domestically produced vehicles by purchaser, 2001

<i>Purchaser</i>	<i>Ford</i>	<i>Holden</i>	<i>Mitsubishi</i>	<i>Toyota</i>	<i>Total</i>
Private					
Number of vehicles	12 009	27 885	4 610	14 642	59 146
Per cent	16.5	27.3	18.9	38.0	24.8
Government Fleet					
Number of vehicles	17 756	29 179	5 246	8 443	60 624
Per cent	24.3	28.5	21.5	21.9	25.5
Business Fleet					
Number of vehicles	43 179	45 151	14 525	15 401	118 256
Per cent	59.1	44.2	60.0	40.0	49.7
Total domestic sales					
Number of vehicles	72 944	102 215	24 381	38 486	238 026
Per cent of total market	30.6	42.9	10.2	16.2	100.0

Source: DITR (unpublished data).

Table B.11 Some leading Australian automotive component manufacturers

<i>Supplier/Location</i>	<i>Products</i>
ACL (Launceston, Tas; Qld; Vic)	Pistons, gaskets, bearings, timing gears, valve seats.
Air International (Vic, SA, NSW)	Air conditioning, seating, steering columns, carpets.
Austrim-Nylex (Vic, SA)	Seating, fasteners, metal forging, fluid delivery, rubber, fabrics, carpets, plastics.
Autoliv (Broadmeadows, Vic)	Seat belts, air bags, child restraints, steering wheels.
BTR Automotive (Albury, NSW)	Manual and automatic transmissions, 4WD components.
Bendix-Mintex (Ballarat, Vic)	Disc brake pads, brake linings, bonding segments.
Bridgestone (Salisbury, SA)	Tyres
CMI Operations (Ballarat, Vic)	Inlet and exhaust manifolds, flywheels, suspension assemblies.
Castalloy (North Plympton, SA)	Wheels, cylinder heads and blocks, inlet manifolds, suspension parts.
Dana Australia (Hallam, Vic)	Axles, transmissions, engine, steering and suspension parts.
Delphi Automotive Systems (Clayton, Broadmeadows, Vic)	Catalytic converters, exhaust catalysts, fuel pumps, fuel tanks, steering gears.
Hella Australia (Mentone, Vic)	Electronics, lighting.
PBR International (East Bentleigh, Vic)	Brake and clutch systems and components.
Robert Bosch (Clayton, Vic)	Anti-lock brakes, traction control, engine management units, regulators, alternators.
Schefenacker (Lonsdale, SA; Taree, NSW)	Mirrors, lighting systems, electric actuators.
South Pacific Tyres (Campbellfield, Vic)	Tyres
Tenneco (Clovelly Park, SA)	Shock absorbers, springs, exhausts.
Venture Asia Pacific (Broadmeadows, Vic)	Design, tooling, manufacturing.

Sources: FAPM (2002), Visit notes.

Table B.12 Some independent^a Australian tooling providers and design houses

Toolers

Broens Toolmaking, Ingleburn, New South Wales
 Clipsal, Adelaide, South Australia
 Columbia Die Sinking, Cheltenham, Victoria
 Crontec Automotive Tooling, Kirrawee, New South Wales
 DMG Industries, Dandenong, Victoria
 Diecraft Australia, Reservoir, Victoria (part of Tupperware, USA)
 George Lovitt, Montmorency, Victoria
 Trident Tooling, Netley, South Australia
 Venture Metro Tool and Die, South Oakleigh, Victoria (part of Venture Australia Group)

Design Houses

Millards, Victoria
 Premoso, Clayton, Victoria
 Venture Australia Group, Broadmeadows, Victoria

^a Some tooling activities and many design functions are undertaken in-house by vehicle producers.

Sources : TIFA (sub. 78), Visit notes.

Table B.13 Employment, turnover and value added in the automotive sector, 1999-00^a

ANZSIC	Activity	Employment	Turnover	Value added
		persons	\$ million	\$ million
2811	Motor vehicle mfg ^b	16 519	10 737	1 662
2812	Motor vehicle body mfg ^c	10 260	1 560	477
2813	Automotive electrical and instrument mfg ^d	5 287	1 286	349
2819	Automotive components mfg n.e.c ^e	22 422	3 852	1 390
Total		54 487	17 435	3 878
<i>Share of total manufacturing (%)</i>		6.0	7.6	5.7

^a ABS figures do not include tooling activities as part of the automotive sector. According to TIFA, the tooling sector currently employs around 10 000 persons and has a turnover of around \$1 billion. About 65 per cent of its output is automotive related. ^b Includes the manufacture of motor vehicles, motor vehicle engines and parts. ^c Includes the manufacture of vehicle bodies, caravans, trailers and bodywork modifications (most of these activities are not under reference in this inquiry). ^d Includes the manufacture of automotive electrical components and automotive air conditioners and instruments. ^e Includes the manufacture of other automotive components not included in the above classification as well as factory engine reconditioning on a changeover basis.

Sources: ABS (2001a), TIFA (sub. 78).

Table B.14 Australian automotive exports by value, 1990 to 2001
\$ million

<i>Year</i>	<i>Vehicles</i>	<i>Components</i>	<i>Total</i>
1990	420	620	1 040
1991	430	740	1 160
1992	450	800	1 250
1993	580	890	1 470
1994	590	940	1 540
1995	660	1 110	1 780
1996	1 020	1 240	2 260
1997	1 270	1 450	2 720
1998	1 300	1 280	2 570
1999	1 760	1 490	3 250
2000	2 420	1 800	4 220
2001	3 260	1 700	4 960

Sources: DISR (1999), DITR (2001, unpublished data).

Table B.15 Australia's automotive trade by country, 2001

<i>Country</i>			<i>Country</i>		
<i>Vehicle exports</i>			<i>Component exports</i>		
	<i>\$ million</i>	<i>per cent</i>		<i>\$ million</i>	<i>per cent</i>
Saudi Arabia	1 379	42	USA	486	29
USA	605	19	South Korea	334	20
New Zealand	435	13	New Zealand	167	10
UAE	218	7	Japan	142	8
Kuwait	186	6	PNG	62	4
Oman	71	2	UK	55	3
Other	368	11	Other	429	26
Total	3 262	100	Total	1 675	100
<i>Country</i>			<i>Country</i>		
<i>Vehicle imports</i>			<i>Component imports</i>		
	<i>\$ million</i>	<i>per cent</i>		<i>\$ million</i>	<i>per cent</i>
Japan	6 337	55	Japan	1 929	32
Germany	1 489	13	USA	1 477	25
USA	788	7	Germany	409	7
South Korea	666	6	South Korea	211	4
Thailand	564	5	Canada	196	3
UK	454	4	China	196	3
Other	1 310	11	Other	1 598	27
Total	11 608	100	Total	6 015	100

Source: DFAT, STARS database.

Table B.16 Nominal investment expenditure, PMV producers, 1988-91 to 1996-1999

<i>Year</i>	<i>1988-1991</i>		<i>1992-1995</i>		<i>1996-1999</i>	
	<i>\$ million</i>	<i>share %</i>	<i>\$ million</i>	<i>share %</i>	<i>\$ million</i>	<i>share %</i>
<i>Investment type</i>						
Product development	663	52	890	50	1234	60
Expansion of capacity	116	9	113	6	97	5
Process innovation	250	20	594	34	300	15
Plant maintenance	249	19	171	10	431	21
Total	1278	100	1768	100	2062	100

Source: DISR (2000).

Table B.17 Recent and anticipated investment in plant and equipment^a, component producers

<i>Year</i>	<i>\$ million</i>
1999	289
2000	297
2001	476
2002	408
2003	324
2004	297
2005	288

^a Measured as actual and anticipated plant and equipment expenditure claimed or expected to be claimed under ACIS.

Source: FAPM (sub. 37, p. 23).

Table B.18 Automotive R&D^a, 1990-91 to 1999-2000

\$ million

<i>Year</i>	<i>Vehicle manufacturers</i>	<i>Component manufacturers</i>
1990-91	94	38
1991-92	103	30
1992-93	85	41
1993-94	122	48
1994-95	177	58
1995-96	216	99
1996-97	221	91
1997-98	244	113
1998-99	217	96
1999-00	239	103

^a Based on the definition that would qualify for the R&D tax concession. Hence, it excludes product and process development and, as such, is significantly less than that which would qualify for ACIS funding.

Source: DISR surveys.

Table B.19 Profit performance of local component firms, 1990 to 2000
profit (before tax and abnormals) to sales, per cent

<i>Year</i>	<i>Return on sales</i>
1990	5.4
1991	3.7
1992	5.2
1993	6.9
1994	8.0
1995	6.8
1996	6.1
1997	5.6
1998	5.6
1999	5.1
2000	4.6
Average	5.7

Source: AAI (2002).

C The automotive workforce

This appendix looks at employment trends in the automotive industry. It also examines the characteristics of the workforce and workplace arrangements in the industry. The appendix draws on a range of data sources as well as information provided in submissions.

While ABS data is used extensively in this appendix, care is needed in interpreting such data because the classification covering the automotive industry includes not only vehicle assembly and component manufacturing, but also the manufacture of truck and bus bodies, trailers and caravans and bodywork modifications. The latter activities are not encompassed by this inquiry.

C.1 Employment in the automotive industry

In June 2000, the automotive industry employed almost 54 000 people, or around 6 per cent of total manufacturing employment. As depicted in figure C.1, around 17 000 people were employed in vehicle assembly and almost 28 000 in component production. The remainder were employed in tooling and automotive service provision. Much of this activity is not covered in the ABS definition of the automotive sector.

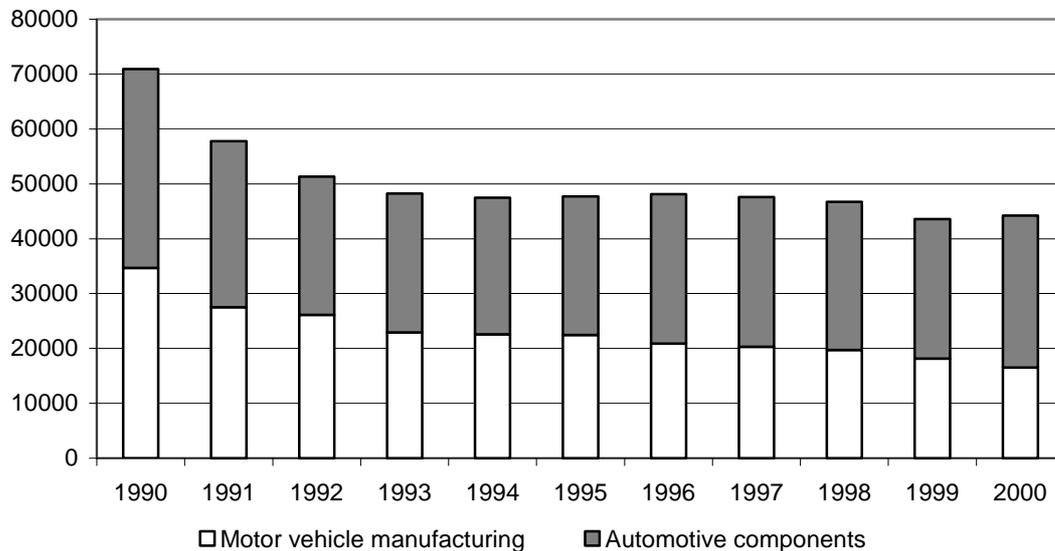
Some participants suggested that the total figure was an overestimate of the magnitude of automotive employment (because of the inclusion of indirect activities such as tooling), while others suggested that it was an underestimate. The Federation of Automotive Products Manufacturers, for example, said that by taking into account other automotive component activities not represented in the ABS data, the component sector would employ around 30 000 people (sub. 37, p. 13). And the Australian Industry Group (sub. 43) estimated that the total number of people employed by automotive firms in Australia is around 58 000 people.

Changes in automotive employment

The last decade saw a contraction in automotive manufacturing employment of almost 38 per cent, or around 27 000 jobs for the industry as a whole. The

contraction was significantly greater than for the manufacturing sector as a whole (around 11 per cent over the same period (figure C.2)).

Figure C.1 Automotive industry employment^a, 1990 to 2000



^a ABS figures do not include tooling activities as part of the automotive sector. According to TIFA, the tooling sector currently employs around 10 000 persons and has a turnover of around \$1 billion. About 65 per cent of its output is automotive related.

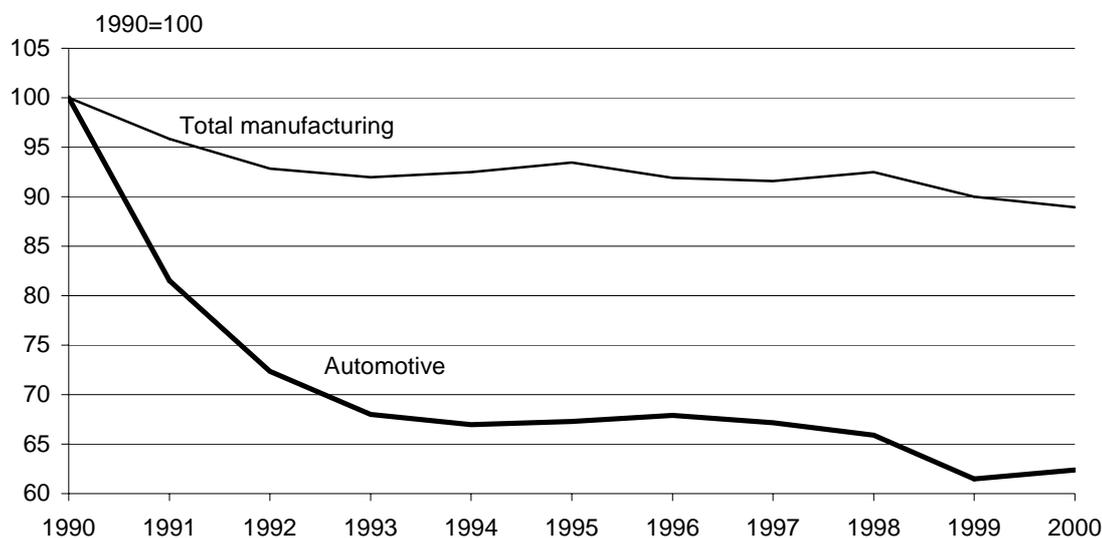
Data source: ABS Cat. no. 8221.0 (various issues).

Most of the contraction in automotive manufacturing employment occurred in the early 1990s. This coincided with the closure of the Nissan manufacturing plant, the rationalisation of models by remaining assemblers and production cuts due to a drop in demand for vehicles.

In more recent years, employment in the industry has been on the increase — in the 12 months to June 2000 employment rose by around 1.5 per cent. Labour force data indicates that employment in the industry increased further over the twelve months to June 2001.

The composition of employment in the automotive industry has also changed over the last decade. The most significant reductions in employment occurred in motor vehicle manufacturing, where the workforce more than halved over the period 1990 to 2000. While employment also declined in the component sector, the contraction was less significant — around 23 per cent (figure C.1). This change in composition partly reflects increased outsourcing by the vehicle assemblers of the manufacture of sub-assemblies and individual components.

Figure C.2 **Index of employment in automotive^a and manufacturing, 1990 to 2000**



^a ABS figures do not include tooling activities as part of the automotive sector. According to TIFA, the tooling sector currently employs around 10 000 persons and has a turnover of around \$1 billion. About 65 per cent of its output is automotive related.

Data source: ABS Cat. no. 8221.0 (various issues).

Geographic distribution of automotive employment

Employment in the automotive manufacturing industry is concentrated in Australia's southern states. In 2000, just over half of all workers were employed in Victoria, 24 per cent in South Australia and 12 per cent in New South Wales. The distribution of automotive employment between states has changed little over the past five years.

While automotive employment is concentrated in metropolitan areas (primarily Melbourne and Adelaide), the industry is a significant employer in regional areas. More than 20 per cent of automotive employment in Victoria is located in regional areas (the majority in the Geelong region), while in New South Wales, in excess of 30 per cent of employment in the industry is located outside the Sydney region (table C.1). Some specific examples of regionally based automotive employment include:

- Geelong — there are over 3 800 people employed in the industry in this region. Ford is Geelong's largest employer, with a workforce of around 2 200 people.
- Albury — BTR Automotive, a manufacturer of transmissions, employs around 850 people;

- Ballarat — Bendix Mintex, a manufacturer of disc brake pads, is the largest individual employer in Ballarat, employing around 700 people;
- Launceston — Automotive Components Limited, a manufacturer of engine parts, employs around 500 people;
- Taree — Schefenacker Lighting Systems Australia with a workforce of around 320 people, is the largest private employer on the New South Wales mid-north coast; and
- Toowoomba — Toowoomba Foundry employs around 230 people.

Table C.1 **Location of automotive employment, May 2002**
per cent

<i>State</i>	<i>Region</i>	<i>Percentage of state automotive employment</i>
Victoria	Melbourne	79
	Other regions (total)	21
	- <i>Barwon-Western District</i>	14
South Australia	Adelaide	94
	Other regions	6
New South Wales	Sydney	68
	Other regions	32

Source: ABS (unpublished data).

C.2 Characteristics of the workforce

The characteristics of employees, including their age, education and language skills, can provide some indication of their adjustment capacity in the event of displacement. Hence, information on employee characteristics is relevant in assessing the likelihood of significant adjustment problems were a major producer to exit the industry or wind back operations (see chapter 13).

Age profile

The age profile of employees in the automotive industry is broadly comparable with that for total manufacturing and the economy as a whole. In 2002, 57 per cent of automotive industry employees were 35 or older. This compares with 61 per cent for manufacturing as a whole and 59 per cent for all industries (table C.2).

The automotive industry has a slightly older workforce in 2002 than it had in 1996 — over this period the percentage of employees aged over 35 increased by 4 percentage points. This trend, however, is not unique to the automotive industry.

Over the same period, the percentage of employees aged over 35 increased in both total manufacturing and all industries (by 6 and 4 percentage points respectively).

Table C.2 Age profile of employed persons, May 1996 and May 2002
per cent

	<i>Employment distribution by age</i>							
	1996				2002			
	15-19	20-34	35-54	55+	15-19	20-34	35-54	55+
Motor vehicle and parts manufacturing	3	44	41	12	2	41	44	13
Total manufacturing	5	40	46	9	3	35	50	11
All industries	7	37	46	9	7	35	47	12

Source: ABS (unpublished data).

However, in assessing adjustment capacity within the industry, it is important to recognise that there is some variation in the age profile of employees across plants and segments of the industry. For example, according to the Tooling Industry Forum of Australia (sub. 78, p. 13), the tooling segment of the industry has a relatively old workforce (due to a continuous reduction in apprentice numbers), with over 15 per cent of employees over the age of 55.

Hence, because of the variation in employee age profiles between plants and segments of the industry, age-related adjustment difficulties could be relevant in the case of particular plants in the industry ceasing to operate.

Gender

The automotive industry has a higher proportion of male employees than the average for manufacturing and all industries. In March 2002, around 85 per cent of the automotive workforce were male compared with around 74 per cent for total manufacturing and 56 per cent for all industries. The proportion of men to women in the automotive industry has remained relatively stable since the early 1990s (Department of Employment and Workplace Relations, sub. 79, p. 5). Again, however, gender profiles vary between firms. For example, 75 per cent of Autoliv's (vehicle safety products) workforce are female (trans., p. 331).

Ethnic background

The automotive industry employs a relatively high proportion of people from non-English speaking backgrounds (NESB). In 2002, around 26 per cent of the automotive workforce were born in non-English speaking countries, compared to 22 per cent for total manufacturing and 14 per cent for the economy as a whole (table C.3).

However, the disparity in the industry's ethnicity profile relative to manufacturing and the economy as a whole has narrowed considerably in recent years. Over the period 1996 to 2002, the proportion of employees from NESBs in the automotive industry declined by around 10 percentage points. Over the same period, the proportion of employees from NESBs remained relatively constant for manufacturing and all industries. Greater alignment in the ethnicity profiles of automotive employees with the rest of the economy is consistent with Holden's comment that the inflow of skilled migrants into the industry has greatly diminished.

That said, like age and gender profiles, the ethnic profile of employees varies significantly between plants. Holden, for example, reported having 62 nationalities represented among its staff, while BTR Automotive in Albury said its workforce has a very low proportion of people from non-English speaking backgrounds. The Commission was also told that ethnicity levels are generally much lower in firms located in regional areas.

Table C.3 Employment distribution by country of birth, May 1996 and May 2002
per cent

	1996			2002		
	<i>Australia</i>	<i>Main English speaking countries^a</i>	<i>Other than main English speaking countries</i>	<i>Australia</i>	<i>Main English speaking countries^a</i>	<i>Other than main English speaking countries</i>
Motor vehicle and parts manufacturing	52	13	36	67	8	26
All manufacturing	66	11	23	66	11	22
All industries	75	11	14	75	10	14

^a The ABS defines main English speaking countries as Canada, New Zealand, South Africa, the United Kingdom, Ireland and the United States.

Source: ABS (unpublished data).

Workforce skills

The automotive industry draws on a wide range of skills including trade skills, engineering, design, project management, finance, marketing and general management skills. The skill set required by the industry has expanded and deepened as motor vehicles have become more sophisticated, workplaces have become more flexible, and as low skilled tasks have become automated. As the Victorian Automotive Audit (2000, p. 22) said:

Production workers now have to be able to undertake basic equipment maintenance, elementary diagnosis and solution of production problems, and provide useful suggestions for further improvements. The increasing sophistication and complexity of many products, particularly motor vehicles, requires ever-greater product and process knowledge and understanding.

Data on educational attainment shows that ‘entry-level’ skills in the automotive industry are slightly higher than for manufacturing as a whole. In 2001, 56 per cent of the automotive workforce had post-secondary education qualifications compared with 50 per cent for manufacturing.

Vocational qualifications are more prevalent in the automotive industry than in manufacturing and all industries. In 2001, only 9 per cent of the industry’s workforce held bachelor degrees or higher — a slightly lower proportion than for manufacturing and a considerably lower proportion than for the workforce as a whole (table C.4).

Table C.4 **Educational attainment of employees in automotive, manufacturing and all industries, 1996 and 2001**
percentage of workforce

	<i>Automotive^a</i>		<i>All manufacturing</i>		<i>All industries</i>	
	<i>1996</i>	<i>2001</i>	<i>1996</i>	<i>2001</i>	<i>1996</i>	<i>2001</i>
Bachelor degree or higher	10	9	8	11	16	21
Skilled vocational	24	32	25	25	17	15
Other post-school ^b	13	16	13	14	17	18
Total with post-school qualifications^c	46	56	46	50	50	53
Total without post-school qualifications	54	44	54	50	48	44

^a Motor vehicle and parts manufacturing. ^b Includes basic vocational training, undergraduate diplomas and associate diplomas. ^c A small percentage of workers are still at school — hence the total figures for workers with and without post-school qualifications may add to less than 100 per cent.

Source: ABS (unpublished data).

The educational attainment of employees in the automotive industry is also higher than it was five years ago. Notably, the increase has been more rapid than that for both total manufacturing and the workforce of the economy as a whole.

Further, data provided by the Federal Chamber of Automotive Industries on the qualification levels of the workforce of the four vehicle manufacturers shows that the percentage of their employees with TAFE qualifications more than doubled over the period 1995 to 2000 (table C.5). This data also indicates that the vehicle manufacturers' workforce has a higher proportion of degree holders — nearly 15 per cent — than the average for the automotive industry and manufacturing as a whole.

Table C.5 Qualification levels of the workforce of the four vehicle manufacturers, 1995 and 2000
percentage of workforce

	1995	2000
Post graduate degree	2	3
Graduate degree	11	12
TAFE qualification	20	42
No post secondary school qualifications	67	44

Source: Allen Consulting-Deloitte Touche Tohmatsu, presented in FCAI (sub. 40, p. 32).

Notwithstanding these increases in the average educational level of employees in the industry, in excess of 44 per cent of the industry's workforce still have no formal post-school qualifications. (This is in line with the percentage for all industries and slightly lower than for total manufacturing). It is this group of employees that are likely to experience most difficulty finding alternative work in the event of displacement.

But even this group's skill levels have increased. As Holden pointed out:

The introduction of the Vehicle Industry Certificate, in 1992 as part of the Award restructuring process has been progressively integrated into the Holden Production System. As a result, all new employees are selected on the criteria and expectation that they will complete this AQF-2 level accredited qualification that is linked to pay progression in the classification structure. As a consequence, production employees have now typically completed year 11 or 12 schooling in contrast to the much lower levels previously. (sub. 72, p. 91)

Moreover, data on formal educational attainment, does not reflect the skills acquired through the extensive on-the-job training that takes place in the automotive industry. For example, with the introduction of the Vehicle Industry Certificate all new employees are required to undertake formal on-the-job training to acquire

necessary competencies. According to Allen Consulting-Deloittes (2002a, p. 29), over the 1990s the automotive companies became 'learning organisations, lifting spending on education and training to an average in excess of 4 per cent of total wages'. This is well above the rate spent on training in many other industries. The Victorian Government also commented that:

Today's automotive industry is characterised by organisations that actively encourage learning and skills development through structured programs. This is apparent in the industry's significant investment in training and skills development, its ability to attract skilled professionals and rising productivity levels across the industry. (sub. PP114, p. 11)

While some of the skills acquired by automotive employees are highly specialised, much of the industry's skill-base is likely to be relevant to other industries. The South Australian Government (sub. 60, p. 43), commenting on significant improvements in training in the industry in recent years, said that 'the result is a growing pool of highly skilled people available to other manufacturing industries'. This matter is discussed further in chapter 13.

Occupational profile of automotive employees

The occupational profile of automotive employees provides a further indication of the level of skill in the industry's workforce.

The largest occupational group in the industry, like total manufacturing, is skilled tradespeople. They represent almost 30 per cent of the industry's workforce (table C.6), the main trades being metal fitters and machinists, structural steel and welding tradespeople and motor mechanics. Production and transport employees are the second largest occupational group accounting for just over 20 per cent of the industry's workforce.

And, while the trades proportion of the industry's workforce has increased over the last five years, the proportion employed in production, transport and labouring type work has declined. However, perhaps the most notable feature is the increase in the proportion of professionals employed in the industry over the last five years (table C.6).

The evidence on skill levels suggests an improved adjustment capacity

Overall, a number of features of the automotive industry workforce point to an improved capacity for employees to find alternative work in the event of displacement:

- the educational attainment of the industry's employees is higher than it was five years ago;
- the proportion of employees in the managers/professional and skilled trades areas has increased; and
- intensive on-the-job training has led to very significant improvements in the industry's skill base across the spectrum of employees. As Holden said, 'the large increase in training intensity in the car industry has greatly increased the market value of the industry members who take part in the training available.' (sub. 72, p. 92).

Table C.6 Occupations employed in the automotive industry, 1997 and 2002
per cent

<i>Occupation</i>	<i>Share of industry employment</i>	
	<i>1997</i>	<i>2002</i>
Managers, administrators, professionals and associated professionals	13	19
Tradespersons and related workers	27	29
Clerks, salespersons and personal service workers	11	8
Intermediate production and transport workers	26	23
Labourers and related workers	23	21
Total	100	100

Source: ABS (unpublished data).

Full time/part time employment

The incidence of part-time employment is relatively low in the automotive industry. In early 2002, around 96 per cent of the automotive workforce were full-time. This compares with around 89 per cent for total manufacturing and 72 per cent for all industries.

However, against a trend of increasing part-time employment in the economy, the proportion of the automotive workforce employed in part-time jobs has changed little — increasing by only around 0.5 percentage points since the early 1990s (Department of Employment and Workplace Relations, sub. 79, p. 5). Presumably, this reflects both the higher proportion of male employees and the higher levels of unionism in this industry than in many other industries.

Wages and salaries

In 2000, average earnings in the automotive industry were just over \$41 000, some 7 per cent higher than for the manufacturing sector as a whole. There is, however, variation in average earnings within the automotive industry. The highest paid employees in the industry are in motor vehicle manufacturing — this group earned around 19 per cent more than the average for total manufacturing. On the other hand, average earnings in automotive components manufacturing were about the same as the average for the manufacturing sector as a whole (table C.7).

Table C.7 Wages and salaries for automotive and manufacturing employees, 1999-2000

	<i>Annual wages and salaries (\$)</i>	<i>% of average manufacturing wage</i>
Motor vehicle and parts manufacturing^a	41 186	107
Motor vehicle manufacturing	45 796	119
Automotive electrical and instrument manufacturing	43 560	113
Automotive components manufacturing nec	37 196	97
Total Manufacturing	38 528	100

^a Excludes the manufacture of truck and bus bodies, trailers and caravans and bodywork modifications.

Source: ABS (2001a).

Average weekly hours worked by automotive employees in 2000 were broadly in line with those in total manufacturing (39.4 hours compared with 38.6 for manufacturing). This suggests that higher earnings in this industry do not reflect higher levels of overtime. Higher average skill levels presumably explain at least some of the difference. According to some, the bargaining power afforded employees by the industry's just-in-time production structures is another contributing factor to higher wage outcomes (see chapter 5).

Labour turnover and absenteeism

While traditionally the automotive industry was characterised by high labour turnover (in excess of 30 per cent in the early 1990s) and absenteeism, many participants spoke about significant improvements made in these two areas in recent years. One component producer, for example, recorded a staff turnover rate of less than half a per cent. Ford also noted significant improvements (table C.8). Toyota (sub. 39, p. 51), however, argued that 'there is still some way to go in bringing workplace practices up to world best levels, with unmanaged absenteeism still twice the rate of that in Japan'.

Table C.8 Employee performance indicators, Ford Australia
per cent

	1996	1998	2000
Absenteeism	4.8	4.1	4.1
Turnover			
- trade	2.8	1.3	1.0
- non-trade	5.7	3.2	2.9
- salaried	3.0	3.5	4.0

Source: Ford Australia (sub. 41, p. 25).

More broadly, data from the ABS Labour Mobility Survey indicates that around 12 per cent of people employed in the automotive industry changed either their employer or job location in the twelve months to February 2000. This was comparable to the proportion of people changing jobs in other manufacturing activities and the economy as a whole. Of those people employed in the automotive industry who changed jobs or job location — around 28 per cent moved to other manufacturing jobs, just over 30 per cent to jobs in other industries, and the rest moved to other firms within the industry.

Unionisation

There is a relatively high rate of union membership in the automotive industry. In 2001, the ABS estimated that around 46 per cent of the industry's workforce was unionised. This compares with 30 per cent for manufacturing and 25 per cent for all industries.

While among the vehicle and large component producers there is very high union coverage below managerial, administrative and professional staff, union membership across all occupational classifications in many of the smaller component producers is considerably lower.

Strong union representation is common in the industry around the world. That said, union membership levels in many countries have been declining and internationally non-union plants are increasingly more common than in the past. As Lansbury, Katz and Park (1997, p. 180) note:

... the auto industry has been one of the strongholds of unionisation featuring some of the world's leading unions such as the UAW in the United States and IG Metall in Germany. However, declining rates of unionisation in many mature economies, such as the United States and Europe, as well as the development of non-unionised plants (for example, those owned by the Japanese in North America), have greatly weakened the union movement within countries where they were previously the strongest.

There are, however, some exceptions to this trend. In the Swedish industry, for example, unionisation has remained very high. And in South Korea, there has been a rapid rise in unionisation in recent years.

The unions covering the Australian automotive industry are largely occupation-based. They include the:

- Australian Manufacturing Workers' Union (AMWU);
- Australian Workers' Union (AWU);
- National Union of Workers;
- Construction, Forestry, Mining and Energy Union;
- Australian Services Union;
- Communications, Electrical and Plumbing Union;
- Association of Professional Engineers, Scientists and Managers, Australia; and
- Liquor, Hospitality and Miscellaneous Workers Union.

According to the Department of Employment and Workplace Relations (sub. 79, p. 11), the Federation of Vehicle Industry Unions plays a role in coordinating combined union approaches to enterprise bargaining negotiations and is also involved in numerous formal consultative arrangements with unions and companies, covering a wide range of issues.

The AMWU is the dominant union in the industry — it is said to represent about 90 per cent of the industry's union members (Bamber and Lansbury, 1997). The AMWU was formed in 1995 through the amalgamation of several unions including the former Vehicle Builders Employees' Federation (which largely covered production workers), the Association of Draughting, Supervisory and Technical Employees (which covered most technicians) and the Amalgamated Metal Workers' Union (which covered skilled engineers and maintenance trades). The AMWU is now structured around four main divisions — Metals, Vehicle, Printing and Food.

The majority of workers employed in the vehicle assembly plants are covered by the Vehicle Division of the AMWU. In the component sector, however, AMWU membership is split between the Vehicle and Metal Divisions. Such demarcation is historical — the two Divisions maintained membership within different enterprises based on the coverage of the former Amalgamated Metal Workers Union and the Vehicle Builders Employees' Federation of Australia.

However, there is considerable variability at the plant level in union representation and coverage. In contrast to many other countries, there are multiple unions at most plants. For example, Hella (lighting), has five unions on site. The employees at

Robert Bosch Australia are represented by seven unions. Conversely, Delphi is a non-union site.

Also, with the exception of the Vehicle Division of the AMWU, the unions covering employees in the automotive sector also cover employees in a range of other industries. Because of this, many participants argued that the interests and agendas of the unions are not always adequately aligned with those of the automotive industry and its employees.

Such multi-industry coverage is not unusual internationally. In the United States, for example, the main union representing employees in the automotive industry is the United Auto Workers (UAW). It is one of the largest unions in North America and has members in many other sectors of the economy. Similarly, the Canadian Auto Workers (CAW) and the IG Metall union in Germany represent employees in a range of other industries. In concluding on the implications of such a structure for the capacity of unions to effectively represent the interests of the automotive workforce, the AMWU said:

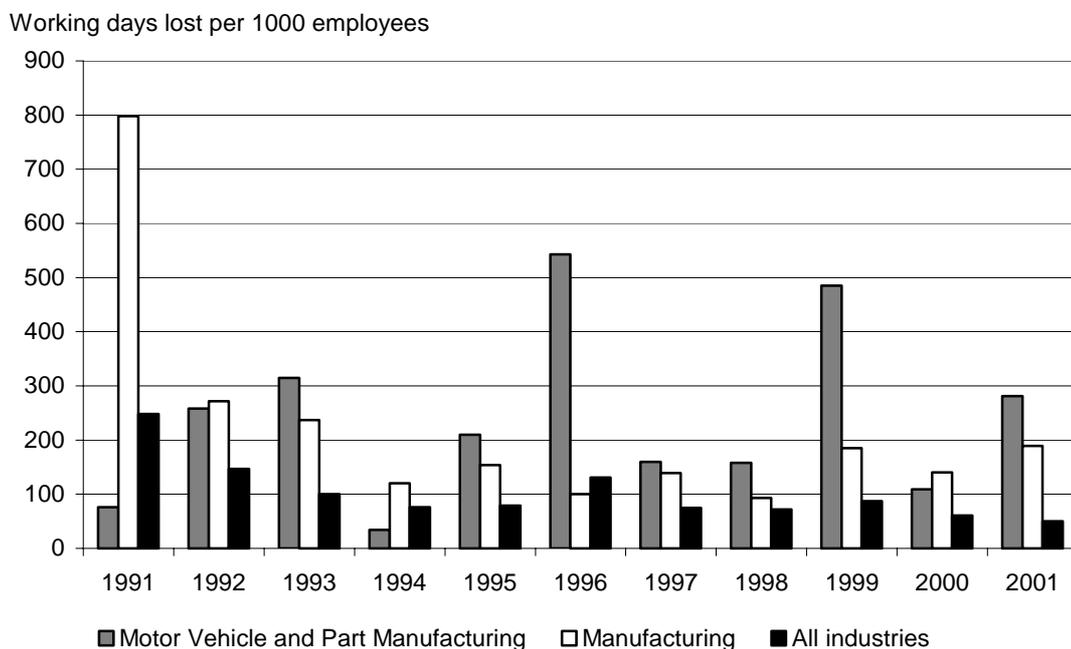
... this has not impeded the unions capacity to provide effective representation of auto workers rather it has enhanced it through economies of scale, shared information and a stronger education and bargaining infrastructure for all workers it represents. (sub. PP108, p. 51)

Industrial disputation

For most of the last decade, lost production time from industrial disputes in the automotive industry has been significantly higher than across the economy as a whole. In 2001, working days lost in the automotive industry were nearly six times higher than the all industry average (figure C.3).

As the AMWU (sub. PP108, p. 27) pointed out, production time lost from disputes in the industry has declined by over 30 per cent since the mid 1980s. However, across all industries days lost fell by more than double this amount over the same period. Moreover, both the number of disputes and number of employees involved (directly and indirectly), have risen in the industry in recent years (table C.9).

Figure C.3 Working days lost per 1000 employees due to industrial disputation, 1991 to 2001



Data source: ABS (Cat. no. 6322.0, unpublished data).

Table C.9 Number of disputes and employees involved in industrial disputation in the automotive industry, 1991 to 2001

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
No. of disputes ^a	10	7	8	na	10	3	3	8	18	14	19
No. of employees directly or indirectly involved ('000s)	5	21	13	3	10	6	10	8	21	9	16

^a An industrial dispute is defined as a withdrawal from work by a group of employees, or a refusal by an employer or a number of employers to permit some or all of their employees to work, each withdrawal or refusal being made in order to enforce a demand, to resist a demand, or to express a grievance. **na** Not available.

Source: ABS (unpublished data).

However, care is required in interpreting and comparing industrial disputation data across industries. For example:

- Large manufacturing and mining industries with highly unionised workforces will almost inevitably have higher levels of disputation than primary and service sector industries with large numbers of smaller businesses.
- Levels of disputation are likely to fluctuate in accordance with the enterprise bargaining cycle. Thus the years that the automotive industry stands out as

having particularly high numbers of days lost due to industrial disputation — 1996, 1999 and 2001 — coincided with bargaining rounds for many workplace agreements within the industry. Toyota, for example, while not losing any days to disputes in its most recent enterprise bargaining round, reported losing 10 days in 1996 and 5 days in 1999 (sub. 39, p. 51).

- The ABS data on the number of disputes includes any time lost from a notified dispute. Hence it would include stoppages that might only have lasted for an hour or two.
- Data on working days lost will not necessarily correlate well with the costs to the industry and wider economy of the associated disputes. Thus a relatively short stoppage which led to the loss of a major export contract could have very significant costs. Conversely, to the extent that lost production can be partially ‘recouped’ through the reorganisation of rostered days off etc, the costs may be diminished but not eliminated.

Another perspective could be provided through a comparison of levels of disputation in the Australian industry with those in other automotive producing countries. Unfortunately, there does not appear to be official data available for other countries on days lost from stoppages in the automotive industry. The AMWU (sub. PP108) provided information for the Canadian and Korean industries, sourced from the relevant unions in those countries. This indicated that days lost per thousand employees have been considerably lower in the Australian industry than in both Korea and Canada. But clearly this is a very limited sample. For example, were data available for say, the Japanese and UK industries, where some automotive producers contended that industrial disputation is less of a problem than in Australia, a different picture might emerge. Moreover, the lack of official data meant that the Commission has been unable to verify the information provided by the AMWU. Indeed, it notes the AMWU’s caution that the Korean information is preliminary (p. 118).

Workplace arrangements

Workplace arrangements in the automotive industry have changed considerably over the last 15 years. These changes have been facilitated by reforms to the industrial relations framework which have seen a move away from a centralised approach to determining wages and conditions towards agreement making at the enterprise and workplace level. Reform initiatives, such as award restructuring and, more recently, provisions for enterprise bargaining agreements have facilitated more flexible forms of work organisation and focused workplace relations at the enterprise and workplace level.

According to ABS data provided by DEWR, the most common method of setting pay and conditions in the automotive industry is Federal collective agreements — in 2000 they accounted for over 60 per cent of all agreements in the industry (table C.10). This was almost double the percentage of such agreements for manufacturing as a whole and three times higher than that for all industries. Reflecting this greater reliance on collective agreements, the proportion of automotive employees covered by individual agreements (just under 30 per cent), is low relative to manufacturing and all industries. Like the rest of manufacturing, the proportion of employees in the industry covered by awards (7 per cent) is low relative to the all industry average (23 per cent).

Table C.10 **Methods of setting pay, May 2000**
per cent

	<i>Awards only</i>	<i>Collective agreements^a</i>		<i>Individual agreements^b</i>
	<i>Federal and State</i>	<i>Federal</i>	<i>State or unregistered</i>	<i>Federal or State unregistered</i>
Motor vehicle and parts manufacturing	6.8	62.4	1.8	29.1
Manufacturing	11.4	37.0 ^c		51.6
All industries	23.2	21.7	15.1	40.0

^a Collective agreements result from bargaining between an employer (or group of employers) and a group of employees (or one or more unions or employee associations representing the employees). ^b Individual agreements are agreed to by the individual rather than on behalf of the individual. ^c Includes Federal, State and unregistered.

Sources: ABS (2000), DEWR (sub. 79, p. 11).

Awards

The two main Federal awards in the automotive industry are *the Metal, Engineering and Associated Industries Award 1988* and the *Vehicle Industry Award 2000* (AIG, sub. 43).

Enterprise Bargaining

All four vehicle assemblers and the majority of large component producers have negotiated enterprise agreements with their employees. While firms spoke about the enterprise bargaining regime facilitating a greater focus on the circumstances of their individual workplaces, there are many common innovations and conditions across agreements. The similarities are most marked among the certified agreements of the four motor vehicle assemblers. These similarities include: nine day fortnights, pay and scheduling of rostered days off during stand downs, restrictions on the use

of casual, contract and fixed-term labour, provisions for paid maternity leave, income protection and voluntary bargaining fees (DEWR, sub. 79, p. 12). Mitsubishi, however, has negotiated some variations in particular areas based on firm-specific considerations — most notably, provision for the use of temporary labour to meet seasonal peaks in demand for its vehicles in the United States.

According to DEWR, there is greater diversity in agreements in the component sector. However, many participants argued that vehicle assemblers' agreements set precedents on wages and conditions that flow through the entire industry almost irrespective of the productivity offsets available to individual firms.

Reflecting on this feature of wage and condition outcomes in the industry, the AMWU, said that:

The nature of automotive manufacturing, both globally and domestically, lends itself to the formation and establishment of common industry led claims as the factors and pressures that affect one employer are, in many respects, the same for all employers, as are the tools by which companies become globally competitive. (sub. PP108, p. 53)

According to the unions, common claims are a feature of regulatory frameworks in a number of other countries. However, as the following examples of negotiation structures in other countries illustrate, there does appear to be a trend towards a greater focus on enterprise-level approaches in some of the major producing countries:

- In Germany, there is a system of regional collective bargaining, whereby the union (IG Metall) negotiates 'framework' agreements with the employers' federation on issues such as wages and working times. Negotiations for other conditions (such as bonuses and work time arrangements) are carried out at the enterprise level by work councils. In recent years, the role of work councils relative to unions has increased as employers have sought to devolve decisions which were formally negotiated with unions down to the plant level.
- In Korea, industrial relations at the company level are based on collective bargaining over wage and labour contracts. Labour-management councils negotiate working conditions (such as health and safety conditions, changes to production layout, job redeployment, etc) at the plant and department level.
- In the United States, the automotive industry has historically relied heavily on collective bargaining. The 'big 3' vehicle manufacturers in the United States (General Motors, Ford and Chrysler) continue to have very similar wage outcomes, particularly around their traditional heartland in Detroit. However, the increasing presence of non-union Japanese and German owned assembly plants mainly in the south of the United States, has contributed to growing variation in negotiating structures.

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- Similarly, the bargaining system in the United Kingdom was traditionally structured around industry wide collective agreements followed by enterprise level negotiations. In more recent years, however, some employers have refused to enter into industry wide agreements with the consequence that bargaining has largely taken place at the enterprise level.

E Automotive industry support arrangements

E.1 Introduction

Government support to the automotive industry is provided in a variety of ways, including through tariffs on imported vehicles and components and the Automotive Competitiveness and Investment Scheme (ACIS). The industry also has access to a range of generally available Commonwealth support measures, as well as to ad hoc support from State Governments. Collectively, these measures provide the industry with considerably more support than nearly all other manufacturing activity in Australia. The impact of this assistance on local automotive firms and other interest groups was the focus of chapter 9. This appendix provides a more detailed description of the arrangements currently in place. It also examines changes in the form in which support has been delivered over time.

E.2 A brief history of automotive assistance policy

Over time, the mix of policies used to support the Australian automotive manufacturing sector has changed considerably. Assistance in one form or another dates back to the industry's inception. The first automotive tariffs were introduced on vehicle bodies and components in 1907 in an attempt to foster the development of local assembly and manufacturing capacity. Tariffs were increased after the First World War and then extended to chassis and other components in the 1920s. In 1925, the assembly of passenger motor vehicles commenced.

During the 1930s, the focus of automotive policy shifted towards encouraging full vehicle manufacture. With the aid of further incentives, Holden would eventually produce the first completely Australian built passenger motor vehicle in 1948.

In the 1950s the major aim of government policy was to increase the local content of vehicles produced or assembled in Australia. In addition to tariff assistance, non-tariff measures such as concessional loans and import licences were an integral part of the strategy to encourage the expansion of the automotive manufacturing sector.

By the early 1960s, the Australian automotive industry consisted of nearly 300 companies employing over 30 000 people. Some firms, notably Holden, were also significant exporters.

Throughout the 1960s, the complexity and level of support to the industry increased significantly at a time when assistance to the manufacturing sector was beginning to decline. In 1965, the first of a series of Motor Vehicle Manufacturing Plans was introduced to promote higher levels of local content. Under these plans, producers were provided with concessions on imported components in return for achieving a specified level of local content in vehicles.

During this period, the industry also began to experience rising competition in the domestic market from smaller, more economical vehicles produced in emerging automotive centres such as Japan. In response, the tariff on imported passenger motor vehicles was increased in 1966 from 35 per cent to 45 per cent, at which it remained until 1973 when it was lowered to around 34 per cent as part of across-the-board tariff cuts. However, continued strong growth in imports and the consequent threat of job losses, prompted the Government to restore the tariff to 45 per cent and introduce an 80/20 market sharing arrangement in which quotas were used to restrict imports to 20 per cent of the market. While this arrangement was intended to be temporary, it in fact became an integral part of the assistance package for more than a decade. And then in the late 1970s, tariffs were increased further on within-quota imports to 57.5 per cent purely as a revenue raising measure.

The upshot of these developments was that, by the latter part of the 1970s, the automotive industry had become entrenched as one of Australia's most highly assisted and uncompetitive industries, supported by a complex package of measures which automatically provided increased assistance when the industry's competitiveness declined. The need for a change in policy direction was clear.

The process of reforming the industry began in 1982 with the introduction of export facilitation — an initiative designed to encourage the industry's integration into the global automotive sector rather than protecting it from international competition. Under this scheme, vehicle and component producers could earn credits for their exports and use them to offset duty on their imports. This shift in policy emphasis was reinforced and greatly augmented under the Button Car Plan, which put in train a program to phase out quantitative import restrictions and substantially lower tariffs.

While the Button plan initially provided for the abolition of quotas by 1992, the dramatic depreciation of the Australian dollar in the mid 1980s and the consequent improvement in the competitiveness of local firms accelerated the liberalisation

timetable. A mid-term review of the Plan resulted in quotas being abolished by 1988 and the tariff on passenger vehicles reduced to 45 per cent. The local content scheme was abolished in 1989.

The Button Plan also contained a range of measures designed to encourage the rationalisation of the number of vehicle models produced in Australia. At the time, there were thirteen models being produced at eight plants across the country. This would eventually fall to just five models being produced in four plants. However, the role of 'directive' restructuring measures in this rationalisation was arguably less significant than the more general pressures created by tariff reductions and the abolition of quotas. Directive restructuring terminated in 1992.

Assistance arrangements over the last decade have maintained the direction established by the Button Plan. Assistance levels have continued to fall and there has been further emphasis on encouraging export activity rather than focussing simply on import replacement (box E.1).

Box E.1 Automotive industry arrangements in the 1990s

Key elements of automotive assistance policy operating between 1991 and 2000 were:

- Tariffs on passenger, light commercial and four-wheel-drive vehicles and components for these vehicles. In the case of passenger vehicles and their components, the tariff declined by 2.5 percentage points annually over the decade to reach 15 per cent in 2000. Tariffs on other vehicles and their components declined by 2 percentage points annually to reach 5 per cent in 1996 and remained at that level.
- A PMV producers' entitlement to duty free importation — known as the duty free allowance (DFA). PMV producers were permitted to import, duty free, vehicles and original equipment (OE) up to 15 per cent of the value of their eligible PMV production. This arrangement was a continuation of the duty free allowance previously provided to vehicle producers to compensate them for the costs of local content protection.
- An Export Facilitation Scheme (EFS) which enabled companies to earn export credits on eligible exports of passenger vehicles, components, machine tools/tooling and automotive design, development and production services. These credits could be used to offset the duty on automotive imports (over and above the DFA entitlements). Export credits were earned on the basis of Australian automotive value added in exports. The credits were freely tradeable.

Although these arrangements have lapsed, some elements have been carried over to the current assistance framework for the industry (see text).

E.3 Current arrangements

Following the last review of the automotive industry by the Industry Commission in 1997, the Government introduced its post 2000 assistance arrangements. The current regime commenced on 1 January 2001 and consists of:

- Tariffs on passenger, light commercial and four-wheel-drive vehicles and components for those vehicles; and
- the Automotive Competitiveness and Investment Scheme (ACIS) which provides a subsidy to eligible automotive production, investment and R&D.

Until June 2002, the industry also benefited from the Automotive Market Access and Development Strategy (AMADS) which sought to remove impediments to the development of export markets. AMADS was terminated following a separate review (see later). The industry benefits from government purchasing preferences for vehicles produced in Australia (or marketed by the local vehicle producers).

In addition to this industry-specific assistance, automotive firms also have access to generally available Commonwealth programs including TRADEX, tax concessions for eligible R&D and Strategic Investment Co-ordination (SIC) grants. And, as discussed in chapter 9, the industry also receives significant further support from State governments. However, information on State-based support is not readily available and is not covered here.

Automotive tariffs

Current tariff rates applying to imports of vehicles and automotive components are:

- 15 per cent on passenger motor vehicles and derivatives and original equipment (OE) for these vehicles, scheduled to decline to 10 per cent on 1 January 2005;
- 15 per cent on replacement components for passenger motor vehicles and their derivatives scheduled to decline to 10 per cent on 1 January 2005; and
- 5 per cent on light commercial vehicles and four-wheel-drives and OE and replacement components for these vehicles, with no changes in this rate currently scheduled. The tariff rate on these vehicles and components is equal to the general manufacturing rate.

Classifying passenger, light commercial and four-wheel-drive vehicles

While current tariff settings effectively differentiate between passenger and light commercial and four-wheel-drive vehicles, the Customs tariff schedule does not

distinguish between vehicles in this way. Rather, it distinguishes between vehicles for the transport of persons, which attract a 15 per cent duty, and vehicles for the transport of goods, which are subject to a 5 per cent duty. The classification of vehicles as either people or goods transporters is made by the Australian Customs Service based on Australian Design Rule criteria.

Customs generally considers utilities to be goods vehicles, and imposes a 5 per cent tariff on their entry. However, the distinction is more complicated in the case of four-wheel-drive vehicles, which are classified in terms of seating capacity and features such as a four-wheel-drive system, appropriate approach, break-over and departure angles and ground clearance. Where a four-wheel-drive is deemed to be a passenger vehicle, it attracts a 15 per cent duty.

The Commission understands that virtually all four-wheel-drive vehicles are entered at the 5 per cent duty rate. Exceptions generally relate to all-wheel-drive passenger vehicles (for example, Subaru's Liberty and Impreza RV). Four-wheel-drives have not been produced in Australia for many years. However, Ford and Holden are set to commence production of such vehicles in the near future.

Second hand vehicles

Tariffs specified for new vehicles also apply to used vehicles. In addition, second hand vehicle imports are subject to a specific tariff of \$12 000 per vehicle. This tariff was introduced in July 1991. There are provisions for specialist vehicles to be exempted from the specific tariff, although the criteria for exemption were recently tightened with the introduction of the Specialist and Enthusiast Vehicle Scheme in 2001.

Automotive Competitiveness and Investment Scheme (ACIS)

ACIS commenced on 1 January 2001 and is currently scheduled to conclude on 31 December 2005. Its operations are set out in the *ACIS Administration Act 1999*, and supporting guidelines. According to government statements at the time of its introduction (see chapter 9), ACIS is intended to facilitate the transition to lower assistance by encouraging investment and innovation in order to achieve sustainable growth. The scheme provides subsidies to eligible automotive production, investment and R&D.

Total funding over the five year life of the program is expected to be around \$2.8 billion with funding allocated from two pools. One pool which is capped at \$2 billion (through the use of a modulation mechanism) provides support to vehicle and component producers and those providing automotive tooling and design

services. The other pool provides support solely to vehicle producers and, in effect, is a continuation of the now defunct Duty Free Allowance. Funding under this pool is uncapped, with the total cost — currently estimated at around \$840 million over five years — dependent on vehicle production levels. In addition, total funding to individual recipients from both the capped and uncapped pools is limited to 5 per cent of their sales in the preceding year.

ACIS subsidies are delivered through the issue of import duty credits to discharge customs duty on eligible automotive products. Assistance therefore takes the form of forgone tariff revenue. Eligible products include new vehicles and components, but exclude raw materials, bulk goods (eg paint, steel, cable or carpet) and components that must be cut to length or which are not purpose built for automotive use. Duty credits are tradeable, meaning that firms can sell their credits through broking agents or directly to any firm with an interest in importing motor vehicles or automotive components. The current market price for duty credits is in the region of 95 to 98 cents in the dollar. The support delivered through ACIS, assuming domestic vehicle production of around 350 000 cars per year, is equivalent to around \$1 600 a vehicle each year.

Eligibility and funding criteria

Motor Vehicle Producers: Qualification requires the production of at least 30 000 motor vehicles or engines in Australia. Duty credits are then determined on the following basis:

- Uncapped production credits
 - 15 per cent of the value of production of passenger vehicles (sold in the Australian and New Zealand markets), multiplied by the passenger vehicle tariff rate;
- Capped production credits
 - 10 per cent of the value of production of passenger vehicles (sold in the Australian and New Zealand markets), multiplied by the passenger vehicle tariff rate; *plus*
 - 25 per cent of the value of production of passenger vehicles (sold in markets other than Australia and New Zealand), and engines and engine components, multiplied by the passenger vehicle tariff rate; *less*

-
- any other Commonwealth assistance received in relation to any passenger vehicle production.¹
 - Investment credits
 - 10 per cent of the value of investment in approved plant and equipment used to produce motor vehicles, engines or engine components (see box E.2); and
 - 25 per cent of the value of investment in approved plant and equipment in relation to production of automotive components (other than engines and engine components), automotive machine tooling or automotive services; and
 - 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: To be eligible under this segment of the scheme, a firm must be producing automotive components in Australia with a combined annual value of at least \$500 000 and which are for use in at least 30 000 new Australian vehicles, or account for at least half the firm's total production value for all automotive components. These requirements mean that small producers of original equipment and those component producers focused on the aftermarket are ineligible for ACIS support. Benefits for eligible component producers are based on:

- 25 per cent of the value of investment in approved plant and equipment; and
- 45 per cent of the value of investment in approved R&D.

Automotive Machine Tool and Automotive Tooling Producers: This group includes those producing automotive machine tools and tooling in Australia with an annual value of at least \$500 000, of which at least 50 per cent is for use in the production of original equipment for Australian vehicles. Duty credit earning rates are the same as for component producers, namely:

- 25 per cent of the value of investment in approved plant and equipment; and
- 45 per cent of the value of investment in approved R&D.

¹ This relates only to any transitional 'carry-over' of EFS and DFA entitlements and funds under the R&D start program and the TCF Strategic Investment Program. It excludes, for instance, financial assistance provided under the Strategic Investment Coordination process such as the \$12.5 million grant to Holden for a new engine plant.

Box E.2 Allowable investment and R&D

Under the Act, allowable investment for ACIS claims are plant and equipment:

- for the manufacture, assembly, design, development or engineering of motor vehicles, engines, engine components, automotive components, automotive machines tools or automotive tooling; and
- for the activation of manufacturing processes for, (or indirectly) supporting functions that are integral to the production of vehicles, engines, engine components, other components and automotive machine tools or tooling and/or facilitating the provision of automotive services or approved R&D.

Under the Act, the definition of allowable R&D is much broader than that applying to the general R&D tax concession. Allowable R&D under ACIS comprises activities directly related to the design, development, engineering or production of motor vehicles, engines, engine components, automotive components, automotive machine tools or automotive tooling; and undertaken for acquiring new knowledge or creating new or improved materials, products, devices, production processes or services. This includes:

- basic and strategic research;
- industrial and engineering design;
- production engineering;
- development activities relating to the building and testing of prototypes;
- re-engineering and modification of existing products and processes;
- development and installation of purpose-designed systems for quality assurance and process control, or materials or movement control;
- testing and modification of new production systems (either purpose-built or interchangeable) to achieve repeatability within specified tolerances;
- obtaining industrial property rights in Australia or elsewhere; and
- activities conducted at the participant's own expense that are aimed at improving a product or process of an engine or component supplier to the participant.

Source: ACIS Administration Act 1999.

Automotive Service Providers: This group comprises firms providing automotive services in Australia with a value of at least \$500 000, of which at least 50 per cent is related to the production of motor vehicles or original equipment. (Automotive services encompass design, development and engineering or production services.) Duty credit earning rates are the same as for component and tooling producers, namely:

- 25 per cent of the value of investment in approved plant and equipment; and

-
- 45 per cent of the value of investment in approved R&D.

Basis for distribution of ACIS funding

As the preceding discussion indicates, there are significant differences in the way ACIS funding is distributed to the different classes of program participants. For example:

- only vehicle producers receive credits based on production;
- vehicle producers receive investment credits based on 10 per cent of the value of investment in vehicle and engine related plant and equipment, whereas component producers, toolers and service providers receive credits based on 25 per cent of the value of their investments in plant and equipment; and
- vehicle producers are ineligible for credits based on R&D spending, where the research activity concerned is related to production of vehicles, engines and engine components for their own use.

Inquiry participants told the Commission that this divergent basis for distributing ACIS funding was designed to provide support to each segment of the industry similar to that received under the previous Export Facilitation Scheme and the DFA. As mentioned earlier, the uncapped production credit regime for vehicle producers is effectively a continuation of the DFA.

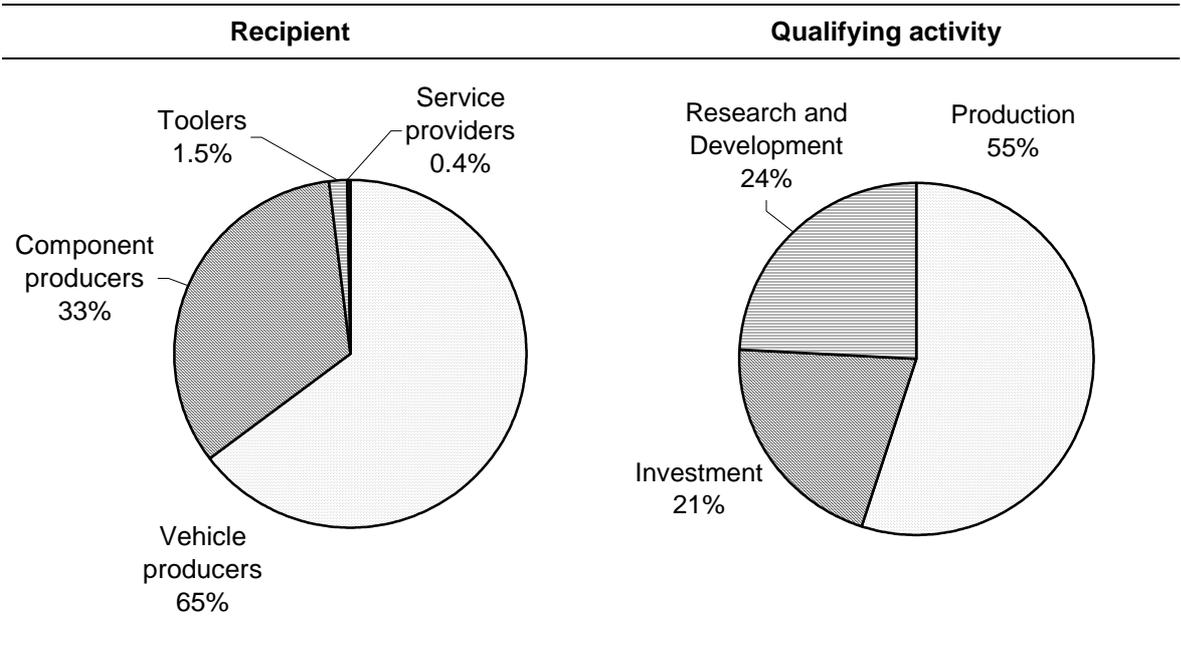
While ACIS was ostensibly designed to deliver a similar quantum of support to those previous arrangements, the form of support was altered to address vulnerability of the Export Facilitation Scheme to challenge as a prohibited subsidy under World Trade Organization rules. Thus, ACIS removed the direct link between assistance and export activity through the replacement of explicit export support with a general production subsidy. The scheme has also extended support to R&D and investment activities which are generally considered to be more benign from a WTO standpoint. WTO subsidy rules were also the reason for placing the 5 per cent cap on benefits received by individual firms.

Distribution of ACIS funding

As it has happened, component producers have received a greater share of ACIS funding than their share of previous export facilitation support. Over the five year life of ACIS, vehicle producers are expected to receive around \$1 billion from the capped pool. The bulk of this will be derived from production activity. In addition, they are expected to receive \$840 million in uncapped production credits. This means that in total, vehicle producers will receive 65 per cent of available ACIS

funding (figure E.1). Component producers are expected to receive around \$950 million from the capped pool and the toolers and service providers about \$50 million.

Figure E.1 Distribution of ACIS funding by recipient and activity
per cent



Data source: Commission estimates.

Viewed in terms of qualifying activity, the Commission estimates that of total ACIS funds, 55 per cent will be distributed to production, 24 per cent to spending on research and development and 21 per cent to investment in plant and equipment.

E.4 Other automotive specific assistance

Other Commonwealth Government initiatives which have provided specific support to the automotive industry include the Automotive Market Access and Development Strategy and vehicle purchasing preferences.

As mentioned earlier, AMADS commenced in 1998-99. Its rationale was to facilitate access to export opportunities reflecting the view that the local industry’s longer term viability was strongly tied to participation in export markets. It expired as scheduled at the end of June 2002 following a separate evaluation (see box E.3). The Strategy centred around three core activities — industry development, market access and export facilitation.

Industry development

Activities within this component of AMADS involved facilitating international business development and industry collaboration through grants from an Automotive Market Development Fund. For example, funds were used to assist in showcasing Australia's automotive engineering and manufacturing internationally through the aXcess Australia Concept Car. Support was also provided to:

- encourage strategic alliances with overseas car producers and component manufacturers to gain access to technology; and
- develop opportunities for international collaborative research, with priority given to developing Australia's capabilities in alloys and casting for lightweight metals.

Market Access

Market access activities were aimed at resolving automotive trade issues through inter-governmental dialogue in multilateral, regional and bilateral negotiations. An Automotive Market Access Facilitator was appointed to identify impediments to Australian automotive trade. The harmonisation of automotive standards was also an objective of this element of the Strategy.

Box E.3 Evaluation of AMADS

AMADS was reviewed towards the end of 2001 under the supervision of an interdepartmental Steering Committee with industry representation. Recommendations included:

- industry wide promotions that showcase the Australian industry should continue;
- funding for discretionary projects such as the Concept Car should continue;
- Australia should continue to seek improved market access at the multilateral, regional and bilateral levels;
- Australia should remain an active participant in the APEC Automotive Dialogue;
- global harmonisation of automotive standards should continue;
- Austrade should continue to employ Automotive Industry Specialists in priority markets;
- cooperation between agencies should continue and be overseen by a committee comprising DITR, Invest Australia, DFAT, Austrade and DTRS; and
- the automotive industry should set new targets for industry internationalisation.

Source: AMADS Evaluation Report (unpublished).

Export Promotion

Austrade was responsible for delivering an automotive export promotion program under a purchaser-provider agreement with the Department of Industry, Tourism and Resources. It targeted priority markets through the Austrade network with the appointment of four Austrade Automotive Specialists in key international markets (Asia, North Asia, Europe and North America) through the purchaser-provider agreement.

Government purchasing preferences

Government purchasing preferences are a further source of support for the local automotive industry. Under the Commonwealth vehicle fleet arrangements, preferential treatment is afforded to vehicles supplied by local producers. Larger vehicles purchased by Commonwealth agencies must generally be made in Australia by manufacturers which satisfy the criteria for registration as a vehicle producer under ACIS. Similarly, Commonwealth agencies purchasing smaller vehicles of a sort not produced in Australia are limited to models imported by the domestic vehicle producers. State governments and, to a lesser extent, local governments have adopted similar preference arrangements. Government fleet purchases account for about 25 per cent of domestic demand for locally produced vehicles (see table B.10).

E.5 General Commonwealth budgetary support

In addition to these industry-specific measures, in 2000-01 the automotive industry received some \$120 million from a range of industry-wide Commonwealth programs (table E.1). Commonwealth programs providing most funding support to the sector were the TRADEX concession, R&D tax incentives and the development allowance.

By targeting market failures or offsetting potential inefficiencies in taxation arrangements, some of these measures may well increase community welfare. From this perspective, they are in a different category to the tariff and ACIS. However, as discussed in chapter 9, support provided through these measures needs to be taken into account when evaluating the extent to which particular industries are advantaged or disadvantaged by the totality of government support mechanisms.

Table E.1 **General Commonwealth budgetary support received by the automotive sector 1999-00 to 2001-02^a**

	Type ^b	1998-99	1999-00	2000-01	2001-02
<i>General support measures</i>		\$ million	\$ million	\$ million	\$ million
Development allowance	TE	25	24	16	15
<i>General export measures</i>					
Austrade export promotion ^c	FI	5	5	6	6
Export Market Development Grants	DA	-	-	2	2
Tariff export concession (TEXCO) ^d	TE	13	14	-	-
TRADEX	TE	-	-	62	62
<i>General R&D measures</i>					
Innovation investment fund	DA	-	-	2	3
R&D Start and related grants	DA	1	<1	<1	<1
R&D tax concession	TE	25	29	30	31
Total		69	73	119	120

^a 2000-01 data are budget estimates while 2001-02 data are budget appropriations. ^b DA: direct financial assistance; FI funding to institutions; TE: tax expenditures (revenue forgone). ^c Data are based on the industry allocations for 1998-99, the only year Austrade assembled disaggregated industry data. ^d TEXCO was the predecessor to the TRADEX scheme.

Source: PC (2001b).

TRADEX

The most significant source of generally available funding for the automotive industry is the TRADEX concession. TRADEX provides businesses with an up-front exemption from customs duty and GST on imported goods intended for re-export or to be used as inputs to exports. In 2000-01 the automotive sector received over \$60 million in TRADEX concessions.

Research and Development

As noted earlier, the ACIS provides support for a range of eligible R&D expenditures (see box E.2). The Commonwealth Government also provides for a generally available R&D tax concession scheme which is open to those automotive firms not eligible for ACIS R&D duty credits, or for R&D expenditure not included in ACIS claims by eligible firms. Benefits under this program mainly accrue to motor vehicle producers (performing R&D on their own behalf), smaller component producers, including those which concentrate solely on the aftermarket, and raw material suppliers. Funding support to the automotive industry under this tax concession was around \$30 million in 2000-01. More details of the tax concession

and an outline of some other general R&D support measures available to the industry are provided in box E.4.

Box E.4 Key aspects of the 'Innovation Action Plan' for R&D support

In January 2001, the Government announced *Backing Australia's Ability*, an Innovation Action Plan for R&D support. Total funding and revenue forgone under the Plan is expected to be \$2.9 billion over the five years to 2005-06. Of these measures, R&D support of direct benefit to industry (schemes assisting business R&D and commercialisation) accounts for \$1.4 billion of projected spending. Some specific aspects of the R&D plan are discussed below.

Streamlining the 125 per cent R&D tax concession

The Innovation Plan retained the existing 125 per cent R&D tax concession for business R&D, but proposed changes to the design of the scheme in response to concerns that the current arrangement allows tax claims on expenditure that go beyond normal R&D activities. However, proposed changes intended to tighten definitions and eligibility criteria were not adopted with the passage of the Taxation Laws Amendment Bill 2001.

Premium 175 per cent R&D tax concession

The premium concession is designed to encourage additional R&D. It applies to increases in R&D expenditure over the (moving) average of expenditure in the previous three years. Only current and labour-related R&D expenditures are eligible for the concession. The Government considered that those expenditures have the greatest (spillover) benefits to the economy.

R&D tax rebate

The R&D tax rebate (also called the tax offset) is intended to provide support to R&D undertaken by small companies, particularly those that are in the start-up phase or in a tax loss position. The rebate is a cash equivalent of the R&D tax concessions.

R&D Start

The R&D Start program provides grants and loans to Australian companies for R&D and commercialisation. Assessment of program eligibility is determined on a competitive basis by the Industrial Research and Development Board. The funding under R&D Start is discretionary and firm-specific. Eligible projects can receive subsidies of up to 50 percent of project costs. Initially, it was expected that around 300 companies a year would be eligible for R&D Start funding. However, the scheme was recently suspended owing to funding constraints.

Source: Costello and Fahey (2001b), Howard (2001), PC (2001b).

Development Allowance

In 2000-01, the automotive industry received about \$15 million from the (now defunct) development allowance. The scheme provided for a tax deduction of 10 per cent of the value of eligible investment in plant and equipment, in addition to depreciation, for projects with a capital cost of \$50 million or more. The allowance was a temporary measure operating between 1992 and 1994. Initially, the allowance excluded any firms receiving substantial support from other government policies. However, in 1994, it was extended to include the motor vehicle and printing industries. While the concession is no longer available, benefits are still accruing to automotive firms from earlier investments.

E.6 Strategic Investment Coordination

The Commonwealth also provides generally applicable, but firm-specific, investment support through its Strategic Investment Co-ordination (SIC) initiative. SIC is administered by Invest Australia — the Commonwealth Government's inward investment body. It aims to attract to Australia investment in projects with significant net economic and employment benefits that would have otherwise located offshore. Requests for incentives are considered on a case-by-case basis against a range of criteria, including the generation of net economic benefits and that a project would be viable in the long term without the subsidy (box E.5). The nature of the incentives varies but may include taxable grants or tax relief.

As there are no program funds allocated to the process, each proposal requires a specific funding allocation for which Cabinet approval is required. Holden has been one beneficiary of the program — recently receiving funding of \$12.5 million to assist the establishment of a new engine plant in Victoria (Minchin 2001). Examples of other projects receiving SIC funding are listed in box E.5. Detailed assessments of these projects have not been released publicly.

Ad hoc measures

Like Holden, Mitsubishi also sought assistance from the Commonwealth Government through the SIC process to increase the capacity of its production facility in Adelaide. The Commission understands that this request was rejected on the grounds that the assistance did not meet key SIC criteria. However, in April 2002, the Government announced that Mitsubishi had accepted a Commonwealth offer for \$35 million in cash assistance (the South Australian Government reportedly provided another \$50 million). The basis for this offer remains unclear.

As part of the package, Mitsubishi undertook to establish an international R&D centre of excellence in Adelaide focussed on vehicle safety (Macfarlane 2002c).

Box E.5 SIC evaluation criteria and assisted projects

SIC evaluation criteria

Project proposals are evaluated against the following criteria.

- The investment would be unlikely to occur in Australia without the incentive.
- The investment provides significant net economic benefits — for example, a substantial increase in employment, investment, or R&D capacity, and substantial benefits to other industries.
- The investment complements Australia's areas of competitive advantage.
- The investment is viable in the long term without subsidy.
- The incentives are open to foreign and domestic investors.
- Incentives are consistent with international obligations, including the WTO.

Further, the quantum of project specific assistance takes into consideration the availability of other support from the Commonwealth or State and Territory governments.

Some SIC assisted projects

- a \$40 million package for Visy Industries to establish a pulp and paper mill;
- an offer of assistance exceeding \$100 million to Comalco to expand an alumina refinery;
- a \$70 million package for Syntroleum Corporation to develop gas-to-liquid technology;
- a \$3.2 million grant to the IBM e-Business Centre for Innovation;
- a \$100 million package to develop a space launch facility on Christmas Island;
- a \$50 million allocation of CSIRO funding for a Queensland magnesium project;
- a \$12.5 million grant to Holden to establish an engine plant; and
- a \$125 million investment incentive to Rio Tinto to develop Hismelt technology.

Sources: Macfarlane (2002b), PC (2001b).

E.7 The effective rate of assistance

As discussed in chapter 9, the effective rate of assistance is a long standing and widely used method of estimating the net impact of assistance arrangements on an industry's value adding activities. That said, as the Commission has acknowledged in the body of the report, effective rates estimates are sensitive to variations in the

assumptions used in their calculation. Indeed, some participants provided alternative effective rates estimates which highlight this sensitivity. In the interests of transparency, the Commission has provided this summary of the methodology used by it to derive the effective rates estimates reported in chapter 9.²

In so doing, the Commission reiterates its caution that effective rates are most useful where an economy is replete with activities with high and disparate levels of assistance. Hence, given the lower and more uniform assistance environment prevailing today, and with further reductions in tariffs in prospect, seeking to ‘equalise’ precisely the effective assistance afforded the vehicle production and component sectors, or drawing policy implications from any differentials in their measured assistance, would be unwise.

In the Commission’s view, the most useful inferences which can be drawn from the effective rates estimates are that:

- automotive assistance has fallen substantially since the 1980s; and
- the automotive industry still receives greater assistance than all other manufacturing activities (apart from TCF) and is therefore advantaged in competing for resources.

The effective rate concept — net assistance relative to value added

In essence, the effective rate of assistance measures the extent to which the value added of an activity is supported by assistance arrangements. It takes into account both tariff and other assistance for the final product and the taxing effect of tariffs and other imposts on inputs to the activity. The method of calculation is outlined in Box E.6.

One of the greatest sources of difference in effective rate calculations typically lies with estimates of the ratio of materials to output. The higher the materials to output ratio, the lower will be value added as a proportion of the final output, and the higher the resulting effective rate, all other things being equal.

The estimates of the assisted value of materials to output ratios used here are derived from the latest ABS input-output data for 1996-97. The raw ABS estimates of materials to output ratios range from 0.648 for ANZSIC industry 2819 — Automotive component manufacturing nec — to 0.720 for ANZSIC industry 2811

² The estimates of effective rates of assistance presented are for a typical component producer and vehicle assembler. These estimates are not comparable with those presented annually in the Commission’s *Trade & Assistance Review*, since those cover a broader range of activity than that under reference in this inquiry.

— Motor vehicle manufacturing. This implies that the value added to output ratio is higher in component activity than in motor vehicle assembly.

Box E.6 Calculating the effective rate of assistance

The effective rate of assistance, where ACIS funding is treated as an output subsidy, is defined as:

$$g = (dx - X * dm + v) / (1 - X) \quad (1)$$

where g = the effective rate of assistance

- dx = the tariff rate on outputs multiplied by the fob-cif ratio³
- dm = the tariff rate on inputs multiplied by the fob-cif ratio³
- X = the ratio of Unassisted Value of Materials (UVM) to Unassisted Value of Output (UVO)
- v = ACIS / UVO
- ACIS = ACIS funding
- UVO = the unassisted value of output

The unassisted value of materials to output ratio, X , is defined as:

$$X = PP * (1 + dx + v) / (1 + dm) \quad (2)$$

where PP = purchased percentage or the Assisted Value of Materials (AVM) to Assisted Value of Output (AVO) ratio, and dx , dm , and v are as above.

The unassisted value of materials, UVM, is defined as:

$$UVM = AVM / (1 + dm) \quad (3)$$

The unassisted value of output, UVO, is defined as:

$$UVO = AVO / (1 + dx + v) \quad (4)$$

Therefore, X is derived from:

$$UVM / UVO = [AVM / (1 + dm)] / [AVO / (1 + dx + v)] \quad (5)$$

For the estimates of effective rates presented below, equation (4) is rearranged as:

$$UVO = AVO - GSE_{tariffs} - ACIS \quad (6)$$

where $GSE_{tariffs}$ is defined as:

$$GSE_{tariffs} = dx (AVO - ACIS) / (1 + dx) \quad (7)$$

³ Input and output tariff rates are multiplied by the fob-cif ratio as tariffs are levied on the fob value of imports, while the domestic price raising effects of tariffs are measured relative to the cif or landed value of imports. These estimates assume a fob-cif ratio of 0.95 for both component production and vehicle assembly.

Consistent with the treatment of manufacturing industries in its *Trade and Assistance Review* effective rates estimates, the Commission defines value added differently from the ABS. It follows the so-called Corden method, by which domestically sourced service inputs are removed from the ABS definition of materials, and included with value added. Thus the resulting effective rates measure assistance not just to the value added of a manufacturing activity, but also to the value added embodied in its service inputs. The rationale is that these service inputs are themselves primarily value added and hence it is difficult to tell how the benefits of assistance would be divided between these two activities.

Based on this definition of materials, estimates of the assisted value of materials to output ratio used by the Commission for estimating effective rates of assistance for automotive production are presented in table E.2. The value of the ratio used for component producers is the combined value for the ANZSIC industries 2813 and 2819. The value used for vehicle assemblers is the estimate for ANZSIC industry 2811.

Table E.2 Estimates of the assisted value of materials to output ratio, using the Commission's definition of materials, 1996-97

<i>ANZSIC Code</i>	<i>Description</i>	<i>Commission estimate of ratio</i>
2811	Motor vehicle manufacturing	0.574
2813	Automotive electrical and instrument manufacturing	0.543
2819	Automotive component manufacturing nec	0.502
2813 & 2819	Total automotive component manufacturing	0.510

Source: Commission estimates based on ABS (2001b).

Commission estimates of effective rates of assistance

Component production

In estimating effective rates of assistance for component production, the input tariff rate is set equal to the general tariff rate of 5 per cent, while the output tariff rate is set at 15 per cent in calculating the current effective rate, and 10 per cent for calculating the rate in 2005. It should be noted that the output tariff rate has not been reduced to reflect the importation by vehicle assemblers of some of their component requirements using ACIS credits. This is because there have not been sufficient credits earned to eliminate duty paid on automotive imports, so the

assistance delivered to local component producers *at the margin* is assumed to be that implied by the tariff.

Estimates of the value of production and ACIS credits for component producers were sourced from the Department of Industry, Tourism and Resources. However, the Department's estimate of the value of production for component producers included exports. As noted, only the domestic share of total production is used in estimating effective rates of assistance. This domestic share of production was derived by multiplying the Department's estimate of total production by one minus the export share of production, estimated from ABS export data.

The resulting estimates of the effective rate of assistance for component producers are presented in table E.3.

Table E.3 **Effective rate of assistance for component producers**
per cent

	<i>Current</i>	<i>2005</i>
Dm	4.8	4.8
Dx	14.3	9.5
V	3.8	2.4
X	0.575	0.545
G	36.0	20.4

Source: Commission estimates.

Vehicle assembly

In estimating effective rates of assistance for vehicle assembly, both input and output tariff rates are set equal to 15 per cent, declining to 10 per cent on 1 January 2005. Again, estimates of the value of production and ACIS credits for vehicle assemblers were sourced from the DITR, with export sales netted out of the production value using the same methodology as for component production (see above). The resulting estimates of the effective rate of assistance for vehicle assembly are presented in table E.4.

Table E.4 Effective rate estimates for vehicle assemblers
per cent

	<i>Current</i>	<i>2005</i>
Dm	14.3	9.5
Dx	14.3	9.5
V	6.7	4.2
X	0.607	0.596
G	31.3	19.9

Source: Commission estimates.

Other estimates

As discussed in chapter 9, both the Federation of Automotive Products Manufacturers (FAPM) and Holden submitted effective rates estimates for vehicle assembly and component production. FAPM's estimate for vehicle assembly (33 per cent) was broadly comparable with the Commission's estimate. However, its estimate for component production (between 6 and 13 per cent) was very much lower than the Commission's estimate.

FAPM's estimate of the effective rate for component production suggests the use of a value for the assisted materials to output ratio of 0.281 for this activity. This would imply that over 70 per cent of the output of component producers is value added, a seemingly excessive amount, even taking into account the inclusion of domestically sourced service inputs. In contrast, the value for the assisted materials to output ratio of 0.636 apparently used by FAPM to calculate the effective rate for vehicle assembly is much closer to that used by the Commission, lying between the raw ABS estimate and the adjusted estimate shown in Table E.2.

Holden observed that unlike vehicle assembly, component production has a lower rate of assistance on its inputs (raw materials, mostly duty free or dutiable at 5 per cent or less) than on its outputs (motor vehicle components, currently dutiable at 15 per cent, falling to 10 per cent in 2005). On this score alone, the Commission agrees that the effective rate for component production would be higher than the effective rate for vehicle assembly.

But this effect is counteracted by the lower value added to output ratio in vehicle assembly than in component activity. This explains why the effective rates calculated here are similar for the two activities, despite the differences in assistance on inputs and outputs noted by Holden.

F Modelling the effects of post 2005 assistance reductions

This appendix summarises the quantitative evaluations of post 2005 assistance options done during this inquiry for the Commission and others.

Many of the contributions were presented in draft form at a modelling workshop held in Canberra on Monday 27 May 2002, prior to the release of the Position Paper. The final versions of the papers prepared for the Commission, incorporating suggestions made at the workshop, were then posted on the Commission's web site. Projections of the potential impact of Mitsubishi's cessation of manufacturing operations in Australia were undertaken by Commission staff for the Position Paper to illustrate points made at the workshop.

Some of the workshop papers evaluate indicative post 2005 assistance scenarios that were posted on the web during the initial stages of the inquiry to facilitate consistency in any modelling undertaken by or for participants. Hence they do not precisely match the specific options the Commission is now putting forward. They are nevertheless consistent with broad parameters of the Commission's approach, including the idea that assistance to the passenger motor vehicle (PMV) industry should not be reduced below that to other industries. The detailed results still provide useful orders of magnitude for the Commission's specific options.

The appendix includes a modelling assessment of the effects of the Commission's preferred assistance option, outlined in chapter 11 of this report, which was undertaken by Commission staff after the release of the Position Paper. This modelling incorporates alterations to the Centre of Policy Studies' (COPS) basecase that were suggested by COPS after follow-up work done by them for the Victorian Government in response to the Position Paper. These changes did not significantly affect the model results.

The appendix also reviews participants' comments received on the modelling in response to the Position Paper.

F.1 The automotive industry's contribution to the Australian economy

The Centre of Policy Studies at Monash University used the MONASH model to examine the benefits to Australia of a healthy motor vehicle industry, as part of a study by Allen Consulting and Deloitte Touche Tohmatsu for the Federal Chamber of Automotive Industries (FCAI) and the Federation of Automotive Products Manufacturers (FAPM).

In the business-as-usual forecast over the period 2001 to 2006, output of the model's PMV industry grew at 1.0 per cent a year, employment fell at 0.9 per cent a year, and imports grew at 4.7 per cent a year. This was based on past performance.

The analysis quantified the benefits to Australia of a PMV industry that grew at 3.6 per cent a year, rather than 1.0 per cent, over the same period. Three potential sources of this additional growth were identified:

- faster productivity growth in the PMV industry, coming from factors such as increasing use of IT based tools and improved supply chain management;
- increased attractiveness of PMV products to domestic users, through the development of new niche products tailored to local market conditions, with associated productivity gains from greater economies of scale in parts production; and
- increased exports, through the exploitation of niche markets, again achieved through productivity improvements.

None of these productivity improvements was linked to changes in post 2005 assistance arrangements or to other policy changes. But the resulting 3.6 per cent annual output growth was judged as being 'relatively conservative, with the viability of growth being achieved in each area being supported by currently evident industry trends' (Allen Consulting/Deloittes 2002b, p. 43).

With higher output growth, PMV employment was projected to decline at the slower rate of 0.4 per cent a year between 2001 and 2006.

The main projected benefits to the economy as a whole flowed from the improvements in the productivity of the PMV industry. Those benefits included:

- a long run increase in real GDP and real household consumption of about \$1 billion a year (by 2011);
- an increase in employment of 5000 jobs over the medium term (to 2006);
- a long run increase in the average real wage of \$100 a year; and

-
- a sustained improvement in the government's budgetary position.

F.2 The effects of post 2005 assistance reductions

Two separate pieces of analysis examined the effects of post 2005 assistance reductions — an evaluation using the MONASH model, undertaken by Commission staff, and one using the MM 600+ model, undertaken by Econtech at the Commission's request.

Both pieces of analysis evaluated the indicative post 2005 assistance options posted on the Commission's web site prior to the modelling workshop. These were of three types:

- ACIS funding discontinued;
- PMV tariffs and ACIS funding halved; and
- PMV tariffs and ACIS funding removed altogether, over various time frames.

The discontinuation of ACIS funding was from its 2005 level, equivalent to about 2.9 per cent of output in the MONASH model's single PMV industry. The starting level of ACIS funding in the MM 600+ model was comparable, but was split among that model's separate assembly and component activities.¹

In the MONASH model, a halving of PMV tariffs implied a 2 per cent fall in the price of PMV imports, and elimination of PMV tariffs implied a 6 per cent fall. In the MM 600+ model, the falls in import prices were comparable, but varied by PMV product.

In the scenarios where PMV assistance was eliminated, general tariffs on non-TCF manufactured products were also removed, so that PMV assistance did not fall below that provided by the general tariff.

In the dynamic MONASH model, the effects of each scenario were examined year by year, under various assumptions about the speed with which the policy changes were introduced. The MM 600+ modelling gave a long run snapshot view of each

¹ In the modelling presented at the workshop, the starting level in both models was lower, at about 2.5 per cent, because all ACIS funding had been assumed to step down on 1 January 2005 in line with the tariff, rather than just that portion of it tied to production. In reality, the step down in the *capped* production-related portion is likely to be offset by an easing of the modulation factor (see appendix E). This has been assumed to be the case in the modelling of the Commission's preferred assistance option later in this appendix, and implies a 2005 starting level of ACIS funding in that exercise of about 3.2 per cent.

policy option, once it had been fully implemented and once all subsequent economic adjustments had taken place.

The dynamic MONASH projections were made relative to the standard basecase used by the Centre of Policy Studies for forecasting purposes, except that PMV exports were allowed to respond to their own price, rather than to the average price of all non-traditional exports.² This implied a basecase growth in PMV output of 2.9 per cent a year, falling between the 1.0 per cent and 3.6 per cent growth rates used by the Centre of Policy Studies, discussed above. PMV employment declined in the basecase by 2.8 per cent a year, far worse than recent experience in the industry.

Both models allowed for:

- price responsive import substitution;
- price responsive export demands; and
- investment that was responsive to rates of return.

In addition, both modelling exercises:

- recognised that the post 2005 policy environment incorporated a GST;
- assumed that aggregate employment under each policy option was the same as in the basecase (a conservative treatment in the MONASH model, which otherwise allows aggregate employment to rise in the short run in response to tariff cuts); and
- assumed that the long run real wealth of Australians was the same under each policy option as in the basecase, so that all of the impact of the policy options would flow through to aggregate real household consumption, which could then be used as a single unambiguous indicator of changes in economic welfare.

Long run effects

In these models, the proposed policy changes have clear cut effects on the PMV industry — lower import prices (with tariff cuts), higher prices of local production (with ACIS cuts), both of which induce more imports and lower domestic sales of locally produced PMVs and components. The final result is lower PMV output and employment than otherwise. It is emphasised that these outcomes are relative to the *basecase*, not necessarily relative to where the industry is today.

² This alternative treatment of PMV exports differed from that presented at the modelling workshop, and was also carried into the MONASH modelling of the indicative policy scenarios and the preferred policy option discussed later.

But the adverse consequences on the local PMV industry need not translate to adverse consequences for the economy as a whole. The modelled effects on the economy as a whole include:

- better allocative efficiency — there is pressure for the local PMV industry to switch to cheaper inputs, and also for resources to move to less protected sectors of the economy;
- an increase in the economy's resource base — cuts to PMV tariffs spur investment, and even if the additional capital is financed by foreigners (by the assumption that the real wealth of Australians is constant), Australians can still gain through the taxes levied on repatriated profits;
- a decline in the terms of trade — tariff cuts spur aggregate exports through lower prices, and ACIS cuts spur aggregate exports through lower wages, but in both cases, greater (non-automotive) export volumes come at the expense of lower export prices.

Such terms of trade effects have often been criticised as being inconsistent with the notion that Australia is a small country by world standards, unable to influence world prices. But they are consistent with the notion that Australian firms sell differentiated products into niche markets — greater sales may require a lower price for the Australian firm's product, even if all other overseas prices are unaffected. And if Australians face a reduction in the prices of things they produce (exports) relative to the things that they use (imports), they can be worse off on this score, even if activity levels have risen in the process.

Thus, within the models, assistance reductions can generate economy-wide gains on two counts — allocative efficiency gains and increases in the resource base of the economy. But they are also likely to generate terms of trade losses. The net outcome in the models depends on the strength of these opposing effects.

However, neither model allowed for the possibility that PMV producers would better position themselves for assistance reductions, as they have in the past, by finding product and process innovations to generate productivity improvements and additional cost reductions. Such effects were included in the Commission's examination of changes to Australia's general tariff arrangements (PC 2000). Their exclusion here means that the results are likely to understate the benefits of reductions in assistance to the PMV industry.

Nor did these modelling exercises allow for the possibility that rationalisation of PMV activity could raise throughput for individual firms, thereby generating productivity improvements through greater economies of scale. However, such

effects were incorporated in the evaluation by Commission staff of the potential impacts of Mitsubishi’s cessation of manufacturing operations in Australia.

Economy wide effects

Table F.1 shows the MONASH model projections for the effects on real household consumption in 2016 of reductions in PMV assistance, under different values for the model’s so-called export demand elasticities. These are parameters that govern the degree of price sensitivity of foreign demands for Australian exports — the higher the elasticity, the smaller the price decline associated with a given increase in export volume.

The results suggest that while options involving tariff cuts generally provide a net economic gain (except sometimes under low export demand elasticities), those involving just ACIS cuts do not. ACIS cuts impose smaller terms of trade declines than tariff cuts, but also provide smaller allocative efficiency gains (tariffs affecting consumption as well as production decisions). In the MONASH model, the terms of trade declines dominate the efficiency gains from ACIS cuts. But in all cases, the magnitudes are very small.

Table F.1 Effects of post 2005 assistance reductions on real household consumption — MONASH model projections
percentage deviations *from basecase* in 2016

	<i>Export demand elasticities</i>		
	<i>4</i>	<i>10</i>	<i>20</i>
Remove ACIS	-0.05	-0.03	-0.03
Halve ACIS and PMV tariff	-0.02	0.00	0.00
Remove ACIS, PMV and general tariffs ^a	-0.04 to -0.07	0.00 to 0.01	0.02
- remove PMV and general tariffs ^a	-0.02 to 0.01	0.03 to 0.04	0.04 to 0.05

^a Results vary, depending on the speed with which policy changes are introduced.

Source: MONASH model projections.

There was some discussion at the workshop about the appropriate values for export demand elasticities. The low value of 4 in table F.1, which is the standard value adopted in the MONASH model for non-traditional exports, may be appropriate in a short run forecasting context, but is likely to significantly overstate the extent to which Australian producers can differentiate their products in overseas markets in the longer term. The intermediate value of 10 is close to the average adopted in the MM 600+ model. The high value of 20 is close to the average now preferred in the

GTAP multicountry model (discussed later). High values are preferred there because:

- they imply a degree of product differentiation consistent with observed engineering measures of economies of scale; and
- they better enable multicountry models to reproduce observed historical changes in global trade patterns.

In response to the Position Paper, the Australian Manufacturing Workers' Union (AMWU) argued that the export demand elasticities used in the modelling exercises grossly overstated reality:

Econometric model estimates from the data rather than theoretical concepts (show) ... the key coefficient is 0.57, one twentieth of the preferred value of 10 used in the Monash and MM models. (sub. PP108, p. 131)

The Victorian Government made a similar claim:

The use of such a high elasticity substantially exaggerates any growth in Australian exports that would flow from a reduction in assistance to the automotive industry. The Centre of Policy Studies at Monash University, which developed the MONASH model, has analysed this issue in depth and now favours an elasticity of around -3 or -4 [referred to in this report as 3 or 4]. (sub. PP114, p. 16)

Conversely, the Western Australian Department of Treasury and Finance argued that the preferred export demand elasticities in the Position Paper were too low, and 'inconsistent with Australia's status as a small open economy' (sub. PP104, p. 7).

In 1950, Orcutt gave cogent reasons why the techniques cited by the AMWU and used to estimate the original export demand elasticities for MONASH would fail to produce plausible estimates. He went on to conclude that :

... it cannot be emphasised too strongly that ... the statistical techniques used in estimating elasticities of demand could very well have indicated demand to be inelastic even in cases in which it was almost infinitely elastic. (Orcutt 1950, p. 117)

The key problem is that data on actual export prices and quantities will reflect a combination of both demand and supply influences. Unless the supply influences are adequately controlled for, the estimates of export demand elasticities will be seriously biased downwards.

More recent econometric estimates have either controlled explicitly for supply effects, or have modelled specific influences that would only affect demand. Head and Ries (2001, p. 864) summarise some of the resulting estimates of elasticities of substitution (which in turn provide an upper bound on the associated export demand elasticities) as follows:

The coefficient on the tariff variable implies that the elasticity of substitution between goods σ ranges between 7.9 (fixed effects) and 11.4 (pooled OLS) ... Feenstra (1994) estimates price elasticities for a demand and supply system ... He obtains 95-percent confidence intervals for six products with an average lower bound of 3.9 and average upper bound of 8.8. Scott L. Baier and Jeffrey H. Bergstrand (2001) ... obtain a point estimate for the elasticity of substitution equal to 6.43 with a 90-percent confidence interval of [2.44, 10.4]. David Hummels (1998) calculates σ equal to 7.6 using information on how freight costs affect trade. Using a methodology based on geographic variation in wages, Gordon H. Hanson (1998) obtains estimates of σ that range between 6 and 11. Jonathan Eaton and Samuel Kortum (1998) estimate a model based on technology differences but obtain a value of 8.3 for a parameter that is observationally equivalent to our σ .

As Head and Ries note, these estimates are higher than those obtained from directly estimating foreign import price elasticities, because they attempt to deal with the problem identified by Orcutt. They are of the same order as the central estimates used in the MONASH and MM 600+ models.

The South Australian Government requested that the indicative policy scenarios be rerun with the MONASH model's import substitution elasticities set equal to the export demand elasticities. But evidence from the GTAP model (Hertel 1997) suggests that domestic-import substitution elasticities are about half the value of elasticities of substitution among different foreign sources, where the latter provide the upper bound on export demand elasticities. The domestic-import substitution elasticity for PMV in the above MONASH and MM 600+ modelling was set at the standard MONASH value of 5.2, about half the preferred export demand elasticity.

The above small effects of the policy options on real household consumption in the MONASH model were also found in the MM 600+ model (table F.2). In that model, the terms of trade effects tended to slightly exceed the gains to allocative efficiency and the resource base, both for ACIS cuts and for tariff cuts.

Table F.2 Effects of post 2005 assistance reductions on real consumer living standards^a — MM 600+ model projections
long run deviations *from basecase* in \$million

	<i>Gross gain</i>	<i>Terms of trade effect</i>	<i>Net gain</i>
Remove ACIS	62	-81	-19
Halve ACIS and PMV tariff	95	-121	-26
Remove ACIS, PMV and general tariffs	194	-398	-204

^a A measure of real household consumption, using a price deflator that gives a better measure of living standards than does the CPI.

Source: MM 600+ model projections.

Table F.3 Effects of post 2005 assistance reductions on real GDP — MONASH and MM 600+ model projections
percentage deviations *from basecase* in 2016 (MONASH) or long run (MM 600+)

	<i>MONASH model results</i>			<i>MM 600+ model results</i>
	<i>Export demand elasticities</i>			
	<i>4</i>	<i>10</i>	<i>20</i>	
Remove ACIS	-0.02	-0.02	-0.03	-0.03
Halve ACIS and PMV tariff	0.00	0.00	0.00	0.06
Remove ACIS, PMV and general tariffs ^a	0.00 to 0.02	0.01 to 0.02	0.01 to 0.02	0.29

^a Results vary, depending on the speed with which policy changes are introduced.

Source: MONASH and MM 600+ model projections.

In both models, the projected effects on economic activity, as measured by real GDP, were more positive (or less negative) than those on real household consumption (table F.3). In both models, policy options involving tariff cuts were projected to generate more economic activity than otherwise, irrespective of export demand elasticities. The effects were larger in the MM 600+, because its ‘long run’ implies a very much longer adjustment period than in the MONASH model.³ In both models, ACIS cuts alone were projected to reduce activity. But once again, the effects were generally very small.

Effects on the PMV industry

In both models, the projected effects on the PMV industry were as expected (table F.4). The sensitivity analysis with the MONASH model also confirmed that these effects were relatively insensitive to the export demand elasticities chosen (as were the results for most variables, other than exports, the terms of trade and real household consumption). Hence the MONASH results in table F.4 are only shown for the intermediate elasticity value of 10.

There is close agreement in the projections from the two models, although those from the MM 600+ model tend to be slightly larger than those from MONASH, because of its much longer time frame. The MONASH results suggest that by 2016 (still a reasonably long time frame), PMV output could be about 18 per cent lower than in the basecase, and employment about 16 per cent lower than in the basecase, as a result of eliminating all PMV assistance and general tariffs.

³ The long run in MM 600+ is a period long enough for capital stocks to have adjusted fully, so that investment can fall back to that required just to cover depreciation on the new capital stock.

Table F.4 Effects of post 2005 assistance reductions on PMV activity — MONASH and MM 600+ model projections
percentage deviations *from basecase* in 2016 (MONASH) or long run (MM 600+)

	<i>Output</i>		<i>Employment^a</i>		<i>Total local sales^b</i>	
	<i>MONASH</i>	<i>MM 600+</i>	<i>MONASH</i>	<i>MM 600+</i>	<i>MONASH</i>	<i>MM 600+</i>
Remove ACIS	-10.8	-10.9	-8.4	-10.8	-1.7	-2.4
Halve ACIS and PMV tariff	-7.6	-9.7	-7.0	-9.7	-0.7	-1.3
Remove ACIS, PMV and general tariffs ^c	-17.9	-21.2	-15.9	-21.3	-1.2	-2.2

^a Employment results differ from output results because of capital-labour substitution. ^b Local sales of domestically produced and imported PMVs and components. ^c MONASH results vary, depending on the speed with which policy changes are introduced. Those shown are for the most rapid introduction, which gives the largest impact in 2016.

Source: MONASH and MM 600+ model projections.

But as noted, PMV employment and output being lower than in the basecase does not necessarily imply that they are lower than today. The MONASH model allows for explicit modelling of the underlying base case, and can show whether these projected deviations from basecase translate into absolute declines over time.

Figure F.1 shows that from a MONASH basecase of 38 per cent cumulative growth to 2016, or about 2.9 per cent a year, none of the post 2005 policy options covered in table F.4 would reduce the output of the PMV industry in absolute terms. The most severe option would trim PMV output growth to a cumulative total of 13 per cent, or about 1.1 per cent a year.⁴ The same option is projected to reduce PMV employment by 4.4 per cent (1900 employees) a year, rather than the 2.8 per cent (1200 employees) a year in the basecase.⁵ Either outcome looks excessive against the reality check of recent experience.

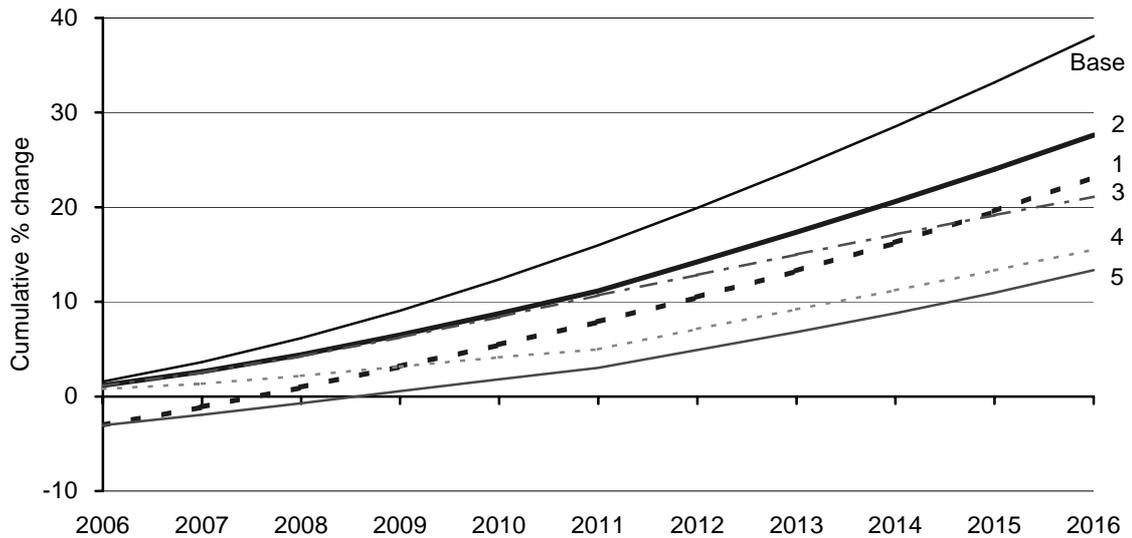
These conclusions are sensitive to the rates of growth of PMV output and employment assumed in the basecase. As noted, the basecase output growth rate of 2.9 per cent a year lies between the 1.0 per cent and 3.6 per cent growth rates used by the Centre of Policy Studies in their evaluation of the benefits of a healthy PMV industry, discussed above. Even the high growth rate was judged to be conservative. Nevertheless, if the lower bound basecase growth of 1.0 per cent a year is used, then the most severe policy option would instead reduce PMV output in absolute terms

⁴ With output in 2016 taking an index value of 138 in the basecase, and a value of 113 under the policy alternative, the percentage reduction in output in 2016 as a result of the policy is 18 per cent, the same as reported for the MONASH model in table F.4.

⁵ The conversion of percentage changes to numbers of employees are based on employment of 44 228 persons in ANZSIC categories 2811, 2813 and 2819 in the year 2000 (AAI 2002).

below its 2005 level by 8.1 per cent in total, or by about 0.8 per cent a year, and would further reduce PMV employment.

Figure F.1 **Absolute effects of post 2005 assistance reductions on PMV output over time — MONASH model projections^a**
basecase and five alternative policy scenarios



^a Policy 1 is removal of ACIS, policy 2 is halving of ACIS and the PMV tariff, and policies 3 to 5 are the removal of ACIS and the PMV and general tariffs over various time frames, with policy 5 being the most rapid.

Data source: MONASH model projections.

Separate effects on PMV assembly and component production

The MM 600+ modelling allows the effects on PMV assembly and component production to be examined separately. Table F.5 shows that there is no systematic tendency for PMV component production to be more or less adversely affected than assembly activity.

The modelling result that there would be comparable adjustment pressure on assembly and component activity accords with Commission calculations indicating that the effective rates of assistance for these separate activities are roughly comparable (see chapter 9).

Table F.5 Effects of post 2005 assistance reductions on composition of PMV activity — MM 600+ model projections

percentage deviation of output *from basecase* in long run

	<i>Remove ACIS</i>	<i>Halve ACIS and PMV tariff</i>	<i>Remove ACIS, PMV and general tariffs</i>
PMVs	-10.8	-10.3	-22.0
Chassis with engines	-16.8	-15.3	-33.4
Other MVs and parts ^a	-12.3	-10.0	-22.3
MV transmissions	-10.6	-12.7	-25.8
Rubber tyres	-4.1	-5.2	-10.0

^a A large residual category covering utilities and panel vans, vehicle electric motors, air conditioners, heaters and other electrical equipment, cylinder blocks, cranks, gaskets and other parts.

Source: MM 600+ model projections.

Labour adjustment costs

The labour adjustments arising from lower assistance for the PMV industry need to be assessed against the general level of structural adjustment already taking place in the economy.

- There may be some additional labour market adjustment costs associated with lower PMV assistance — such as job search, retraining of displaced employees and interstate migration.
- Lower PMV assistance could also reduce the labour market adjustment costs associated with structural change elsewhere in the economy.

The MONASH model includes a Labour Input Loss Index, which takes such factors into account.

However, in this instance, the estimates of labour adjustment costs it produces are indistinguishable from the noise produced by the lack of absolute machine accuracy in the computer used. Even in circumstances where lower assistance for PMV would lead to an absolute decline in PMV output growth, rather than simply slower output growth, this is not projected to add to adjustment costs in the longer term. This is because lower assistance for PMV would facilitate structural adjustments occurring elsewhere.

Thus the modelling suggests that the labour market adjustment costs associated with post 2005 assistance reductions for the PMV industry are unlikely to be significant at the economy-wide level. If there is an adjustment issue, it is more likely to be concentrated in particular regions.

In commenting on these aspects of the economic modelling, the AMWU noted:

Any loss of jobs and output in the automotive industry, and consequent increase in unemployment is assumed away. Both models simply assume that in the short term there will be a small reduction in real wages across the economy, that this will eventually restore equilibrium in the labour market and eventually unemployed capital and labour will find its way to industries with higher productivity and the nation will be better off. (sub. PP108, p. 128)

The AMWU also criticised the sensitivity of the models to wage changes by noting:

However, as a growing body of economic literature is showing, modest minimum wage increases do not destroy jobs. (sub. PP108, p. 132)

The minimum wage studies to which the AMWU is referring were undertaken in the United States. There, even among teenagers, the proportion of employees being paid the minimum wage was only 23 per cent in 1996. Therefore, the findings of these studies on how minimum wages affect employment are of limited relevance to the responsiveness of employment to wage changes applying generally. A detailed critique of the studies is given in Daly et al. (1998).

In any event, the AMWU appears to have misdiagnosed the relevant adjustment mechanisms in the models. For scenarios involving tariff cuts, the relevant adjustment mechanism is the lower price of imported PMVs, which reduces input and investment costs for a range of industries, promoting greater output and investment than otherwise. In response to these pressures, both models show that real wages would have to be *higher* than otherwise to maintain aggregate employment at its basecase values. This can be seen in the workshop papers posted on the web site.

Thus, contrary to the suggestion of both the AMWU and the Victorian Government (sub. PP114, p. 17), holding aggregate employment fixed has, if anything, inflated projected labour adjustment costs. By forcing labour market pressures to be absorbed through higher wages, it has prevented a short term increase in aggregate employment that would otherwise occur. Such an increase would have reduced the labour market adjustment costs associated with trend declines in employment in the PMV industry and some other industries in the basecase, leading to even lower additional adjustment costs than projected here.

The model results nevertheless imply that some PMV industry labour finds its way to other industries. The reason this reallocation does not add to labour adjustment costs is because other key industries projected to gain in *relative* terms from the reduction in PMV assistance are also projected to experience absolute declines in employment in the base case (while some projected to lose in relative terms are still projected to have positive growth in absolute terms). Thus on balance, reducing

PMV assistance tends to ameliorate trend declines in employment in other industries, thereby minimising adjustment costs.

The AMWU further cite modelling work undertaken by the NIEIR for the Victorian Government which suggests that initial job displacement in the PMV industry would be about one and a half times that projected here, for a comparable reduction in assistance. This is because the NIEIR projects roughly the same PMV job losses as here from a smaller cut in assistance — a 5 percentage point cut in the PMV tariff (from 15 to 10 per cent) and eliminating ACIS, rather than the 10 percentage point cut in the PMV tariff (from 10 per cent to zero) and eliminating ACIS that was examined using the MONASH and MM 600+ models. However, a copy of the NIEIR modelling report was not provided by either the AMWU or the Victorian Government. Given this, and the inadequate documentation of the NIEIR model generally, the job loss estimates are impossible to evaluate.

Moreover, the AMWU submission makes clear (but the Victorian Government submission does not) that the particular NIEIR scenario includes the tariff cut from 15 to 10 per cent that is already legislated and not under reference.

In the AMWU's view, even the NIEIR modelling is inadequate:

In our assessment the modelling doesn't adequately reflect an industry on the verge of total collapse. (sub. PP108, p. 133)

But nowhere else in its submission does the AMWU, nor any other body that made a submission to this inquiry, paint the industry as being on the verge of total collapse, or provide any analysis or factual evidence that the proposed cuts in assistance would put it there.

Regional employment effects

Both the MONASH and MM 600+ models trace the effects of national changes down to the regional level, based on the regional distribution of each of the model's industries.

To understand the regional employment projections, it is therefore useful to look first at the models' detailed industry employment projections. Table F.6 shows the MONASH model's projected deviations *from basecase* for some industries' employment in 2016, under a policy of rapid elimination of PMV assistance and general tariffs, assuming export demand elasticities of 10.

Table F.6 Effects on industry employment of rapid elimination of PMV assistance and general tariffs — MONASH model projections
percentage deviation *from basecase* in 2016

<i>Industry</i>		<i>Industry</i>	
Motor vehicles and parts	-16.0	Other metal ores	3.2
Rubber products	-3.7	Fishing	1.7
Iron and steel	-2.3	Iron ores	1.5
Fabricated metal products	-2.1	Other machinery	1.3
Paints	-2.1	Wholesale trade	0.4
Sawmill products	-1.0	Retail trade	0.3

Source: MONASH model projections for selected industries.

Employment is projected to be worst affected in the PMV industry and those industries closely related to it — rubber products, iron and steel, fabricated metal products and paints. Employment in some manufacturing industries is also adversely affected to a much smaller extent by the general tariff reductions.

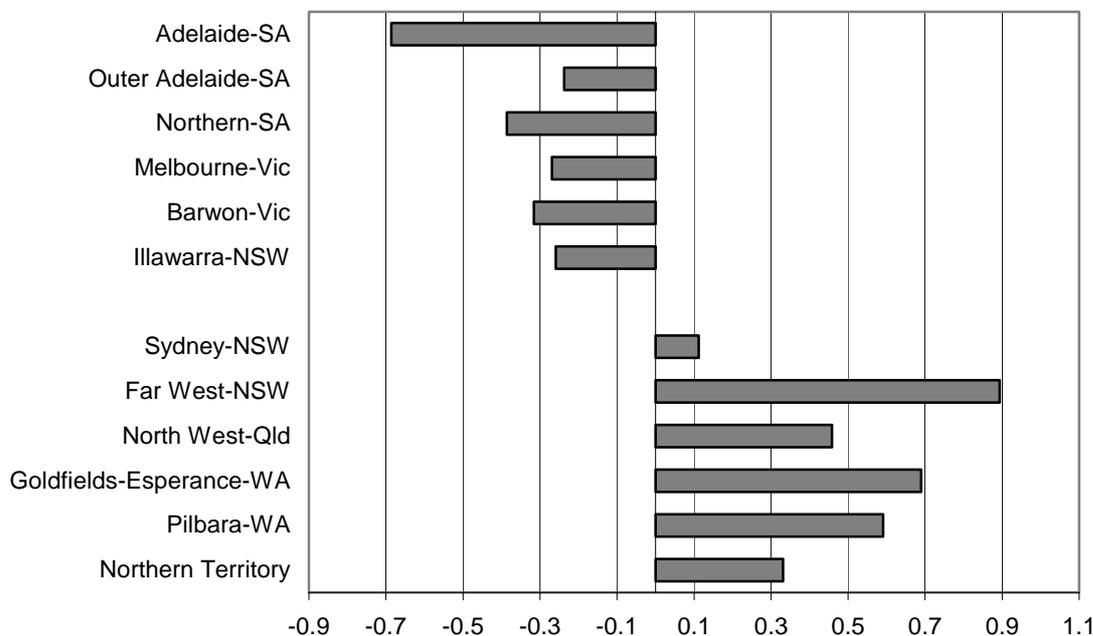
Conversely, employment gains are projected to occur in a range of other industries. Some, such as Iron Ores and Other Metal Ores, are trade exposed and benefit from the induced reduction in their cost structures. Others, such as wholesale and retail trade, benefit from the small induced increase in general economic activity.

Because of the assumption that labour market pressures are absorbed by real wage changes rather than by changes to aggregate employment, the employment gains and losses balance each other out. But as noted, the modelling also projects that by 2016, this policy option would increase real wages.

Figure F.2 shows the resulting deviations from basecase in 2016 for regional employment, by statistical division. Because each statistical division contains a major urban conurbation, most contain a substantial, but varying, mix of primary, manufacturing and service activities. Diversity is one feature that can help preserve a region from the employment effects of a shock to one particular industry. Smaller regional areas may be less diverse, and therefore more vulnerable.

Not surprisingly, among the statistical divisions projected to be adversely affected are those in which PMV assembly and component production occurs — Adelaide, Melbourne and Barwon (encompassing Geelong). Also adversely affected are those in which iron and steel production occurs — Illawarra (encompassing Wollongong) and Northern SA (encompassing Whyalla). Outer Adelaide is projected to be adversely affected, partly because of the reduction in PMV component activity, and partly because of the projected effects of general tariff reductions, including (in the model) on the wine and spirits industry.

Figure F.2 Effects on regional employment of rapid elimination of PMV assistance and general tariffs – MONASH model projections
percentage deviations *from basecase* in 2016



Data source: MONASH model projections for selected regions.

Among the regions projected to gain in employment terms are those, such as Sydney, with very diverse economic bases and parts of Queensland and Western Australia where export oriented mining activity occurs.

But the cumulative deviations of regional employment from basecase in 2016 are all projected to be small. Adelaide’s employment is projected to be about 0.7 per cent lower than otherwise by 2016. In the other adversely affected regions, the cumulative deviations from basecase are about 0.2 to 0.4 per cent. The employment gains, in regions where they occur, are generally of a similar magnitude.

As noted, reductions in employment from basecase do not necessarily imply absolute contractions in employment. For all those regions adversely affected in *relative* terms, absolute employment growth over time is still projected to be positive. For example, employment in Adelaide and Melbourne is projected to be about 16 per cent higher in 2016 than in 2005, even under a basecase with 1 per cent a year growth in PMV output. Employment in Barwon, Outer Adelaide and Illawarra is projected to be about 11 or 12 per cent higher. Results for the other adversely affected regions are similar.

The regional projections from the MM 600+ model tell a similar story about the geographical distribution of employment effects from PMV assistance reductions,

although the magnitudes are larger than in the MONASH model because of the longer time frame in MM 600+ (table F.7). The MM 600+ results confirm that for most regions, the employment effects of reducing PMV assistance are larger than the effects of eliminating general tariffs, although the latter effects tend to reinforce the former. But in all cases, the results are still small relative to likely basecase employment growth.

Table F.7 Effects on regional employment of eliminating PMV assistance and general tariffs — MM 600+ model projections

percentage deviations *from basecase* in long run

	<i>No ACIS</i>	<i>No PMV tariffs</i>	<i>No general tariffs</i>	<i>No assistance</i>
Sydney	0.1	0.1	0.0	0.1
Hunter-Illawarra	0.3	0.2	0.1	0.6
North Coast NSW	0.3	0.1	-0.1	0.3
South Eastern NSW	0.4	0.3	0.0	0.7
Inland NSW	0.5	0.3	0.1	0.9
Melbourne	-0.6	-0.5	-0.2	-1.3
Gippsland	0.4	0.4	0.3	1.0
Western Vic	-0.4	-0.4	-0.2	-1.0
Murray	-0.3	-0.4	-0.3	-1.0
Brisbane	0.1	0.1	0.0	0.1
Moreton	0.2	0.1	0.0	0.4
Southern Qld	0.4	0.3	0.1	0.8
Central Qld	0.6	0.7	0.5	1.7
Far North	0.5	0.4	0.2	1.1
Adelaide	-1.1	-0.9	-0.4	-2.3
Balance of SA	-0.4	-0.3	-0.2	-0.9
Perth	0.3	0.4	0.3	1.1
Lower Western WA	0.5	0.5	0.3	1.3
Remainder WA	0.9	1.2	1.0	3.1
Hobart	0.4	0.3	-0.1	0.6
Balance of Tasmania	0.5	0.5	0.1	1.1
Northern Territory	0.7	1.0	0.8	2.6
ACT	0.2	0.1	0.0	0.2
Australia	0.0	0.0	0.0	0.0

Source: MM 600+ model projections.

In commenting on the Position Paper, the Victorian Government suggested that the effects on Victorian output and employment would be greater than implied by these projections. It reported that modelling conducted by the Victorian Department of Treasury and Finance using the MMRF-GREEN model showed that a 5 percentage

point cut in the tariff would reduce Victorian employment by up to 6500 jobs, or about 0.27 per cent, below basecase. This compares with the MONASH model estimate that the indicative policy scenarios would reduce Victorian employment by up to 0.19 per cent below basecase. One reason the Victorian Department's estimate is greater is that the 5 percentage point cut appears to have been made from current tariff levels, rather than from 2005 levels. But in either case, employment in Victoria would still grow significantly over time.

The Victorian Government also cited NIEIR modelling that suggested the effects on Victorian output would be up to 10 times as adverse as those in the Position Paper. The NIEIR estimates that Victorian output would be 0.8 per cent lower than otherwise as a result of halving the PMV tariff and ACIS funding. This compares with a MONASH model estimate of 0.08 per cent lower than otherwise.

That the NIEIR result for Victorian output is 10 times more adverse than the MONASH projections, although the immediate effect on PMV employment is only 1.5 times greater, is consistent with the NIEIR model being like a simplistic input-output multiplier model. The adverse outcome for the PMV industry is magnified indefinitely as it flows through to downstream using industries and to household incomes, with very little price adjustment to ensure that resources are reallocated to alternative uses. It appears to ignore the offsetting benefits of lower PMV import prices, which would also be magnified through the economy.

F.3 Effects of plant closure

There was discussion at the workshop as to whether the above regional results could accurately capture the disruption created were a vehicle producer to cease operation. It was argued that such discontinuous change could not be captured by an approach that started from incremental industry effects at the national level.

The discussion then moved to suggesting how the non-incremental effect of a plant closure could be captured by such models at the national level, and how the results would be sensitive to various assumptions, particularly concerning any 'leakage' of demand to imported vehicles.

Reference was made to the MONASH modelling previously conducted by the Centre of Policy Studies into the impacts of the closure of Mitsubishi. In response to that discussion, and as the results of the Centre's modelling are currently not publicly available, Commission staff subsequently used the MONASH model to examine the short run effects were Mitsubishi to close, under a variety of assumptions about demand leakage.

-
- At one extreme is the experience of Nissan's closure, where the bulk of its local sales were lost to imports.
 - However, all of the remaining vehicle assemblers have significant fleet sales, and it is unlikely that most of these would flow to imports, given the purchasing preferences of Commonwealth, State and some local governments. So at the other extreme, it was assumed that all of Mitsubishi's fleet sales, which currently account for around 75 per cent of its local sales, would be replaced by local production, but that non-fleet sales would follow the experience of Nissan. As in the first scenario, it was assumed that all of the company's export sales would be lost.

Also critical to the results are the assumptions about economies of scale. On the one hand, less domestic assembly activity could imply a loss of throughput and hence scale economies for local parts producers. On the other, the rationalisation of local assemblers would most likely allow those remaining to achieve greater throughput and greater economies of scale.

Thus, the MONASH model was first used to project the effects were Mitsubishi to close, with the following flow-on assumptions:

- Mitsubishi's export sales lost, and its plant and equipment scrapped;
- the overwhelming bulk of Mitsubishi's local sales lost to imports;
- a resulting reduction in local component activity, with an associated loss of economies of scale (calculated in the same way as in the Centre of Policy Studies' evaluation of the benefits of a healthy PMV industry); and
- the regional effects concentrated in Adelaide, though with some allowance for local replacement of Mitsubishi's output to occur there.

This implied an initial 7.0 per cent reduction from basecase in output of the national Motor Vehicles and Parts industry, which decayed slightly to a 6.9 per cent reduction 10 years later, once aggregate employment had returned to the basecase. The initial economy-wide and regional implications were:

- a 0.07 per cent reduction from basecase in aggregate employment;
- a 0.09 per cent reduction in aggregate real household consumption;
- a 0.06 per cent reduction in real GDP; and
- a 2.0 per cent reduction below basecase in employment in South Australia, and a 0.1 per cent increase in Victoria.

These macroeconomic effects decayed substantially after 10 years, as aggregate employment returned to the basecase. However, the regional reallocation of

employment remained, with employment in South Australia still being 1.3 per cent below basecase after 10 years, and employment in Victoria still being 0.1 per cent above.

The exercise was then repeated with the alternative, less extreme assumption about leakage to imports, and with the flow-on effects to component production rescaled accordingly. This implied an initial 3.1 per cent reduction from basecase in output of the national Motor Vehicles and Parts industry, which decayed completely to become a 0.9 per cent *increase* from basecase 10 years later. The initial economy-wide and regional effects were mostly smaller than before:

- a 0.05 per cent reduction from basecase in aggregate employment;
- a 0.07 per cent reduction in aggregate real household consumption;
- a 0.06 per cent reduction in real GDP; and
- a 1.6 per cent reduction below basecase in employment in South Australia, and a 0.2 per cent increase in Victoria.

Again, these macroeconomic effects decayed substantially after 10 years, as aggregate employment returned to the basecase. The reduction in South Australia's employment below basecase decayed to 1.0 per cent after 10 years, while the increase in Victoria remained at 0.2 per cent.

Finally, the exercise was repeated with the less extreme assumption about leakage to imports, and with allowance made for economies of scale in assembly activity. This implied the same initial 3.1 per cent reduction from basecase in output of the national Motor Vehicles and Parts industry, which decayed to a 0.9 per cent decline from basecase 10 years later. But even with the scope for economies of scale in assembly activity assumed to be substantially less than the Centre of Policy Studies had assumed for parts production,⁶ the initial economy-wide effects were essentially neutralised, though the regional reallocation of employment remained:

- no change in aggregate employment;
- a 0.01 per cent increase in aggregate real household consumption;
- a 0.02 per cent increase in real GDP; and
- a 1.6 per cent reduction below basecase in employment in South Australia, and a 0.2 per cent increase in Victoria.

⁶ The ratio of marginal to average cost was assumed to be 0.95 in assembly activity, compared with COPS' assumption of 0.75 for parts production. For comparison purposes, the ratios of marginal to average costs surveyed in Francois, McDonald and Nordstrom (1995) range from 0.85 to 0.95.

The economy-wide gains were slightly higher after 10 years, once aggregate employment had returned to basecase. The reduction below basecase in South Australia's employment decayed to 1.1 per cent after 10 years, while the increase in Victoria remained at 0.2 per cent.

F.4 Effects of changing the basis of ACIS funding

At the request of Holden, Access Economics used its AE-MACRO model, a one sector macroeconomic model, to examine the national economic impact of an expansion of automotive R&D. This was assumed to flow from a revenue-neutral change to the basis of ACIS funding.

The results showed that the macroeconomic consequences of adding a new activity to the economy (Holden's R&D program) would be quite beneficial, with relatively little crowding out of other activity over the simulation horizon (but with some occurring afterwards).

Discussion at the workshop focused on whether it was reasonable to assume little crowding out through real wage increases over the horizon considered. It was also noted that if the model showed that new R&D activity generated benefits to the economy as a whole, it was because it generated a higher return on capital than existing activity, and hence would be profitable to the firm undertaking it. Whether the modelling had any policy implications was unclear.

F.5 Australia's assistance reductions in an international context

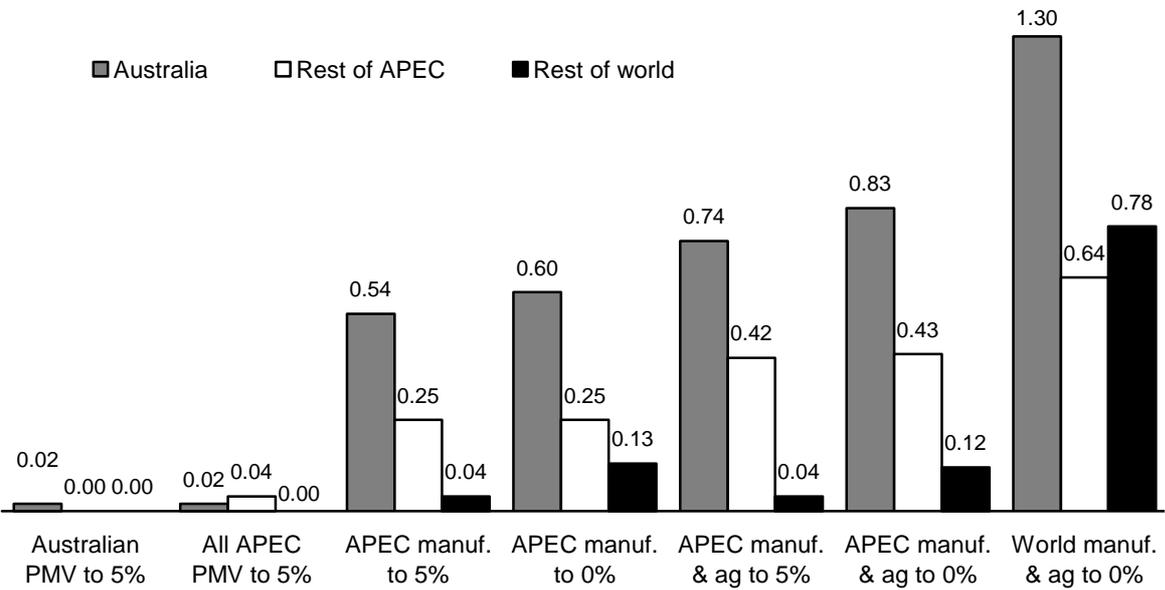
At the Commission's request, the Centre for International Economics used GTAP, a multisector, multicountry model of the world economy, to examine Australia's assistance reductions in an international context.

The results from that exercise are summarised in figure F.3. Like MONASH and MM 600+, the projections suggest that the gains to Australia from unilaterally reducing PMV tariffs to 5 per cent would be very small.

The results also suggest that the benefits to the APEC region from jointly reducing tariffs on PMVs would be small. And to the extent that there were gains, they would flow to other PMV producers in the region, particularly Japan and Korea, rather than to Australia. The implication is that caution is required in assessing the extent to which better market access in the APEC region would help the local PMV industry.

Finally, the projections indicate that substantial gains would accrue when trade liberalisation was broadly-based. When APEC reform covers all of the manufacturing sector, it is projected to provide gains to Australia that would be an order of magnitude bigger than when just PMVs are covered. And those gains would more than double again when liberalisation includes agriculture, and extends beyond APEC to include the EU.

Figure F.3 Effects of international assistance reductions — GTAP model projections
percentage deviation in income from basecase



Data source: GTAP model projections.

F.6 Effects of the Commission’s preferred tariff/ACIS option

The Commission’s preferred post 2005 assistance option involves:

- retention of PMV tariffs at 10 per cent from 2005, with a step reduction to 5 per cent in 2010 and no further reduction until at least 2015; and
- retention of overall ACIS funding at current levels from 2005 to 2010, and retention of the uncapped production credits (the former ‘duty-free allowance’) from 2010 to 2015. The possibility that in 2015, this might be converted to the Tariff Concession System (with a further small reduction in benefits) has not been modelled.

In essence, this combination involves halving PMV tariffs and eliminating the bulk of ACIS funding over the period to 2015. The results would therefore be expected to lie somewhere between the indicative scenarios that halved both and eliminated both of these assistance measures. In fact, the results should be closer to the former, because:

- not all ACIS funding is eliminated; and
- with PMV tariffs not being reduced below the general rate of 5 per cent, there is not the added reduction in general tariffs along with PMV tariffs (though this is not to rule out that the Government, in the context of APEC, may reduce general tariffs more quickly).

Table F.8 confirms these effects. As noted, the modelling incorporates alterations (suggested by COPS after work done for the Victorian Government in response to the Position Paper) to modify the following features of the original basecase:

- a rate of investment in financial services that was too low, and led to very high rates of return on capital in that industry; and
- an unrealistic trend increase in real interest rates in the basecase which contributed to:
 - a trend increase in public sector debt; and
 - unstable investment behaviour in a few industries, which was originally addressed by slowing down the rate of adjustment in industry investment (including in the PMV industry).

As it transpires, the modifications to the basecase to address these issues make very little difference to the model results. The most notable impact is that increasing the speed of adjustment of industry investment, increases the size of the eventual positive investment response to PMV tariff cuts.

In addition, COPS observed that the Commission's modelling had used a slightly different closure in its basecase forecast than in its policy simulations (that is, projected economic changes resulting from reductions in automotive assistance after 2005). COPS noted that this risks creating differences in linearisation errors between the basecase forecast and the policy simulations. However, the Commission has confirmed that using the same closure produces virtually identical results.

Table F.8 **Projected macroeconomic and industry effects of the Commission's preferred post 2005 assistance option**
percentage deviation *from basecase forecast* in 2016

	<i>Export demand elasticities</i>		
	<i>4</i>	<i>10</i>	<i>20</i>
National aggregates			
Real h'hold consumption	-0.01	0.01	0.01
Real investment	0.08	0.10	0.09
Export volumes	0.30	0.24	0.20
Import volumes	0.40	0.39	0.35
Real GDP	0.00	0.01	0.00
Real wage	0.08	0.11	0.12
Capital stock	0.01	0.01	0.01
Terms of trade	-0.08	-0.02	-0.01
Real depreciation	0.14	0.07	0.05
PMV industry			
Output	-8.38	-9.00	-8.78
Employment	-8.49	-9.25	-10.22
Domestic sales – domestic production	-8.52	-8.47	-8.33
Domestic sales – total	-0.82	-0.87	-0.95
Exports	-6.68	-15.64	-27.63
Imports	3.15	2.97	2.66
Domestic supply price	2.04	1.93	1.82
Import price (incl duty)	-1.95	-2.01	-2.02

Source: MONASH model projections.

As in the workshop paper, the MONASH model projections show that the static economy-wide allocative effects of the Commission's preferred tariff/ACIS package are negligible.

PMV output and employment are both projected to be about 9 per cent lower than in the basecase by 2016. These reductions are relatively insensitive to the export demand elasticities chosen. In absolute terms, the preferred option would yield cumulative PMV output growth of 22 per cent, or about 1.8 per cent a year, rather than the 2.7 per cent a year in the altered basecase. The same option would involve a rate of decline in PMV employment of 4.7 per cent (2100 employees) a year,

rather than the 3.9 per cent (1700 employees) a year in the altered basecase.⁷ The employment projections are more adverse with the altered than with the unaltered basecase because of the slightly greater responsiveness of industry investment. But as before, the projections look excessive against recent experience.

The model projections suggest that the additional labour market adjustment costs associated with the preferred post 2005 assistance option will be concentrated in 2011, following the step reductions in PMV tariffs and ACIS funding at the end of 2010. In practice, the announcement of the policy in advance would suggest that these adjustment costs would be spread out. The MONASH model's Labour Input Loss Index calculations suggest that in 2011, additional adjustment costs might total about 96 person-years. Prior to that, additional adjustment costs are negligible. After that, they are slightly negative, since again, the reduction in PMV employment ameliorates trend declines in employment occurring elsewhere. But the magnitudes of these effects are tiny compared with the ongoing adjustment costs occurring in the basecase.

The impact on particular regions can be more significant. As before, these flow from the effects on particular industries. Table F.9 shows how the effects of the preferred post 2005 assistance tariff/ACIS package impact on industry employment. The industries projected to have employment lower than otherwise are primarily those with linkages to the PMV industry, as before. Those projected to have employment higher than otherwise differ somewhat from in the workshop papers, primarily because the modelled policy scenario no longer includes a reduction in general tariffs.

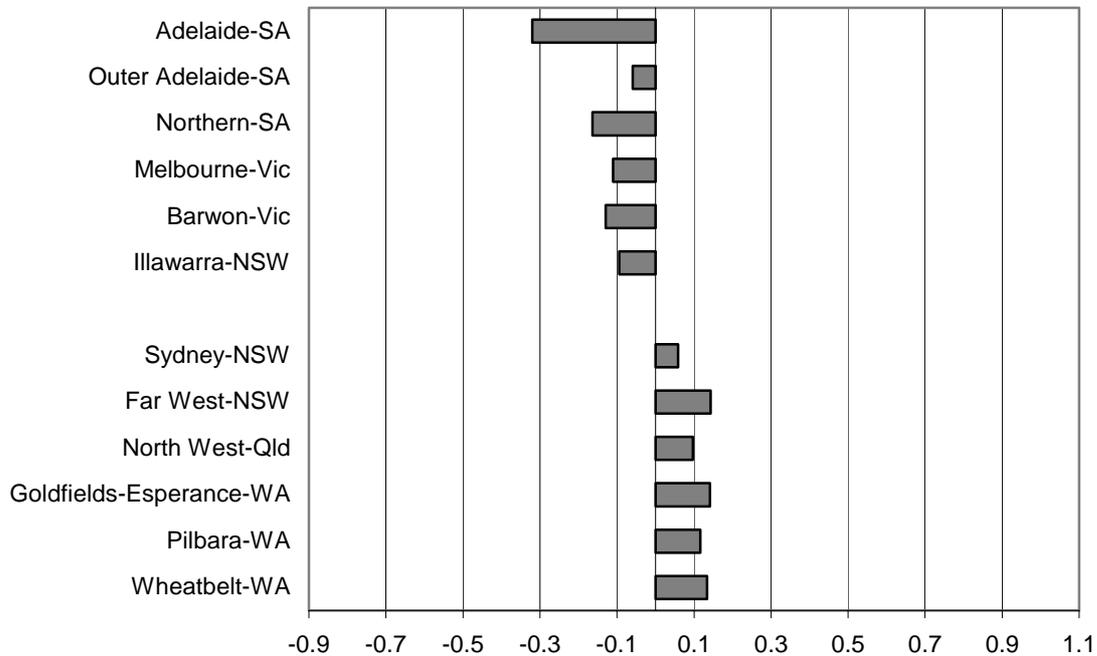
Table F.9 Effects on industry employment of the Commission's preferred post 2005 assistance package
percentage deviation *from basecase* in 2016

<i>Industry</i>		<i>Industry</i>	
Motor vehicles and parts	-9.3	Dairy cattle	0.6
Rubber products	-1.5	Other machinery	0.4
Iron and steel	-0.9	Leather products	0.4
Paints	-0.8	Other metal ores	0.4
Other mining	-0.7	Agricultural services	0.3
Fabricated metal products	-0.3	Other agriculture	0.3

Source: MONASH model projections for selected industries.

⁷ The conversion of percentage changes to numbers of employees are based on employment of 44 228 persons in ANZSIC categories 2811, 2813 and 2819 in the year 2000 (AAI 2002).

Figure F.4 Effects on regional employment of the Commission’s preferred post 2005 assistance package
percentage deviations *from basecase* in 2016



Data source: MONASH model projections for selected regions.

Figure F.4 shows how these industry effects translate into effects on particular regions. In all cases, the magnitudes are smaller than in the workshop papers. Those regions projected to have employment lower than otherwise are those with linkages to the PMV industry. But in all cases, regional employment still grows substantially over time in absolute terms. Those regions projected to have employment higher than otherwise now include the Wheatbelt of WA.

References

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