Toyota Motor Corporation Australia

Submission

to

Productivity Commission Inquiry

into

Post 2005 assistance arrangements for the automotive manufacturing sector

10 May 2002

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Executive Summary

The Australian automotive industry is faced with significant new opportunities. The post 2005 policy environment will influence whether the industry takes advantage of the opportunities now opening to continue strong growth and development, or whether the industry struggles to hold its own, unable to fully capitalise on its strengths to significantly contribute to the Australian economy.

Adapting to a changing operating environment.

Since the opening of the Altona plant, Toyota Australia has demonstrated that it can meet the challenges faced in its operating environment. These challenges have come from the following sources:

- reductions in tariffs from 30% to 15% since 1994;
- the global operating practices of the parent company;
- the need to meet the demands of key export markets;
- the devaluation of the Australian dollar against the Japanese yen and the US dollar, and the relative strengths of European currencies; and
- increasing global integration of the Australian automotive industry.

To secure its position in Toyota's global operations, Toyota Australia has embarked upon a set of integrated measures designed to raise performance. These measures have focused on:

- improving quality to world class levels;
- improving operating efficiency and flexibility and attacking costs across all the company's activities;
- working in partnership with component suppliers to localise significant components and improve their operating capability and efficiency; and
- establishing and servicing new export markets.

Toyota Australia now competes on the global stage. Quality, cost and product delivery must be at world standards if the company is to continue to grow its exports, preserve its vital domestic market base and continue to attract manufacturing investment by the parent company and affiliated suppliers.

Contribution to Australia

Throughout this period of adjustment to a changing operating environment, Toyota Australia has continued to make a significant contribution to the Australian economy.

Toyota is Australia's fifth largest manufacturing enterprise (by turnover), employs over 4,100 staff (including over 2,900 manufacturing employees) with a total payroll of $290 million per annum and, in 2001, had exports totalling $1.4 billion. The company also helps sustain an extensive local supplier base, purchasing $1.2 billion per annum in goods and services from its 98 component suppliers and 300 general suppliers.

Toyota also introduces to its own and its suppliers' operations new standards, technologies and management techniques that are then disseminated throughout the Australian manufacturing base.

Company aspirations

Toyota Australia is committed to manufacturing vehicles in Australia and has high aspirations for continued growth. Realising these aspirations requires the company to actively pursue higher levels of performance to establish itself as a centre of manufacturing, exporting and engineering within the Toyota global network. However, for Toyota Australia and the industry in general to achieve consistently higher levels of global competitiveness requires the support of a globally competitive automotive policy environment.

Toyota Australia has ambitious growth aspirations. These include a fifty percent increase in the production capacity over the next five years. Expanding production volumes to this extent will require substantial investments in the Altona plant and by the Australian supplier base.

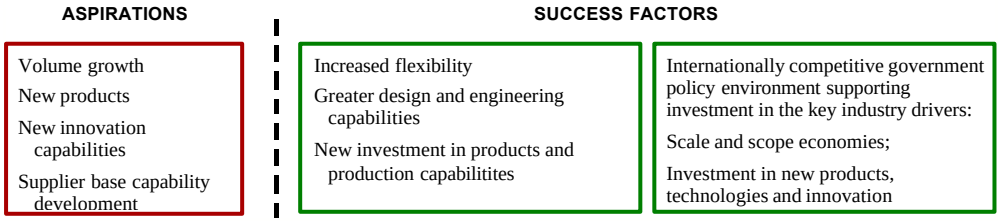
Integral to this expansion is Toyota Australia securing significantly new design and engineering responsibilities within the Toyota global network. Toyota is considering locations for a Toyota Technical Centre – Asia Pacific. A decision has not yet been made but Australia is one of the countries being considered. Securing this Technical Centre would allow Toyota Australia to quadruple its design and engineering capabilities. It will open up new opportunities to develop products tailored to the Australian market, support the development of the supply base, assist the achievement of the company's sales and production targets, and allow Toyota Australia to take on design and engineering tasks for other Toyota affiliates.

To realise the company's growth aspirations it will be absolutely essential to continue efforts to achieve world class levels of flexibility in production operations.

To support Toyota Australia's continuous improvement, the supplier base requires further development. In addition to continuous improvement in quality, cost, and delivery reliability, improvements are needed in the time taken to bring in a new product, development and tooling lead times and tooling capacity. Tooling capacity, for example, is currently not able to meet peak demand in the lead up to model changes.

Figure ES1

COMPANY ACTION PLANS AND GOVERNMENT POLICY MUST BE WORKING TOGETHER IF GROWTH ASPIRATIONS ARE TO BE REALISED



Toyota Australia, if it is to realise its aspirations, must demonstrate to the parent company that considerable new investment in the Australian operations is warranted. Toyota Australia must compete with Toyota subsidiaries throughout the world, including in North America, Thailand, Indonesia, Malaysia and Taiwan, for new investment. It is important that Australian policy settings towards the industry do not disadvantage Toyota Australia relative to policy settings in alternative investment locations.

The policy environment

The imperative for the car manufacturers in Australia is to continue to attract investment by their parent companies to grow the industry in Australia. The reality Australia faces is intense competition by developed and emerging automotive producing countries to attract this investment.

Toyota Australia considers setting the automotive policy environment beyond 2005 requires benchmarking Australia's automotive policy against policy settings in competing countries. If a globally competitive policy environment is maintained in Australia, the automotive industry will grow and continue to make a significant contribution to the growth of the Australian economy. Competitive policy settings are particularly important over this decade as significant structural change in the global industry continues.

Policy settings need to focus on the key industry drivers of production volume, influenced by market access and product attractiveness, and investment in capacity and capability improvement.

Trade Policy

Although the company supports the opening up of world markets for automotive products, the reality is that the automotive industry continues to be treated as a special case in most developed and emerging automotive producing countries[1]. The reason is the significant contribution automotive manufacturing makes to the economies in which it is located, and the contribution it will make, as it becomes a key element of the knowledge-based economy.

Progress in lowering trade barriers, especially in Asia, has been slow. Tariffs and non-tariff barriers taken together mean that the automotive industry generally receives greater support than that provided to most other manufacturing industries.

Australia already has one of the most open markets for automotive products in the world. This can be seen by the share of the domestic market held by imports and the affordability of vehicles in Australia.

Industry Policy

Governments also provide special support to attract and retain investment, encourage R&D and innovation and, frequently, provide special education and training assistance.

Taking into consideration all measures used to support the automotive industry, the assistance being provided to the Australian automotive industry is broadly in line with that being provided by other developed countries and a good deal less than that being provided by Asian countries seeking to develop their automotive industries.

There is little to suggest that other countries are likely to move away from providing an attractive investment environment for their automotive industries in the foreseeable future. Policy makers in developed and emerging automotive producing countries judge that the significant benefits the industry contributes to their economies will continue to warrant special support. Against this background, it would be counterproductive for Australia to adopt an approach to the automotive industry that signalled to overseas investors that it placed a lesser priority on the automotive industry than competing investment locations.

Future Policy Settings

Toyota Australia considers the economic contribution and potential of the automotive manufacturing sector in Australia warrants continuation of industry specific policy settings that are competitive with those in competing automotive manufacturing locations, although this entails support that is higher than for most other manufacturing sectors. Internationally competitive policy settings are necessary if Australia is to grow a strong automotive manufacturing base.

Toyota Australia believes that in order to provide a sound basis for planning the post 2005 policy arrangements should adopt a 10 year perspective and contain the following elements:

[1] The Federal Chamber of Automotive Industries (2002), A Policy Environment for Growth: Submission to the Productivity Commission Inquiry into the Automotive Industry.

Tariffs

Toyota Australia accepts that tariffs on passenger motor vehicles will fall to 10% by 1 January 2005. Toyota considers, however, that to take them lower than this will put Australia in a position that is out of step with its direct competitors and place the future of the industry in jeopardy by compromising its domestic market base.

Toyota Australia considers tariffs should be left at 10% from 2005.

Automotive Competitiveness and Investment Scheme

The Export Facilitation Scheme and its successor the Automotive Competitiveness and Investment Scheme (ACIS) have been vital in enabling the automotive industry to expand its activities beyond the domestic market to become one of Australia's leading export industries. The viability of the industry depends on achieving continued expansion of exports.

Toyota Australia considers that there should be a replacement for ACIS commencing 1st January 2006. This replacement scheme should be broadly similar in scope and scale to ACIS.

Market Access Considerations

The challenge for the automotive industry is to continue to expand its exports of both vehicles and automotive products. This has been achieved to date by developing markets in relatively open economies such as those in the Middle East. Although major efforts are being made to develop markets in ASEAN and China, success to date has been minimal because of the presence of high tariff and non-tariff barriers in place in these markets. Regional trade initiatives like the ASEAN +3 FTA proposal would further lock Australia out of these markets.

Efforts must continue to be made to improve market access for Australian automotive products, particularly into ASEAN and China. The stakes are high. If Australia is not successful in doing so the risk is significant that the world's leading automotive companies will commit investments to other countries in Asia which offer better access to markets in ASEAN and China.

Toyota Australia welcomed the efforts of the government to negotiate a free trade agreement between AFTA and CER and supports the government pursuing, in parallel, further global, regional and bilateral initiatives to improve market access for Australian automotive products.

Industrial Relations and Workplace Issues

Industrial relations policy settings have a significant impact on attractiveness of Australia for new investment. Industrial relations flexibility and stability is of central importance to achieving the production flexibility needed for international competitiveness and success. Toyota Australia has made progress with changes in workplace practices. Toyota supports the process of workplace agreements which reflect the values contained in the global statement of Toyota values known as the Toyota Way. Toyota notes, however, that the Australia's workplace culture, practices and standards still diverge from global best practice. For example, employee resistance to moving between work areas as production demands contributes to the relative inflexibility of the workplace. A further example is the artificial demarcation barriers between the performance of jobs related to the union coverage rather than the job requirements. Specific examples of this can be found within the Trades structure of mechanical and electrical as well as between trades and non trades employees.

Industrial action can also delay the installation of capital equipment necessary to maintain or increase production, or introduce new technology. This is a further deterrent to attracting investment.

Furthermore, continued disruptions in the supplier network make it impossible to fully implement the Toyota Production System. This means maintaining inventories and increases the cost and reliability of manufacturing in Australia. In the context of just-in-time manufacturing, the present legislative remedies to prevent or stop industrial action are not fast enough.

The full adoption of flexible manufacturing requires further substantial up-skilling of the workforce. Toyota Australia considers that in addition to ongoing workplace relations reform, the Government should increase support for developing human resources in the industry.

Environment Policy

The average age of the Australian vehicle fleet, at 10.5 years,[2] is significantly above that in developed economies such as Japan (6.2 years[3]), EU (7.3 years 1998[4]), Korea (5.5 years[5]) or USA (7.7 years[6]). One reason for the older vehicle fleet in Australia is that other countries have more stringent policies in place to ensure vehicles continue to comply with environmental and safety standards to remain registered. In Australia, many older vehicles no longer comply with the standards in place at the time they were first sold. Toyota Australia believes government action is required to reduce the numbers of these relatively high polluting, older vehicles.

Toyota Australia considers initiatives to reduce the number of older vehicles would significantly contribute to achieving the government's environmental and road safety objectives. They would address a gap in the government's policy and initiatives to encourage the development and uptake of cleaner vehicles. Such initiatives would also potentially increase the size of the domestic new vehicle market. This would increase the opportunities for local manufacturers to increase domestic sales of locally-made vehicles.

Other Policy Considerations

Toyota Australia considers the government needs to continue towards the international harmonisation of Australian Design Rules.

Toyota Australia consider the government should maintain the present policy settings in relevant areas including government purchasing, import of used passenger vehicles, and the tax treatment of fleet vehicles.

[2] ABS (2001) Motor Vehicle Census, Australia 31 March 2001 Cat. No. 9309.0

[3] APEC (2001) Automotive Profile - Japan, www.apecsec.org.sg 29 April 2002

[4] European Environment Agency (2001) Average Age of the Vehicle Fleet 20-08-2001

[5] APEC (2001) Automotive Profile - Korea, www.apecsec.org.sg 29 April 2002

[6] APEC (2001) Automotive Profile - USA, www.apecsec.org.sg 29 April 2002

Box ES.1

POLICY RECOMMENDATIONS: SUMMARY

R1	*Pending significant reductions in international tariffs on automotive products, Australia maintain the tariff regime due to come into effect in 2005.*
R2	*The Government introduce an equivalent program to ACIS after ACIS expires.*
R3	*The Government make all efforts possible to improve market access to regional automotive markets. Failing breakthroughs at the multilateral trade negotiation level, Australia should aggressively pursue bilateral trade negotiations with China, Thailand and other Asian countries.*
R4	*Government and industry work collaboratively to resolve industrial relations issues and move Australia's workplace capabilities and practices to a world competitive basis.*
R5	*The Government develop policy with a 10 year time horizon.*
R6	*The Government consider what other actions it is able to take to address the continuing decline in market share held by locally produced passenger vehicles, which will accelerate as the tariff falls to 10%.*
R7	*The Government maintain the present policy settings in relevant areas including government purchasing, import of used vehicles, and the tax treatment of fleet vehicles, and continue international harmonisation of Australian Design Rules.*

Chapter One

The Submission Context

The Toyota Motor Corporation of Australia (Toyota Australia) is pleased to present this submission to the Productivity Commission inquiry into the automotive industry announced by the Treasurer and the Minister for Industry, Tourism and Resources on 21st December 2001.

The submission is designed to provide information about Toyota Australia and its prospects and to address the issues raised in the terms of reference, in particular to *make findings about the automotive industry and its prospects and to set out options that the Government might consider in the future for policy arrangement to apply after 2005*.

1.1 Submission structure

Toyota Australia's submission is structured in the following manner:

- The activities of Toyota Australia and their contribution to the Australian economy (Chapter Two).
- The changing automotive industry operating environment, both globally and in Australia (Chapter Three).
- How Toyota Australia is adapting to the changing operating environment (Chapter Four).
- The strengths and weaknesses of the Australian automotive industry and the opportunities and threats it currently faces (Chapter Five).
- Toyota Australia's aspirations for the future (Chapter Six).
- Proposals for a globally competitive automotive industry policy environment (Chapter Seven).

Toyota Australia is strongly committed to the growth of the automotive industry in Australia. Toyota Australia believes that with globally competitive policy settings, both the company and the industry have the potential for sustained growth throughout this decade, which will make a significant contribution to the Australian economy.

1.2 Importance of the automotive industry to the Australian economy

In order to place the current activities and future aspirations of Toyota Australia in an appropriate context, it is important that the scale of the Australian automotive industry and its contribution to the Australian economy is properly understood.

Like the global automotive industry of which it is a part, the Australian automotive industry makes a significant direct contribution to the economy:

- The industry produces over 350,000 vehicles annually plus a range of automotive components and contributes almost six percent of manufacturing value added and about one percent of GDP[7].

[7] ABS (2001), Manufacturing Industry Australia 1999 – 2000, 8221.0

- Over 54,000 people are directly employed in the production of motor vehicles and automotive components, with 26,000 employed in vehicle production[8]. Direct and indirect employment associated with automotive vehicle manufacture in Australia is estimated at 100,000 people[9].

- The automotive industry has close linkages to a number of other industries, both in manufacturing and the services sector. Many jobs in manufacturing industries such as steel, glass and textiles are directly dependent upon the automotive industry. The same is increasingly true for jobs in a range of service industries which supply to the automotive industry.

- The industry is important to many regional economies in Australia. Cities such as Adelaide and Melbourne and regional centres such as Albury, Launceston, Geelong, Bendigo and Ballarat all have significant automotive industry presences.

These contributions to the economy have been well documented in the past, both in Australia and in other automotive manufacturing countries. More recently, economists and government have examined the contribution the automotive industry is making to the development of Australia's knowledge–based economy. Much of this examination has been triggered by the increases in the industry's competitiveness, export growth and Australia's growing reputation as an exporter of complex manufactured products. The major aspects of the industry's contribution to the change in the Australian economy to a knowledge based economy are:

- The automotive industry has become one of the major funders and performers of business R&D in Australia, spending over $400 million annually[10].

- Relationships with the universities and the CSIRO to undertake collaborative R&D. Automotive companies are members of a number of Cooperative Research Centres and are increasingly developing relationships with universities and research organisations, enhancing Australia's science and engineering base.

- Investing heavily in training and skills development for its workforce to achieve world class levels of performance in quality and price and to provide for continuous improvement. As the motor vehicle changes in its level of technological sophistication, workforce capabilities need to be upgraded commensurately.

- Product development partnerships between the car manufacturers and their automotive component suppliers to ensure investment in innovation throughout the supply chain.

- Dissemination to suppliers and industry generally of leading edge design, engineering and production technologies and organisational methodologies. The industry leads the way in manufacturing in utilising lean production methods and introducing total productive management principles within its operations. Its relatively high use of advanced manufacturing technology is reflected in its significant purchases of robotics.

- Leading edge customer for a number of other manufacturing industries. More recently, the automotive industry has become a leading edge customer for a number of service industries and is leading the trend to services enhanced manufacturing[11].

[8] ABS (2001), Manufacturing Industry Australia 1999 – 2000, 8221.0

[9] The 100,000 estimate is derived using the employment multiplier found in the University of Michigan (2001) study, Contribution of the Automotive Industry to the US Economy in 1998: The Nation and its Fifty States, Winter

[10] Unpublished ABS data

[11] Sheehan and Pappas (1998), The New Manufacturing: Linkages between production and services activities, Victoria University Centre for Strategic Economic Studies

- Valuable linkages for Australian companies to international networks through the networks of the Australian subsidiaries. These are important both as suppliers of knowledge and know–how and significant potential market opportunities.
- Rapidly growing exports of automotive products. In 2001 exports contributed $4.94 billion to Australia's total exports, having grown at an average of 17% per annum since 1996. Automotive products are now Australia's sixth largest export.
- Contribution to the balance of payments not only by exporting but also by replacing imports. In its absence, imports of vehicles could rise by 260,000 units per annum (the current level of domestic sales of Australian produced vehicles) at a gross cost (assuming $25,000 per vehicle) of approximately $6.5 billion. Taken together with the loss of exports of vehicles and components worth $4.94 billion per annum, and having regard to offsetting reduction in imports of original equipment automotive components (in the order of $5 billion), the presence of the industry directly improves the balance of payments by approximately $6 billion[12]. It also improves the terms of trade[13].

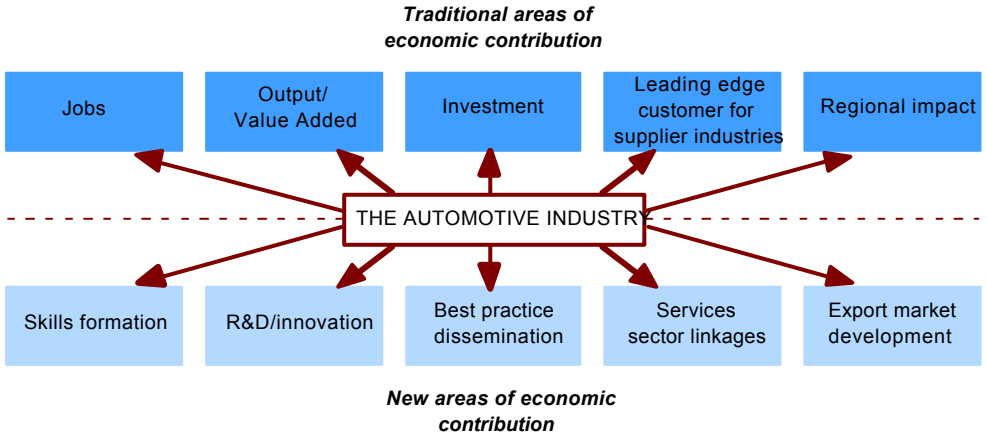
The traditional and newly recognised economic contributions of the Australian automotive industry indicate that it is an industry with particularly strong links into the wider economy and is a driver of technical and operational improvements for many other sectors of the economy. As is discussed in Chapter 4, internationally the recognition of these powerful spillover benefits generated by the automotive industry has led to governments in both developed and developing countries employing policy settings designed to attract and retain investment in this strategically important industry.

The Productivity Commission itself has noted that the "Australian automotive industry has strong links to other industries. It is a large purchaser which contributes to the use of technology and skill levels across the economy."[14]

The automotive industry's economic contribution is summarised in Figure 1.1.

Figure 1.1

CONTRIBUTIONS TO THE ECONOMY: TRADITIONAL AND NEW AREAS



[12] Data used is from Department of Industry Tourism and Resources, Key Automotive Statistics 2001

[13] Based on data provided in Department of Industry Tourism and Resources (2001), Key Automotive Statistics 2001

[14] Productivity Commission (1999), Microeconomic Reforms and Australian Productivity: Exploring the Links

Figure 1.1 broadly aligns with the findings of the report *Victoria's New Manufacturing Future*[15], which indicated that the importance of advanced manufacturing industries (of which the automotive industry is a prime example) to the Victorian economy stem from:

- their strong upstream and downstream linkages with other industries;
- their transfer of leading edge technologies to the local economy; and
- their development of the skills, work organisation arrangements and new management techniques which, through labour turnover and supply chain networks, spillover to the rest of the economy.

The traditional view of the automotive industry as a major part of the industrial economy and direct provider of jobs and investment is not adequate to assess the economic value of the industry and individual companies to a sophisticated economy. The automotive industry is an integral part of the emerging knowledge–based economy and has strong linkages to the services sector. This enhances its already considerable potential for future growth.

The role of the Australian automotive industry as a globally connected innovation leader makes the automotive industry a key sector as Australia seeks to develop a globally relevant knowledge based economy.

[15] Manufacturing Industry Consultative Council (2001), Victoria's New Manufacturing Future, Department of State and Regional Development. This report's conclusions draw upon a report by the National Institute of Economic and Industry Research (Oct 2001), Growth or Stagnation: Construction an Alternative Scenario for Victorian Manufacturing in the New Millennium.

Chapter Two

Toyota Australia

2.1 Toyota Australia Profile

Toyota Australia is the second largest vehicle manufacturer in Australia in terms of vehicles produced and one of Australia's largest manufacturing organisations. Toyota Australia ranked fifth amongst all Australian manufacturers in 2000-2001 in terms of revenue[16]. Box 2.1 provides a snapshot of the Toyota Australia's activities.

Box 2.1

SNAPSHOT OF TOYOTA MOTOR CORPORATION AUSTRALIA

Value of production of $2.35 billion, making the company one of Australia's largest manufacturing enterprises.

Total sales of domestically produced and imported products reached $5.66 billion in 2000-2001.

Production of over 95,000 vehicles.

Extensive local supplier base, with 98 component suppliers and 300 general suppliers providing $1.2 billion per annum in goods and services.

Total exports of $1.4 billion in 2001, 30% of total Australian automotive exports for the year.

4,134 employees Australia wide, including over 2,900 in manufacturing, with an annual payroll of $290 million.

Toyota Australia has been producing cars in Australia for more than four decades. Prior to 1995 production took place at the former Australian Motor Industries plant in Port Melbourne and the former General Motors Holden plant in Dandenong.

Toyota Australia's parent company decided in the early 1990s to invest in a new state of the art plant in Altona. The plant was commissioned in 1995 following a $420 million investment and is now the base for all Toyota Australia vehicle manufacturing operations.

Camry is the main model produced at Altona since 1995. Toyota Australia also made the Corolla at Altona between 1995 and 1999. Toyota commenced Avalon production at Altona in 2000.

Toyota Australia's head office and component production is based at its Port Melbourne facility.

Toyota Australia has a large supplier base, with 98 direct component suppliers and over 300 other suppliers of goods and services. It purchases $1.2 billion in goods and services from its suppliers each year.

In addition to its Melbourne operations, Toyota Australia maintains a comprehensive sales and marketing operation in Sydney as well as sales and distribution operations in all mainland States.

Toyota Australia also imports a range of passenger, 4WD and commercial vehicles and is Australia's largest vehicle importer.

[16] The BRW1000, November 15-21, 2001, pgs 108 - 137

2.2 Key performance features

The following represents a brief snapshot of the current activities of Toyota Australia's operations.

2.2.1 2001 Production and sales

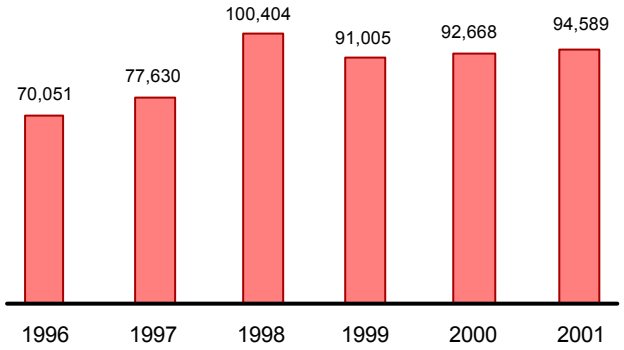
The total value of Toyota Australia's domestic production was over $2.35 billion, making Toyota Australia the second largest vehicle producer in Australia. Total sales of both domestically produced and imported products was $5.65 billion.

Total production was 94,589 units. This was over 26% of Australian vehicle production. The new model Camry will commence production in the third quarter of 2002, and following a substantial investment in plant capacity, total vehicle capacity at Altona by 2003 will be some 115,000 units.

Figure 2.1 sets out Toyota Australia production levels over the past six years.

Figure 2.1

TOYOTA AUSTRALIA PRODUCTION VOLUMES: 1996 - 2001



Source: Toyota Motor Corporation Australia

2.2.2 Investment

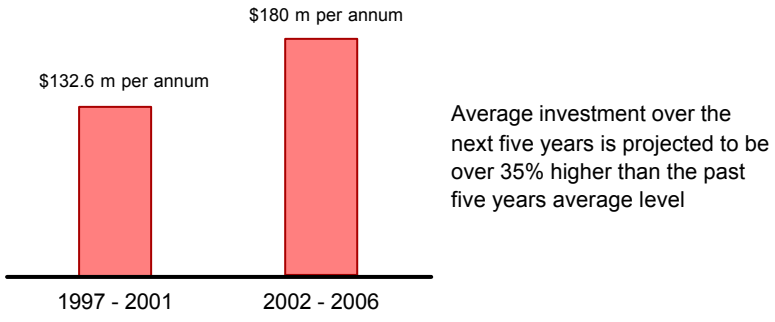
Toyota continues to make major investments in production facilities at Altona, in addition to its Sydney sales and marketing centre and its operations at Port Melbourne. Investment is linked to new model cycles, with investment peaking in the lead up to the introduction of a new vehicle model.

In the lead up to 2002, a major model change year, Toyota Australia is spending some $320 million to bring to market a new model Camry, establish a new 4 cylinder engine plant, and increase plant capacity.

Over the five years from 2002, new investment is currently projected to exceed $900 million.

Figure 2.2

TOYOTA AUSTRALIA INVESTMENT LEVELS



Source: Toyota Motor Corporation Australia

Investments to be undertaken in the next five years include:

- a new automated press line;
- e-business implementation investment;
- supplier tooling for Camry;
- paint facility upgrade;
- tooling and equipment for Avalon; and
- new corporate business centre in Melbourne.

2.2.3 Employment

In mid 2001 Toyota Australia employed 4,134 people, approximately 16% of employment by the car manufacturers in Australia. Toyota Australia's annual payroll is approximately $290 million per annum.

In Victoria alone Toyota's payroll exceeds $215 million per annum, with Toyota paying Victorian payroll tax of $12.5 million in 2000-01.

Table 2.2 presents a breakdown of employee numbers by functional group. This shows that 75% of staff are involved in manufacturing operations with the remaining 25% of staff in service sector functions including IT, design, marketing and business planning.

Table 2.2

TOYOTA AUSTRALIA EMPLOYMENT BY FUNCTIONAL GROUPING

Manufacturing, purchasing and engineering	3,075
Corporate services	252
Sales, marketing and parts distribution	807
Total	**4,134**

Source: Toyota Motor Corporation Australia

2.2.4 Training and skills formation

Supporting Toyota Australia's improved productivity and quality performance is a strong commitment to increasing the skills of its workforce. Toyota Australia has links with universities and TAFE institutions to provide training to employees at all levels.

Toyota sees the development of its people as a foundation stone for future prosperity. Recognising that innovation is the key to product differentiation and competitiveness, Toyota is committed to developing the drivers of innovation, its people, giving them the tools and skills they require and empowering them to implement change. In the Toyota Production System, on the job training is a continuous process for Toyota Australia manufacturing staff and is central to updating and deepening competencies.

In 1999 Toyota introduced its Frontline Management Program for manufacturing supervision. Over the subsequent two years, 105 senior supervisory staff attained qualifications in Frontline Management at either the Diploma or Certificate 4 Level. Working with Chisholm Institute, Group Leaders were assessed and developed on-the-job, using their managers as coaches, supported by facilitators from the Institute.

In 2002, Team Leaders will be undertaking a Certificate 3 Frontline Management program to be rolled-out in stages for employees at this level. Toyota Australia also operates an extensive formal staff development program with 1,135 employees attending internally conducted training courses in 2001.

As part of a global company, there are global learning opportunities for senior and middle level executives and specialists. The Inter-Company Transfer (ICT) Program selects technical specialists for overseas assignments of up to 3 years duration, while the Management Exchange Program (MEP) rotates managers globally to learn world's best practice in manufacturing management and bring their learning back to TMCA. Up to ten Toyota managers and specialists are selected for these programs annually.

Toyota also contributes to broader industry training and skills formation efforts through the Toyota Technical Education Program (TTEP). Through the TTEP, alliances have been established with four major TAFE institutions throughout Australia:

- Morton Institute of TAFE (Brisbane);
- Wetherill Park Institute of TAFE (Sydney);
- Kangan Batman Institute of TAFE (Melbourne); and
- Douglass Mawson Institute of TAFE (Adelaide).

This alliance, established more than eight years ago, involves the donation by Toyota of purpose built training materials to the TAFE institutions, including:

- simulators;
- cut away assemblies;
- training manuals; and
- complete vehicles.

These resources are crucial to the delivery of the TAFE institutions' education syllabus.

In addition to this program, Toyota also supplies many other TAFE institutions throughout Australia with regular vehicle and component donations.

Toyota is a core sponsor of the highly successful SAE Formula Car competition, through which the automotive industry works with TAFE colleges and the universities to enhance the education of engineers, technicians and marketers. Many program participants will take this experience with them as they commence careers is other sectors of the economy.

Toyota also supports the development of automotive retail and service skills through the T-3 program which involves Toyota, TAFE institutions and the Dealer Network. This program provides valuable training opportunities in vehicle retailing and servicing to secondary students in years 10, 11 and 12.

2.2.5 Exports

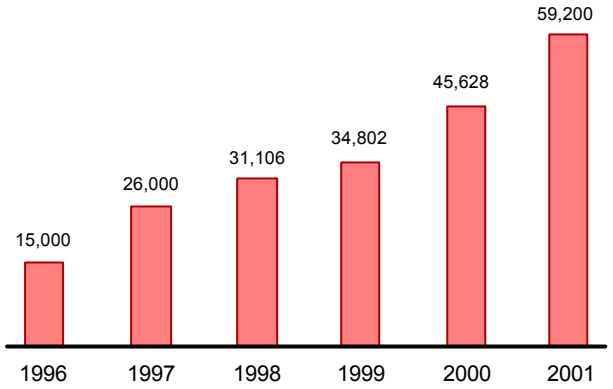
Toyota is Australia's largest vehicle exporter. Exports of Completely Built Up (CBU) and Completely Knocked Down (CKD) vehicles and cylinder heads reached $1.4 billion for 2001, a 30% increase over the then record 2000 earnings.

In 2001 Toyota Australia achieved a record for export sales with 59,200 vehicles, representing 55% of total Australian vehicle exports for the year. Figure 2.3 sets out Toyota Australia's CBU export figures over the past six years.

Toyota's export success has been made possible by supportive government policy. The EFS in the 1990s and ACIS have assisted TMCA to make the required investment in capacity and capabilities and market development.

Figure 2.3

TOYOTA AUSTRALIA EXPORTS OF CBU VEHICLES: 1996 - 2001



Source: Toyota Motor Corporation Australia

Currently the Middle East is the principal market for Toyota Australia's exports of CBU Camrys. In total, Toyota exported cars to 33 countries in 2001. Camry exports to South Africa commenced in 2001 and Toyota Australia is aggressively pursuing export opportunities in emerging markets such as China. In 2002 Toyota Australia sent a shipment of six Camrys to China where they will be trialed by the Australian Embassy and Consulates.

Box 2.1

TOYOTA AUTOMOTIVE EXPORTS TO THE MIDDLE EAST

Exporting to the Middle East

Toyota started exporting vehicles to Saudi Arabia in the mid-1990s. Exports have built up rapidly to the point where Toyota is now exporting over 50,000 vehicle to the Middle East each year. In order to meet the demanding climate and consumer quality demands in the Middle East, Toyota needed to raise its quality levels for all of its Australian built vehicles.

In Saudi Arabia, Toyota's largest export customer with 42,200 vehicles shipped in 2001, the Australian made Camry is the top selling passenger vehicle.

Vehicles are the first high value added, complex product that Australia has exported to the Middle East in significant quantities and these exports are helping to deepen the Australia-Middle East trade relationship and position Australia as a serious exporter of world class high value added products.

Sources: Toyota Motor Corporation Australia

2.2.6 Quality

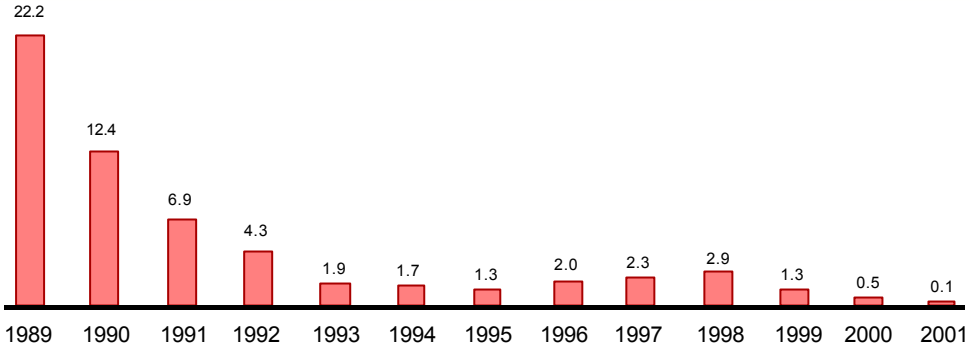
Achieving and sustaining high levels of product quality has been a necessity for Toyota Australia. At the end of the 1980s Toyota Australia, like other Australian car manufacturers had quality levels that fell short of world standards. In the early 1990s a major effort was made to significantly lift quality levels. Commencement of Middle-East exports required Toyota Australia to further raise quality standards in the late 1990s to satisfy export customers. Toyota Australia now achieves Toyota's stringent global quality targets.

As Figure 2.4 indicates, the number of deviations per vehicle on the Camry has fallen from 22.2 in 1989 to only 0.1 in November 2001. Deviations per unit is not a measure of defects per vehicle. It is a more stringent test of performance against Toyota global production standards. A deviation is recorded if a production process has not been performed as specified, even if a defect itself has not necessarily resulted. This measure is used because one of the key aspects of the Toyota Production System is standardised tasks, and high quality is achieved by completing tasks precisely to the standard. If deviations from standard are allowed to continue, lower quality and defects can result.

This quality achievement also reflects the significant quality gains being made by Toyota Australia's suppliers.

Figure 2.4

TOYOTA AUSTRALIA QUALITY STANDARDS IMPROVEMENT, NUMBER OF DEVIATIONS PER VEHICLE: CAMRY 1989 - 2001



Source: Toyota Motor Corporation : Performance Audit

2.2.7 Productivity

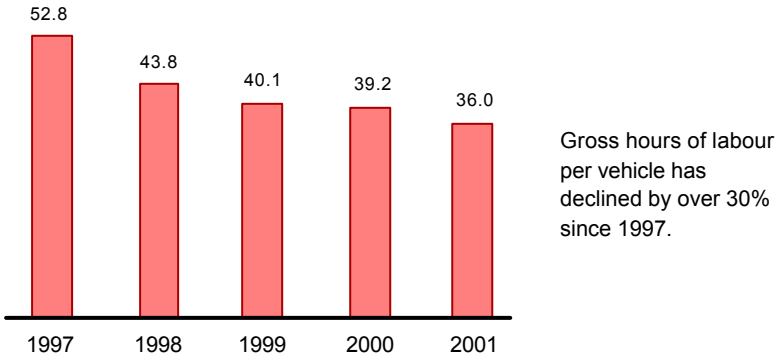
Toyota Australia, with its levels of automation of approximately 50% rather than the 80 to 90% found in Japan and the USA, relies upon its ability to produce flexibly in order to offset the scale disadvantages it has when compared to Toyota production facilities in Japan and the USA.

Toyota Australia produces on the same assembly line the Avalon and the Camry for both the Australian and the international market. This requires considerable skills in flexible manufacturing, as both left and right hand drive vehicles are made and the specifications of cars differ for domestic and export markets. In total over 500 vehicle variants are made on the one line.

Labour productivity, measured in terms of vehicles per production employee, has increased significantly since 1994, as is shown in Figure 2.5. The big increase took place in 1995 following the Altona plant coming on stream. Since then labour productivity has shown some fluctuation reflecting changes in the level of production (and hence capacity utilisation) and the run out of old models/introduction of new models. The underlying trend is for labour productivity to increase. This is discussed further in Chapter Four.

Figure 2.5

TOYOTA AUSTRALIA LABOUR PRODUCTIVITY LEVELS: GROSS LABOUR HOURS PER VEHICLE



Source: Toyota Motor Corporation Australia

Toyota Australia has recently completed a new workplace agreement that will see wage rises of 5%, 5% and 5.5% over the life of the agreement granted in exchange for the adoption of key performance targets that will significantly boost production flexibility and labour productivity.

Targets for the 2002 through 2004 period include:

- production efficiency and pieces shipped per direct operation increases;
- unmanaged absenteeism reductions to bring Australia into line with Japanese best practice;
- maintenance down time per shift to fall by one third;
- occupational health and safety days lost reduced by 75%;
- reduction in gross labour hours to world competitive standards; and
- reduced costs associated with improved quality performance (rework).

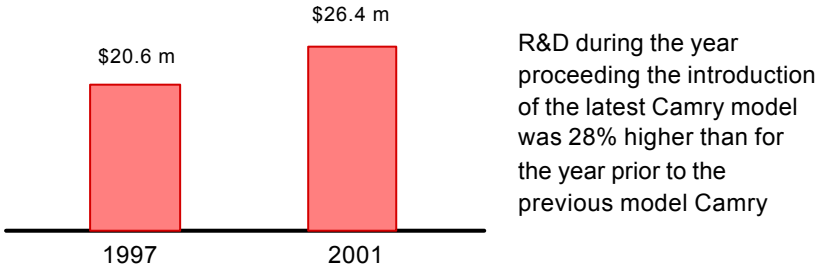
2.2.8 Research and Development

As a producer of global vehicles, Toyota Australia benefits from the significant R&D by Toyota globally that goes into developing the Camry and the Avalon. Toyota Australia's R&D effort is focused on developing and applying technology, and localising production in Australia. This provides direct benefits for the local supplier base through technology and capability transfer.

Peak expenditure occurs in the lead up to new model releases. Historically, R&D expenditure has followed model cycles, peaking in the year before new models are introduced. Toyota's 2001 R&D spend was $26.4 million, placing it in the top 30 or so R&D performers in Australia. This was a 28% increase on 1997, the previous model introduction's peak year. Production volume is a critical driver of local R&D levels.

Figure 2.6

TOYOTA AUSTRALIA R&D EXPENDITURE: 1996 - 2001



Source: Toyota Motor Corporation Australia

Toyota Australia is currently working to significantly expand its R&D role within the global Toyota network (discussed in greater detail in Chapters Four and Six).

2.2.9 Supplier improvement activity

Toyota globally has long been recognised as being the most efficient vehicle manufacturer in the world and it has been acknowledged for the considerable efforts it has made to disseminate its lean production system know-how throughout its supply chain[17]. The Toyota Production System has long been hailed as the source of Toyota's outstanding performance as a manufacturer'.[18]

Toyota Australia recognises that its future performance is intrinsically linked with that of its domestic suppliers. It has therefore been proactive in working in partnership with its suppliers to improve capabilities and increase local component sourcing. The new model Camry due to commence production in 2002 will include over 250 new local components (compared to the current Camry model) with the value of these new components exceeding $120 million per annum.

[17] See for example Flynn, M., Alkire, K. and Graham, D. (2001), OEM Parts Purchasing: Shifting Strategies, Office for the Study of Automotive Transportation, University of Michigan

[18] S.Spear & H.K. Bowen, (1999) Decoding the DNA of the Toyota Production System, Harvard Business Review, Sep-Oct, 1999).

Since 1989, Toyota has had a dedicated supplier development team in place that has worked with a wide range of Toyota suppliers to help them implement lean manufacturing. Although supplier development programs involve a strong complement of formal theoretical training, there is substantial practical application of the principles to implement enduring change in the workplace. In the industry, the Toyota Supplier Assessment system is widely regarded as a superior tool to monitor performance and assist implement change.

Toyota has worked with 60 of its first tier suppliers on the introduction of lean manufacturing into their operations. An outstanding example of the impact of this activity is the step change in performance achieved by Autoliv Australia following a period of intensive support from Toyota. As Box 2.2 indicates, the benefits of the greater competence they have achieved is providing spillover benefits to other parts of the economy.

Toyota Australia regularly receives requests from both automotive and non-automotive industry firms to visit and benchmark our Toyota Production System processes.

Box 2.2

DRIVING PROCESS IMPROVEMENTS IN MANUFACTURING

Since Toyota's supplier development team's intensive work with Autoliv, Autoliv Australia has:

- become a benchmark company for the Global Autoliv Group in the areas of productivity and manufacturing systems;
- doubled sales in three years;
- reduced direct labour costs by 50%; and
- reduced stock holding by 90%.

Autoliv's experience in introducing new production processes and management methodologies has in turn benefited many more Australian manufacturing enterprises, as Autoliv has disseminated its knowledge of lean manufacturing to its own supplier base, many of whom also supply to other industries. Over 100 manufacturers have visited Autoliv's facilities and Autoliv has now become a training ground for a wide range of manufacturers in a variety of sectors.

Source: Toyota Motor Corporation Australia

2.2.10 Environmental performance

Toyota Australia is committed to reducing the environmental impacts of its products throughout their full lifecycle. The overarching environmental policy for Toyota Australia is *Toyota Motor Corporation's Earth Charter and Action Plan*. This policy commits Toyota globally to proactively take environmental issues into account in everything it does.

Toyota's global environmental commitment is reflected in the development of the Prius as a viable mass produced low emission vehicle and its continued research efforts in the area of new powertrain technologies.

In line with the *Earth Charter*, Toyota Australia has implemented a number of initiatives that have significantly reduced the environmental impact of its operations. These include being the first manufacturer in Australia to adopt waterborne paint technology, recycling all emulsified oil coolants used in the plant, and initiatives that have reduced water, gas and electricity use by more than 2% per annum since 1999. The Toyota environmental ethos extends to community activities, one of the best known being the Toyota Planet Ark National Tree Day, an Australia wide community tree planting project.

Toyota Australia has also established an environmental affairs project to ensure that Toyota Australia becomes a leader in environmentally friendly production. This project involves implementing and consolidating environmental management systems within Toyota Australia and its close business partners and the establishment and implementation of a number of action plans. Action plans have been developed across the areas of product, manufacturing operations, suppliers, regional offices and dealers and raising the profile of environmental affairs.

Some of the key targets Toyota Australia has adopted through the more than 25 action plans developed to date include:

- meeting Euro 2 and Euro 3 emission standards in advance of their mandated introduction times;
- working with the Sustainable Energy Development Authority to reduce energy consumption with the target to further reduce energy consumption by 10% by 2005;
- working with the Victorian EPA to assist medium sized suppliers to gain ISO 14001 environmental management certification;
- working with its dealer network to develop recoverability and end of life vehicle policies to increase recycling and reduce landfill; and
- signing a letter of intent accepting the Federal Government's Greenhouse Challenge. Toyota Australia will work with the Australian Greenhouse Office to explore ways of reducing factory greenhouse gas emissions.

Through taking a proactive stance of environmental performance improvements, Toyota Australia is seeking to grow its business in ways that are in harmony with the environment.

2.3 Toyota Australia in the Toyota global network

Toyota Motor Corporation is the world's third largest vehicle manufacturer. Sales by the group (Toyota, Daihatsu, Hino) in 2001 were nearly six million vehicles, or 9% of the world market.

Toyota production is still significantly centred in Japan, where over 3.5 million vehicles are produced, approximately half of which are exported. However, Toyota has built up significant production operations outside of Japan in recent decades. It now has operations in 24 overseas countries, with its 39 overseas production centres producing almost 1.8 million vehicles in fiscal 2001. In the USA, the Toyota Kentucky facility alone produces 500,000 vehicles annually, predominantly for sale in the North American market.

The evolving global strategy of Toyota Motor Corporation is now opening up more opportunities for Toyota Australia to take on a greater range of functions and assume a more integrated and strategic role in Toyota's global operations. Toyota head office is becoming more open to decentralising research and product development activities and is giving each of its subsidiaries greater control over their component sourcing strategies. This is discussed further in Chapter Six.

This move to ceding greater autonomy to overseas subsidiaries has been prompted by the growing scale of Toyota's global operations, its growth aspirations, and the greater confidence that Toyota head office now has in the capabilities of its leading overseas subsidiaries.

Toyota Australia currently has three major roles in the Toyota global network: producing vehicles for the Australian market; producing vehicles for export markets; and importing and distributing Toyota vehicles in Australia.

Within the Toyota global production network, Toyota Australia is the fourth largest vehicle producer outside of Japan. Toyota Australia vehicle production in Australia in 2001 represented 1.8% of total Toyota global vehicle production and 5.5% of international (non-Japanese) production. More significantly, Toyota Australia is responsible for 16.5% of global Camry production. In 2001, Toyota Australia exported nearly 60% of its production.

Toyota vehicle sales in Australia (of 141,300 vehicles) account for 2.4% of Toyota's global vehicle sales, making Australia the third largest Toyota market in the world (after Japan and the USA).

The differences in the scale of the Australian production operations when compared to the Japanese and American operations is reflected in areas like lower usage of robotics in the Australian plant. Nevertheless, Toyota Australia is able to produce vehicles cost competitively to Japan and the USA. One factor in the cost competitiveness is labour cost. Australian labour costs per hour are significantly lower than those in Japan and the USA but higher than those in the major competitors for investment like Taiwan or Thailand. For example, Australian labour costs are 50% of those in Japan, but 10 times those in Thailand. Domestic cost competitiveness is only one factor in attracting further investment. Competitiveness must also be achieved in quality, market access, delivery reliability, a strong domestic sales base, and government policy to secure future investment in Australia.

The benefits that flow to Toyota Australia and from the company to the wider economy from its participation in Toyota's global network are very substantial. The main ways through which these benefits come are:

- access to the production know-how and technology base of Toyota;
- investment from the parent company; and
- the opportunity to enter Toyota export markets and access Toyota's large internal purchasing networks.

Toyota's global purchasing mission is to purchase the world's best products in the most timely manner at the lowest total cost. This provides an opportunity for suppliers to Toyota Australia to also gain access to supply contracts throughout the massive Toyota global network. The planned move to integrate Toyota Australia's Camry model cycle with the global Camry model cycle will further increase opportunities for Toyota Australia suppliers to access volume building export supply opportunities.

Toyota Australia works with its local suppliers to help them to reach the quality and cost standards required for them to capitalise on the extensive opportunities for export supply to the Toyota global network.

Being part of the Toyota global networks bring with it challenges as well as opportunities. The Camry, which Toyota Australia currently exports to 33 countries, is also produced in Japan, the USA and (from 2002) Thailand and Taiwan. Domestic and export markets currently served by Toyota Australia could be served by any of these production centres, meaning that Toyota Australia is in constant competition with other Toyota global production centres to retain and win markets.

It is the need to be cost and quality competitive with other Toyota production centres, as much as the need to be competitive with other Australian producers, that is driving Toyota Australia's continuous efforts to improve quality and eliminate waste throughout the production system.

2.4 Conclusion

Toyota Australia plays an important role in the Australian automotive industry and the Australian manufacturing base. It is the second largest volume producer of vehicles and the largest vehicle exporter. It is also a leader in terms of supplier capability development initiatives and a major contributor to building skills in the industry.

Toyota Australia works continuously to improve its quality and cost performance as it strives to build a sustainable position within the highly competitive Toyota global production network.

Toyota Australia is an integral part of the Australian automotive industry and its continued performance improvement and production growth will be a major determinant of the overall prospects of the Australian automotive industry. Toyota Australia is in ongoing competition with other Toyota subsidiaries to attract new investment. Its success in this competition will determine its future contribution to the growth of the Australian automotive industry and the wider Australian economy.

Chapter Three

The Operating Environment

3.1 Global industry operating environment

The global automotive industry has undergone significant restructuring over the past five years. Mergers between major vehicle producers has seen the industry consolidate into six major production groups: General Motors, Ford, DaimlerChrysler-Mitsubishi, Volkswagen, Toyota and Renault-Nissan. Many smaller formerly independent companies, such as Fiat, Volvo, Saab, Suzuki, Subaru and Isuzu have been taken over by Ford or General Motors, while the Korean companies Hyundai, Daewoo and Kia are also now linked to the DaimlerChrysler-Mitsubishi, Ford and General Motors groups.

The components supply industry has also seen recent consolidation as well as divestments by vehicle makers of their component making subsidiaries (General Motors selling Delphi and Ford Visteon). Vehicle makers now demand their Tier One component suppliers to have systems integration skills and to deliver entire component modules. The result has been the emergence of major component suppliers that are as global as the vehicle makers themselves.

This industry wide consolidation, restructuring and strategic reorientation has been accompanied by a progressive rationalisation of production facilities, with global automotive groups increasingly trying to extract greater efficiency from their global assets. This is having a major impact on automotive investment decisions.

This consolidation poses both threats and opportunities for the Australian industry. The opportunity is to secure a stronger role in the restructured global industry that helps set the long term foundations for the Australian industry.

3.1.1 Automotive investment trends

The global automotive industry is dominated by a small number of Japanese, German and United States headquartered vehicle and component manufacturers. Investment decisions are made on the basis of increasingly integrated global strategies. These corporations coordinate brands, product portfolios and supply chains, with investments in production, engineering, R&D and design being located across their many subsidiaries that are distributed across every continent.

The major production groups continuously monitor the attractiveness of production, investment and research & development locations around the globe, locating their facilities where the operating environment is most favourable. Government policy and domestic market size are among they operating environment factors that companies consider in their decision making.

A particularly significant recent development has been the growing recognition of the potential of China as a market for automotive products. This has seen the major automotive companies competing to establish plants in that country. Currently Volkswagen (which in 2000 held over half the market for cars in China[19]) and General Motors in particular have significant production facilities in China.

[19] Die Zeit, Polo for the Masses, 13 December 2001.

As part of China's entry into the World Trade Organisation, the import tariff on cars, which was 80%, was reduced from January 2002 to 50% and is due to fall to 25% by 2005. However, analysts are expressing concern about whether new non-tariff barriers will be introduced, particularly at a provincial level, to offset the impact of these tariff reductions[20].

3.1.2 Automotive industry policy environment

The international automotive industry policy environment is directly relevant to the setting of Australian policy towards the industry. Investment decisions are now being made on a truly global basis. The policy environment in a country significantly influences the attractiveness of a country as a location for new investment. If Australia is to be a location for significant automotive investments, our policy environment must be internationally competitive, particularly policy that directly impacts on the key economic drivers of the industry - volume, investment, research and development.

The changing policy mix

The automotive industry is regarded by both developed and emerging economies as making a well above average contribution to the development and growth of their economies[21]. Reflecting the industry's importance for employment, wealth creation and broader industrial development reasons, it has been treated as a "special case" by policy makers for a long time[22]. Decisions taken in the 1970s and 1980s by governments in North America, Europe and Asia resulted in very significant investment decisions whose outcomes continue to shape the development of the automotive industry in these countries and globally.

The "special case" nature of public policy towards the automotive industry in many automotive producing countries has not changed over the past decade. What is changing is the mix of policies used to support and facilitate the development of the industry.

The WTO trade negotiation process and the establishment of major trade blocs with their own rules on the conduct of member countries have constrained the use of some form of industry support. Despite these new disciplines, however, governments in both developed and developing countries continue to offer significant incentives to attract and retain automotive industry investment.

3.1.3 International market access

Market access is very important to the industry, and particularly important to the Australian industry as it only has a small domestic market base. A stable domestic market base is essential. Export markets are required, however, to provide sufficient volume to vehicle and component manufacturers to exploit scale and scope economies.

Toyota Australia has witnessed very little change in the last decade in the openness of international automotive markets. Access to the markets of developed countries has been largely unchanged for some time, while in developing markets in Asia, barriers to market access remain high. WTO and APEC negotiations have made no difference to market access from Australia.

Tariff rates in countries such as Malaysia, Thailand, China and Indonesia remain very high while significant non-tariff barriers are also widespread in the region.

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[20] The Australian Financial Review, Hidden Tigers of Economic Reform, 15th January 2002, p.10

[21] The Federal Chamber of Automotive Industries (2002), A Policy Environment for Growth: Submission to the Productivity Commission inquiry into the Automotive Industry.

[22] The Federal Chamber of Automotive Industries (2002), A Policy Environment for Growth: Submission to the Productivity Commission inquiry into the Automotive Industry.

In Malaysia for example, tariffs on passenger vehicles range (dependent upon engine size) from 140 to 300% and from 60 to 200% for 4WD and commercial vehicles[23]. These policies reflect the government's commitment to the national car producers (Proton and Perodua). Non-tariff barriers in Malaysia are extensive and include a local content scheme requiring 45 to 60% local content, a quota on imported vehicles, and restrictive and discretionary import licences.

In Thailand, tariffs on vehicles actually increased over the late 1990s to their current level of 60 to 80% (dependent on engine size and vehicle type) while tariffs on components range from 10 to 46%. Non-tariff barriers in Thailand include customs regulations that lack transparency and excise duties of between 35 and 48% on vehicles which impact disproportionately on imported vehicles.[24]

The lack of progress in improving access to markets in the region, while the Australian market is highly open to imports, places Toyota Australia in a difficult position compared to other Toyota operations in the region (who are within AFTA) when competing for investment from Toyota head office.

3.2 Australian industry operating environment

3.2.1 Market trends

Major recent developments in the Australian automotive industry operating environment include:

- the depreciation of the Australian dollar against the US dollar and the Japanese Yen. This has also seen European currencies improve their relative position against the Australian dollar.
- stable sales of locally made vehicles in a growing domestic vehicle market; and
- the increasing export orientation of Australian vehicle and component manufacturers. Between 1996 and 2000, vehicle manufacturers increased exports by 29% and component manufacturers increased exports by 23%.[25]

High exposure to currency movements is an unacceptable risk factor for automotive companies which source significant components from Japan and the USA. The depreciation of the Australian dollar is supporting a major push to increase local content levels in Australian produced vehicles. The need to boost local content levels means that now, more than ever before, a strong domestic component and materials supply base is crucial to the success of the four vehicle manufacturers.

This depreciation is providing an opportunity to locate new investment in Australia. It does not, however, provide a sustainable advantage to manufacturers. This can only be achieved through operating at world class levels.

Recent years have seen strong domestic vehicle market growth, with total vehicle sales in Australia rising from 650,000 in 1996 to over 770,000 for each of the past four years. Sales of passenger vehicles have reached approximately 550,000 vehicles per annum, after exceeding 500,000 for the first time in 1997[26]. Despite this strong overall market growth, domestic sales of Australian made vehicles have been declining in the face of competition from new entrants and the proliferation of imported vehicle models which now make the Australian market one of the most competitive in the world.

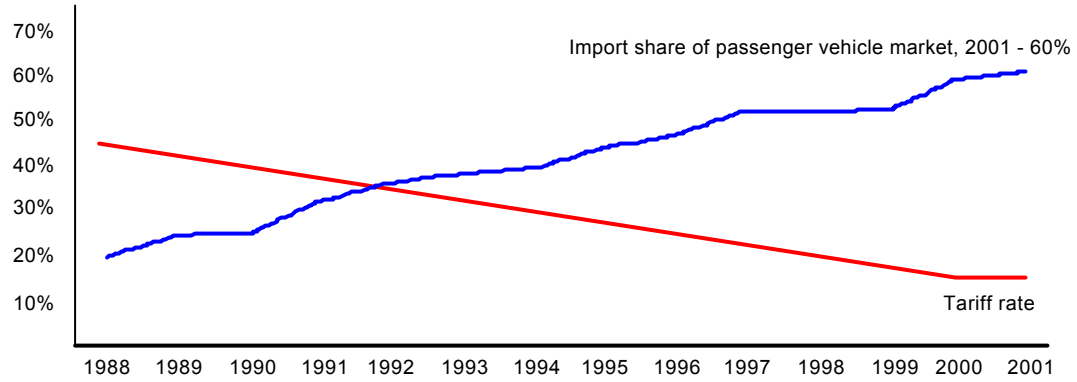
[23] APEC tariff database
[24] APEC tariff database
[25] Austrade (2002) Ausrtalian exporters
[26] VFACTS data

Domestically produced vehicles sales of 237,500 in 2001 represented a 40% share of the Australian passenger vehicle market (Figure 3.1) (Table 7.2 highlights the high import penetration rate in Australia when compared to import penetration rates in other developed automotive producing countries).

This decline in market share by the local manufacturers is a serious threat to the industry viability and sustainability. A strong domestic market base is essential to the industry ability to exploit scale and scope economies and to justify further investment in capacity and capabilities.

Figure 3.1

IMPORTED VEHICLES' SHARE OF THE AUSTRALIAN PASSENGER VEHICLE MARKET 1988-2001



Source: VFACTS

A significant and stable domestic market is essential for a viable automotive manufacturing base in Australia. Toyota Australia considers exporting 50% of production to be maximum sustainable level, and the maximum level at which a case can be made to locate new manufacturing investment in Australia. Overseas markets are more unstable and carry more risks. Without a large and stable domestic base, Australian operations can not readily absorb fluctuations in export sales.

Offsetting the falling domestic market sales have been increasing levels of export sales. In 1996, only 39,000 completely built up vehicles were exported from Australia, representing only 12% of vehicle production of 325,000 units[27]. In 2001, exports reached 109,000 units, representing 30% of vehicle production for the year. Growing export sales have allowed domestic production to remain above 350,000 vehicles in 2001.

The growing export orientation of the vehicle manufacturers in recent years has been followed by the component sector. Many of these companies could not justify the investment required to export without a sizeable domestic market base.

3.2.2 Government policy environment

A number of government policy changes over the past five years have had a significant impact upon the Australian automotive operating environment. The most significant of these policy changes have been:

- The reduction of tariffs from 25% in 1996 to 15% in 2000 on passenger motor vehicles
- Scheduled fall in tariff to 10% on 1 January 2005;
- The replacement of the Export Facilitation Scheme (EFS) from 1 January 2001 with the Automotive Competitiveness and Investment Scheme (ACIS); and
- The removal of the 22% motor vehicle wholesale sales tax and the introduction of the GST at 10% in 2000.

[27] DISR, Key Automotive Statistics

The reduction of tariff rates has seen import competition intensify further, and a continuation of the long term decline in domestic passenger vehicle market share of the four Australian vehicle manufacturers.

Australia has one of the most open market access regimes in the world and is substantially more open than other countries in the Asian region.

The introduction of ACIS has had a range of positive impacts upon the automotive industry as a whole. These include:

- underpinning volumes (and hence jobs, and exports) in the industry pending greater overseas market access being achieved. This is particularly important for companies such as Toyota Australia that make truly global products and requires volume to justify investment in technology and capabilities to compete in an increasingly open market;
- 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.

Overall the industry has responded well to the replacement of the EFS by ACIS. Although ACIS was a significant fall in support levels compared to ACIS, particularly for an exporter such as Toyota, exports have continued to rise, as has investment and R&D.

The removal of the 22% motor vehicle wholesale sales tax and the introduction of the GST at 10% has further boosted vehicle affordability in Australia. Improvements in the general economic environment saw a step change increase in the size of the domestic vehicle market between 1996 and 1997. However, imported vehicles captured this market growth almost entirely. Since 1997 vehicle sales have again levelled off, despite the introduction of the new tax system.

3.3 Conclusion

Recognition of the powerful knowledge and innovation spillovers associated with the automotive industry have seen it long treated as a special case in many developed and developing economy countries.

Although automotive industry policy varies between countries and have evolved over time, internationally policy settings are still aggressively geared to attract and retain automotive investment.

The policy settings currently in place in Australia, and in particular the ACIS program, allow Toyota Australia to continue to compete for new investment.

However, the lack of progress being made in relation to improved access to major export markets (including Australia's exclusion from AFTA) and the planned reduction in tariffs will constrain its ability to successfully compete for investment. The continued erosion of the domestic market sales base for locally produced vehicles, which is in part due to the highly open nature of the Australian vehicle market relative to many of our overseas competitors, also poses a major threat to future investment.

Given these disadvantages relative to alternative investment locations, it is vital that an equivalent program to ACIS be introduced once ACIS expires.

In a highly competitive automotive investment environment, where Toyota Australia must compete with Toyota subsidiaries in North America, Thailand, Indonesia, Malaysia, Taiwan, and elsewhere, it is important that Australian policy settings towards the industry do not disadvantage Toyota Australia relative to policy settings in alternative investment locations.

Chapter Four

How Toyota Australia Has Adjusted to Changes in the Operating Environment

As demonstrated in Chapter Three, there have been very considerable changes in the operating environment facing the Australian automotive industry. These changes have had their origins in developments in both the global automotive industry and the Australian operating environment. The global automotive industry has seen a trend to consolidation amongst major players, greater global integration of the leading companies and the introduction of higher levels of technology into motor vehicles and their production. The Australian operating environment has seen ongoing reductions in tariffs which are due to fall further at the start of 2005, the termination of EFS and its replacement by ACIS and the reduction in the indirect tax on passenger motor vehicles.

Most of these changes in the operating environment have had the effect of making it more competitive and challenging for participants in the Australian automotive industry. Toyota Australia is no exception. It has been under very considerable pressure to continually lift its performance and to get deeply involved in export markets.

This Chapter outlines the main ways in which Toyota Australia has sought to meet the challenge of changes in its operating environment. These are:

- improving its quality performance;
- increasing production efficiency and reducing costs;
- increasing the degree of localisation of components;
- working with suppliers to improve their efficiency; and
- developing export markets.

Toyota Australia's actions in each of these areas has been driven by its fundamental commitment to continuous improvement and to increasing the knowledge intensity of its operations.

4.1 Improving Toyota quality performance

Toyota Australia sees quality not as an option, but as a mandatory requirement to ensure continued competitiveness in domestic and export markets.

In the late 1980s quality standards at Toyota Australia were well below world's best practice. Following a major push to improve quality, between 1989 and 1993 the number of deviations per Camry fell from 22.2 to 1.9. However, from 1993 to 1998 this level of deviations gradually rose to 2.9 per unit. This level of deviations proved unacceptable to highly demanding export customers.

The importance of building exports led to a focus on the Middle East and Saudi Arabia in particular. It quickly became apparent that in order to be accepted in that market place it was necessary to satisfy the demands for global quality levels. With Toyota Australia facing the prospect of losing this rapidly growing export market, it instituted a second major quality improvement push.

Project G was initiated in October 1997 with the objective of re-engineering the company's quality focus. This project focused on the systems and people of both Toyota Australia and its suppliers. Achieving improvements in employee knowledge, skills, attitude, willingness and commitment was the major emphasis of Project G. Project G has driven a dramatic change in the culture of the company, with Toyota Australia now seeing itself as part of the global community rather than just an Australian company.

This drive to meet world class quality standards has seen the number of deviations per Camry fall to 0.1 per unit by the end of 2001, a figure that significantly outperforms the 0.4 deviation target level.

Achieving world class quality performance and striving for zero defects has required changes to be made in a number of areas ranging from work practices and training to plant operating systems. In conjunction with the cultural change achieved through Project G, the rigorous application of the Toyota Production System principles has been of central importance to Toyota Australia being able to meet the required international quality performance levels.

The driving philosophy and key elements of the Toyota Production System are highlighted in Box 4.1.

It is the application of the Toyota Production System that allowed Toyota globally to become "the pre-eminent production organisation in the world"[28].

Box 4.1

TOYOTA PRODUCTION SYSTEM KEY ELEMENTS

Philosophy

The philosophy is founded on the elimination of waste. The term waste is used in a broad sense and encompasses all non-essential work that takes place in the manufacturing process. Integral to the elimination of waste is the building in of quality at all stages of the production process – quality is built in not inspected in at the end of the process.

Just-In-Time (JIT)

The goal of JIT production is to translate each order to a finished quality vehicle quickly and efficiently – in essence JIT is a pull system of operating. To do this only small quantities of material are kept on production lines with the resupply of those items used occurring in the right amount at the right time.

Standardised Work

Standardised work is best defined as procedures and standards of work established by supervision at the worksite.

Continuous Improvement (Kaizen)

Kaizen is the quest for continuous improvement. All employees are encouraged to contribute ideas for improvement. The quality circle and suggestions scheme are ways in which team members can be involved in the Kaizen process.

Jidoka

The principle used at Toyota to build in quality. Jidoka is giving machinery or equipment human-like intelligence so that if a defect occurs, the equipment will stop automatically. the principle of Jidoka allows team members to stop the production line to immediately rectify quality problems and ensure that defects are not passed on down the line.

Source: Toyota Motor Corporation Australia

The work Toyota Australia has undertaken with suppliers to adopt the Toyota Production System into their own operations has also been important in achieving significant quality improvements in recent years.

[28] Womack, J.P., and Jones, D.T. (1996), Lean Thinking, Simon & Schuster

4.2 Increasing Toyota production efficiency/reducing costs

Toyota Australia's philosophy is to consider cost in everything it does.

The imperative to increase efficiency and reduce costs comes from a number of quarters. First, Toyota Australia faces intense competition in the Australian market from other car manufacturers and imported vehicles. The competitiveness of the Australian vehicle market is highlighted in Chapter Seven (Table 7.3) which illustrates the above average affordability of the Camry in Australia when compared to other developed country markets. Second, Toyota Australia faces intense competition in export markets, both product competition in these markets and competition with other Toyota affiliates for the right to supply these markets. Third, Toyota Australia faces competition for investment and markets from other Toyota subsidiaries in the Asian region.

There is also pressure on Toyota Australia to demonstrate to its parent the capacity to generate an acceptable return in the longer term on the invested capital in the business. Toyota's globalisation has been accompanied by a need for greater transparency, including in terms of the performance of individual subsidiaries. This has been accelerated by Toyota Motor Corporations' listing on the New York Stock Exchange and contributes to pressure to reduce or restructure less profitable operations.

This pressure to achieve world class levels of efficiency and to generate profits has been the main driver for Toyota Australia to achieve Toyota's global performance standards.

This process of cost control and waste elimination extends to the design of the vehicle components themselves. Until recently, suppliers of components to Toyota Australia were required to produce parts in accordance with global Toyota specifications and production techniques. Following representations by Toyota Australia, Toyota head office has now allowed for components to be sourced on the basis of meeting functional specifications. This has allowed for greater localisation of sourcing by Toyota Australia and the reduction in cost of some components.

Toyota Australia needs to increase its scale of operations to over 100,000 vehicles per annum if it is to sustain local content development activity that is essential to controlling costs. The importance of continuing to build scale in local production is reflected in the aspiration of Toyota Australia that are set out in Chapter Six.

To improve production efficiency, Toyota Australia has systematically applied lean manufacturing principles encapsulated in the Toyota Production System (see Box 4.1 above). Since 1990, the application of TPS and the adoption of Just-In-Time delivery by all Toyota Australia suppliers has resulted in a 97% reduction in stock holding at the Altona plant.

A significant recent initiative to improve efficiency at Toyota Australia was the introduction of the *Drivers of Change* program in 2000, which involves all executives and senior managers. This major organisational initiative has involved introducing and developing:

- a "Balanced Scorecard" framework of management to foster and coordinate strategic breakthrough thinking, planning, resource allocation and performance measurement;[29]
- organisational restructuring reducing 23 Divisions to 16 and 13 management levels to five;
- *re:think*, a key executive development program used to identify and benchmark competency attributes of executives and senior management within Toyota Australia; and
- aligned performance appraisal and development plans and job descriptions to tie together the ongoing individual assessment of job performance against the objectives under the balanced scorecard and the competency developments identified within the re:think program.

[29] Kaplan and Norton (1996), The Balanced Scorecard, Harvard Business School

Increasing efficiency and reducing costs requires, as identified by the Balanced Scorecard, a focus on people, business processes, financial management and customers.

The key to improving efficiency is people. For people to work to best effect, they must be given the right tools, working environment and skills. Toyota Australia continues to invest in its Altona production plant to achieve higher efficiency levels. This investment is complemented by investment in training and skills development and human resources management.

Project G, while focused on driving quality improvements, with its emphasis on building the knowledge, skills, attitude, willingness and commitment of Toyota Australia's people, has also made a significant contribution to improving productivity in recent years.

The business environment operating in Australia places some constraints on the efficiency and cost gains that can be made by Toyota Australia. Although microeconomic reform in the last decade has been successful, there remain areas where further reform is required to achieve world class levels of performance. For example, the present state of Australia's industrial relations system and practices which, although improving, in some respects compare unfavourably with the industrial relations environment facing Toyota in other developed country location such as Japan, UK and the USA. However, the company is continuing to work hard to improve its performance in terms of workplace culture, with the recently concluded workplace agreement securing important commitments to productivity and flexibility gains.

4.3 Localisation

Until Toyota Australia commenced its export program, localisation effort was driven by the requirements of the domestic market. The new Camry to be introduced in 2002 has been developed for global sales. This has required developing suppliers to the global performance levels required to support export production.

When the Australian dollar was trading at a higher level, Toyota Australia focused on sourcing from whichever source was best in terms of cost, quality, and delivery. Supplier development activity tended to focus on helping established local suppliers become better at supplying the components that they produced. The decline in the Australian dollar in recent years has made it possible for Toyota Australia to change its approach to product sourcing and develop existing and new suppliers to increase localisation.

A major objective of Toyota Australia is to become free of significant exposure to movements in the Yen and US dollar exchange rates. The company cannot accept a situation where its bottom line is overexposed to currency movements. Given the vigorous price competition in both the Australian and export markets, it is simply not possible to pass on exchange rate generated costs to the final customer. Therefore Toyota Australia has instituted a strategy to pursue opportunities for greater local sourcing, both by itself and its suppliers.

Toyota Australia now explicitly looks to source from Australia first and then for the optimum source outside Australia.

The change in component specification policy by Toyota head office, that now sees Toyota Australia setting its own sourcing standards and product specifications has been important in enabling Toyota Australia to increase localisation levels from 75% on previous models to 82% on the 2002 Camry.

By working closely with local suppliers, for the new model Camry Toyota Australia has achieved significantly higher localisation levels. This model will have over 250 new local components valued at in excess of $120 million per annum. Toyota Australia has nominated key additional localisation components for introduction within twelve months of the commencement of the new model vehicle production.

To continue this trend to greater localisation more design and development work must be undertaken in Australia by both Toyota and its suppliers as component designs are being more heavily modified from the standard global Toyota design specifications. Toyota Australia, as is discussed further in Chapter Six, is now developing the engineering and product development capabilities that it will require to undertake the greater product and process design functions that this sourcing policy shift requires. This will allow Toyota Australia to localise sourcing in areas that it had previously been forced to source from Japan due to the lack of any Australia suppliers that followed prescribed Toyota global production methodologies in particular areas.

Toyota Australia holds regular imported component displays for its local suppliers to encourage proposals from them for the development of local component substitutes. It is also working closely with its suppliers to improve their overall capabilities in order to increase the general standard of the Australian supplier base. The way it is doing so is discussed below.

4.4 Supplier capability development

One of the key strengths of Toyota is the partnership relationship it has established with its suppliers. The company recognises that its performance is intimately connected to the performance of its suppliers.

A number of procedures have been developed which are designed to build trust between Toyota and its suppliers. These include an open exchange of information, regular briefings on changing technologies, the availability of support services and plentiful opportunities for dialogue.

Toyota Australia has been extremely pro-active in working with its suppliers to improve their efficiency to assist them in reducing costs and improving quality. The supplier development programs and services offered by the Toyota Supplier Development Department are focused on assisting suppliers to improve their operational capabilities through application of aspects of lean manufacturing principles. Table 4.1 sets out the range of supplier development programs and services that Toyota Australia has provided to large numbers of its suppliers in recent years.

Table 4.1

TOYOTA AUSTRALIA SUPPLIER DEVELOPMENT PROGRAMS AND SERVICES

Supplier support initiative	Specific program	Benefits received
Direct supplier assistance	Direct application of TPS principles – interactive support program	Overall business operating benefit – cost, quality and delivery
Consultation services	Specialist consulting – eg. plant/process design	Effective problem resolution and supplier education
TPS development networks	Supplier to supplier contact through visits/workshops	Accelerate improvement process
Kaizen/ Jishuken/ Workshop events	Hands-on shop-floor improvement workshops	Demonstration of short lead time improvement activities
TPS training seminars	Formal theoretical & practical education	Education and motivation process
TPS benchmarking	Visits and benchmarking study locally and worldwide	Assist world class comparison and target setting
Top to Top quality/delivery	Problem area resolution through management focus	Quick response to problems and supplier education
Supplier crisis prevention and management	Crisis response team hands-on approach	Avoid business losses and protect long term business viability
Supply chain management	Value chain analysis and management	Focus on all cost areas, from raw material to final customer
New model programs	Program management and production preparation	Effective program introductions and reduced problems
Supplier structure/ education	Resources and management structure establishment	Program sustainability & internal education process
Japanese TPS expert audits	Access to Japanese expertise who assist with training and plant audits	Supplier reference to worlds best practice, benchmarking and training opportunity

TPS = Toyota Production System

Source: Toyota Motor Corporation Australia

The application of Toyota Production System principles by suppliers has seen significant improvements in efficiency. Significant man-hour, inventory, floor space, and lead time reductions have been achieved by many Toyota suppliers due to the application of these principles to their operations.

The future focus of Toyota Australia's supplier activities is twofold.

Firstly, capability development of current and new suppliers through encouraging local component suppliers to enter into product areas where Australian production had previously been lacking. Toyota Australia has encouraged the development of knowledge alliances with global suppliers.

The second focus is volume. Toyota Australia aims to grow its domestic volumes to provide a more significant domestic base, and is encouraging local producers to compete for Toyota supply contracts in Asia where these countries are currently sourcing components from Japan.

4.5 Increasing export orientation

Export sales are crucial to viable scale for Australian manufacturers.

In the mid 1990's, recognising that Toyota Australia needed to achieve higher volumes at its Altona plant, a decision was taken by Toyota headquarters that Toyota Australia should begin exporting Camrys to the Middle East. The decision was also a reflection of Toyota headquarters recognition of the increasing quality standards and improved competitiveness of the Toyota Australia operations. This important market has underpinned Toyota Australia's export performance over the past five years, with exports to Saudi Arabia alone now accounting for 71% of its completely built up (CBU) exports.

The growth in exports to Saudi Arabia has been driven by Toyota Australia's ability to achieve world class standards of quality and competitive pricing as well as delivery reliability (Toyota Australia has never missed an export shipment deadline). It has also been supported by Toyota Australia being able to make alterations in the vehicle to meet specific market requirements. It has improved air-conditioning systems and adjusted handling characteristics to better satisfy demanding Saudi buyer's preferences in these areas.

Government policy in the form of EFS in the late 1990s and ACIS now, has been an instrumental part of Toyota Australia's successful case to Toyota Japan to secure these export markets.

Toyota Australia continues to pursue new export markets and in 2001 commenced exports to South Africa. In 2001, it exported CBU Camrys to 33 countries.

At the same time that export sales where rapidly increasing, the domestic market for Toyota Australia vehicles was falling. The replacement of the locally produced Corolla with the lower volume selling Avalon accelerated this slide in local market share.

Toyota Australia exported 60% of its production in 2001, with almost 45% of production going to Saudi Arabia alone. This heavy reliance on just one major export market carries significant risks. Toyota Australia is actively seeking to establish other major export markets in China, South Africa and Latin America in addition to exploring options to rebuild its domestic sales base. Toyota Australia wishes to continue to increase exports and to achieve greater market diversification. However, domestic sales will need to increase even faster than exports if a 50/50 balance between export and domestic sales volumes – considered desirable to ensure proper balancing of risks - is to be restored.

It must be noted, however, that exports are made possible by a significant and stable domestic market for locally made vehicles. Unless Toyota can reverse the decline in the level of domestic sales of local production, its ability to attract the investment required for production of new models in the future will be threatened. Any loss of new investment, due to insufficient domestic sales, would prevent Toyota Australia from continuing to play a role as an export centre within the Toyota global production network. Government policy settings can significantly influence Toyota Australia's ability to strengthen its domestic market base.

4.6 Conclusion

Over the past five years the adjustments that Toyota Australia has made to adapt to the changing operating environment have resulted in significant changes in its production and sales performance. Quality, cost and product delivery performance have all been improved.

Quality has been dramatically improved and now exceeds Toyota quality target levels.

Efficiency has increased, both within Toyota Australia and its suppliers, with the reduction of waste in production processes continues to be aggressively pursued.

Without its supplier support and development activities, many suppliers today would not be internationally competitive

Recognising the crucial role of its people in achieving future quality and productivity goals, Toyota Australia has placed significant emphasis on upgrading of the skills and qualifications of the Toyota Australia workforce and improving human resources management practices.

The quality and productivity improvements that Toyota Australia has achieved to date have allowed Toyota Australia to expand its export role within the global Toyota network. Export sales have quadrupled over the past five years.

Table 4.2 presents key indicators of Toyota Australia performance improvements in the areas of quality improvements, efficiency gains and export market growth.

Table 4.2

CHANGING TOYOTA AUSTRALIA PERFORMANCE: SELECTED INDICATORS 1996 – 2001

	1996	2001
Quality standards (deviations per unit)		
Camry	1.95	0.1
Corolla	~1.8	n/a
Avalon	n/a	0.2
Productivity		
Gross Labour Hours per Vehicle	52.8	36.0
Labour qualification levels		
% of staff with TAFE or higher qualifications	20%	45%
Industrial relations climate		
Strike hours as a % of total available hours	5.5%	>0.2%
Export sales of Toyota Australia production		
Camry (CBU)	15,000	59,200

Source: Toyota Motor Corporation Australia

Toyota Australia has responded strongly to the changes in its operating environment.

Toyota Australia must maintain the continuous improvement effort if it is to secure the investment it needs to produce new models and grow its role in the Toyota network.

Toyota Australia needs a policy environment that supports continuous improvement in capabilities if it is to grow.

Chapter Five

Australian Automotive Industry: Strengths, Weaknesses, Opportunities and Threats

Toyota's aspirations and performance are constrained by the nature and capabilities of the Australian automotive industry, and the business and policy environment in which it operates. There has been much greater understanding in recent times that competition takes place between competing value chains – this is as true at the national level as it is at the company level.

The potential of the automotive industry is constrained by a number of factors which directly affect the supply side. This involves aspects such as the available skills base, the sophistication and depth of the automotive supplier base, the industrial relations system, the business environment more generally and the quality of the education and research institutions.

The potential is also constrained by a number of factors which directly affect the demand side of the equation. These include the size and nature of the domestic market, including the relative size of the private and fleet markets, and access to potential export markets. The greater the size of the effective market available to the automotive industry the greater the opportunities for exploiting available economies of scale, building critical mass and developing a deep supplier infrastructure.

Finally, the potential is influenced by the policy environment for the automotive industry in Australia relative to that provided in countries which compete directly with Australia to attract automotive industry investment.

The strengths, weaknesses, threats and opportunities facing the Australian automotive industry have formed the development of the industry and have resulted in the following areas of revealed competitive advantage:

- The production of medium and upper medium sized cars (not small cars)
- Innovation-based automotive components
- Design and engineering automotive services
- Exports to particular overseas markets
- High flexibility in producing relatively low volumes of highly specified, high quality vehicles.

Although the automotive industry is one of Australia's largest manufacturing industries, it is relatively small compared to automotive industries in most developed countries. The exception is the Swedish automotive industry, although a different picture emerges when account is taken of Volvo's production outside Sweden. Apart from Japan, Australia is the only developed country automotive producer which is not a member of either the EU or NAFTA.

The SWOT analysis presented below reflects the issues considered by the major global automotive companies when considering investment decisions to be potentially placed in Australia.

5.1 Strengths

The Australian automotive industry has a relatively long history of production of a range of automotive products. The leading global automotive companies have had operations in Australia for considerable periods of time. This has a number of important implications. First physical and intellectual infrastructure has been built up over time to support the automotive industry. Second a great deal of experience and know how has built up in the manufacture of medium to upper medium sized vehicles at relatively low volumes. Third a reasonably diversified component supplier industry has developed.

To adapt to the relatively small Australian market, the car manufacturers and component suppliers have developed strong skills in low volume production. They have also developed skills in developing new models and new products at modest investment costs compared to the costs typical in the larger developed economies.

The Australian automotive industry is one of the relatively few which possesses the capability to design, engineer and manufacture a new vehicle. Reflecting the production history of the industry a wide ranging skills base has been developed. In the last decade opportunities have emerged to export Australian design and engineering services. The introduction of the Vehicle Industry Certificate and the commitment by the industry to training has seen a significant upskilling of the vehicle manufacturing workforce. The workforce is able to operate effectively at high levels of complexity and flexibility.

Innovation in all its forms has become increasingly important to achieving and sustaining success in the automotive industry. Reflecting this, the industry is one of the leading sources of business expenditure on R&D. In manufacturing, it is the largest spender on R&D in Australia. A number of the component suppliers have established strong reputations for producing innovative products which are finding acceptance in global markets. The knowledge intensity of the modern motor vehicle is now such that once capacity and capabilities are lost, they are very difficult to rebuild. The four Australian manufacturers, as subsidiaries of some of the world's largest vehicle manufacturers, are a significant asset for the Australian manufacturing base.

The fact that the four car manufacturers are all subsidiaries of the world's four leading car manufacturers brings a number of strengths to the Australian automotive industry. The global linkages possessed by the four car manufacturers have the following benefits:

- Access to know how and technology
- Access to global platforms
- Access to overseas markets

These global links allow Australia to leverage the capabilities of the domestic manufacturing base for products for domestic and export markets. They also contribute to the further development of the Australian manufacturing base.

Box 5.1

AUSTRALIAN AUTOMOTIVE INDUSTRY - STRENGTHS

1. History of production and build up of an extensive automotive infrastructure
2. Special skills associated with low volume production
3. Wide ranging skills based
4. Growing innovation capability
5. Linkages to the worlds leading car manufacturers

5.2 Weaknesses

The Australian automotive industry has had to cope with the reality of a small domestic market. The size of the market places considerable limits on the ability of the industry to take advantage of all available economies of scale in production. In the last two decades, there has been a considerable reduction in the number of car manufacturers and in particular the number of assembly plants and models produced as the manufacturers have striven to achieve greater economies of scale.

The process of rationalisation since the mid 1980's has seen the number of component suppliers fail and the situation develop in which only one supplier now exists for some important automotive components. As the industry has embraced Just-In-Time principles, one of the implications is that supply problems at one component producer can bring significant parts of the industry to a standstill.

The small scale of the domestic market means domestic volume alone is not sufficient to support the local production of vehicles or many key components. The continued erosion of the local manufacturer's share of the Australian market places the viability of the industry in jeopardy as critical mass is being lost.

An outcome of the above developments is that there is no local production of certain significant components, eg, trans-axles. The scale at which such parts must be produced in order to reach full operating efficiencies is too great for the Australian market. These components are imported from the major developed automotive countries in North America, Japan and Western Europe. In a world of freely floating exchange rates this means that an important part of the cost base of the Australian car manufacturers is outside their control. Over time, there is, however, capability to increase the degree of localisation of automotive components to reflect sustained changes in currency relativities.

Local tooling sector also lacks the scale to support the industry during peak periods. The number of models produced in Australia and model cycle timing means that demand for tooling tends to occur simultaneously with long periods between demand peaks.

Increased localisation requires Australian suppliers to develop technology alliances to achieve global competitiveness. Presently, however, some suppliers lack the management capabilities to develop these relationships and are not investing in developing them.

The relatively labour intensive nature of car and automotive component production means that the industry's operating efficiencies are influenced by the industrial relations environment. The move in the early 1990s to enterprise bargaining has meant that the companies have been able to negotiate improvements in work practices as offsets for improvements in wages and conditions. Notwithstanding the improvements in the industrial relations environment in Australia, it continues to lack the flexibility availably to car manufactures in alternative locations in Western Europe, Asia and North America. Industrial action can also delay the installation of capital equipment necessary to maintain or increase production, or introduce new technology. This is a further deterrent to attracting investment.

The relatively small, highly open domestic market has meant that the car manufactures and component suppliers have had to pursue export opportunities in order to grow. Solid export markets have been developed for vehicles in the Middle East and North America in addition to the long standing market in New Zealand. Components are exported to a wider range of countries than are vehicles. The reason for this is the trade barriers facing exports of vehicles in regional markers in Asia. Despite strong efforts by the Australian government to negotiate a relationship between AFTA and CER this has not occurred which makes sale of Australian made vehicles in ASEAN countries not viable.

Box 5.2

AUSTRALIAN AUTOMOTIVE INDUSTRY – WEAKNESSES

1. Small Australian domestic market and lack of access to economies of scale at vehicle manufacturer, component supplier, and tool maker level
2. Lack of alternatives in the domestic supplier base
3. Gaps in the domestic supplier base and currency exposure
4. Impediments in the industrial relations environment
5. Lack of access to important regional markets in Asia for vehicles
6. Capability gaps in domestic suppliers limiting their ability to grow

5.3 Opportunities

The opportunity to expand sales by the four car manufacturers in the Australian market will come from introducing new models. Past experience suggests that these will not be small cars. Rather, increased vehicle sales will come from the introduction of new models or model variants based on existing platforms. As demonstrated by the production of utilities based on family cars, such vehicles can be produced at competitive prices. Some of the car manufacturers are considering introducing four wheel drive variants.

The experience of the last five years shows the considerable potential the industry possesses to expand export sales of vehicles. The industry has increased its export performance to approaching 30% of total sales. The increase in exports to Middle Eastern markets has been most striking. Exports have also increased to North America and South Africa. The obvious gap is export sales to regional markets in Asia and China. With China committing to open its market for vehicles in the next five years as part of its WTO obligations opportunities could emerge for exports of Australian vehicles to that market.

The persistent weakness of the Australian dollar compared to the currencies of major trading partners in North America and to a lesser extent in Japan and Western Europe means that the environment for increasing exports to those markets is positive. It also means that there are incentives to localise, wherever possible, major components that are currently being imported from those markets. This opportunity will be transient and needs to be seized while the exchange rate is favourable.

Beyond the opportunities associated with the production and exports of automotive products, opportunities also exist for the export of R&D, design and engineering services. In the last five years or so automotive companies have taken on significant R&D and engineering services provision roles within their parent companies networks. Given the availability of skills in the Australian industry and the attractive cost base the potential for increasing exports of services is strong.

The average age of the Australian vehicle fleet, at 10.5 years,[30] is significantly above that in Japan (6.2 years[31]), EU (7.3 years 1998[32]), Korea (5.5 years[33]) or USA (7.7 years[34]). This suggests there is further potential for the Australian new vehicle market to grow. Measures to reduce the average age of the fleet would contribute to a stronger domestic vehicle market and increase the opportunities for local manufacturers to increase their sales of locally made vehicles.

[30] ABS (2001) Motor Vehicle Census, Australia 31 March 2001 Cat. No. 9309.0

[31] APEC (2001) Automotive Profile - Japan, www.apecsec.org.sg 29 April 2002

[32] European Environment Agency (2001) Average Age of the Vehicle Fleet 20-08-2001

[33] APEC (2001) Automotive Profile - Korea, www.apecsec.org.sg 29 April 2002

[34] APEC (2001) Automotive Profile - USA, www.apecsec.org.sg 29 April 2002

Box 5.3

AUSTRALIAN AUTOMOTIVE INDUSTRIES – OPPORTUNITIES

1. Opportunities in the Australian market through production of variants
2. Opportunities to expand exports of both vehicles and components
3. Incentives to localise sourcing of certain automotive components
4. Potential to expand exports of R&D, design and engineering services and take on global mandates
5. Potential to expand the domestic vehicle market through initiatives to reduce the age of the national vehicle fleet

5.4 Threats

Market access is a major threat to the industry. The continued exclusion of Australian vehicles from regional markets in Asia caused by high barrier protection in most ASEAN countries and the lack of a relationship between AFTA and CER has two significant negative consequences for the industry. First, it limits the companies' capacity to grow exports and focuses exporting efforts on more distant, albeit more open, markets. Second, it means that in the competition for investment, local manufacturers can not demonstrate the same market potential and access to ASEAN as other locations, eg. Thailand. There is a risk other locations in Asia which possess access to regional economic Asian markets will be preferred for classes of vehicles which could otherwise be produced competitively in Australia.

Although exports of vehicles have grown dramatically into Middle Eastern markets, the Australian industry is now heavily dependent on this market for viability. If Middle East market circumstances were to change, a significant proportion of vehicle exports could be placed at risk.

The share of the Australian market held by the domestic automotive industry has declined markedly in the last decade as the industry has rationalised, local production of small cars has stopped and the market for entry level small vehicles has expanded. There has also been a trend to sports and utilities vehicles which are currently not produced locally. Further erosion of the share held by the domestic automotive industry in the Australian market would place the industry at risk.

The future of the automotive vehicle manufacturers depends on their ability to continue to attract significant investment by their parent companies. The trend has been for the major automotive companies to become more transparent in terms of the returns being made by elements of their businesses which means that their capacity to carry lesser performance over an extended period of time has been reduced. The Australian subsidiaries are under pressure to meet globally established performance benchmarks.

In making major investment decisions the parent companies of the car manufacturers not only look at the performance of their subsidiaries but also the policy environments in which they operate. There is strong competition between developed and emerging countries to attract and retain investment by the world's leading automotive companies. If automotive policy environments become uncompetitive the consequence is lost investments.

Box 5.4

AUSTRALIAN AUTOMOTIVE INDUSTRY – THREATS

1. Development of alternative locations in Asia as centres for automotive production
2. Erosion of the Australian domestic market in terms of the market share of the local industry
3. High concentration of vehicle exports to Middle East markets
4. Application of global performance benchmarks to Australian subsidiaries
5. Australian policy environment becoming less attractive than that in competing countries

5.5 Conclusion

Over the last decade the Australian automotive industry has improved its performance to meet the challenge of both lower tariffs and the operating principles being applied by the world's leading global automotive companies. Production by the vehicle produces is now focussed on a small number of medium to upper medium car models. Exports of vehicles and automotive components have increased very strongly and are now worth almost $5 billion which places automotive products amongst Australia's leading exports.

The industry has developed a strong skills base and valuable capabilities both in the areas of vehicle manufacturer and component production and innovation. These skills and capabilities contain the potential for the industry to increase its growth in the future based essentially on export growth. The automotive industry is far from being a mature industry – it is increasingly applying a wide range of new technologies and upgrading the quality of its product offerings.

In order to achieve its growth potential a number of challenges and threats facing the industry will need to be met and overcome. Given the central importance of continuing to attract investment by the car manufacturers' parent companies, the industry's growth potential will only be realised if the industry is provided with a globally competitive policy and business environment.

Box 5.5

AUSTRALIAN AUTOMOTIVE INDUSTRY – SWOT ANALYSIS

STRENGTHS	**WEAKNESSES**
1. History of production and build up of an extensive automotive infrastructure 2. Special skills associated with low volume production 3. Wide ranging skills base 4. Growing innovation capability 5. Linkages to the world's leading car manufacturers	1. Small Australian domestic market and lack of access to economies of scale at vehicle manufacturer, component supplier, and tool maker level 2. Lack of alternatives in the domestic supplier base 3. Gaps in the domestic supplier base and currency exposure 4. Impediments in the industrial relations environment 5. Lack of access to important regional markets in Asia for vehicles. 6. Capability gaps in domestic suppliers limiting their ability to grow
OPPORTUNITIES	**THREATS**
1. Opportunities in the Australian market through production of variants 2. Opportunities to expand exports of both vehicles and components 3. Incentives to localise sourcing of certain automotive components 4. Potential to expand exports of R&D, design and engineering services and take on global mandates 5. Potential to expand the domestic vehicle market through initiatives to reduce the age of the national vehicle fleet.	1. Development of alternative locations in Asia as centres for automotive production 2. Erosion of the Australian domestic market in terms of the market share of the local industry 3. High concentration of vehicle exports to Middle East markets 4. Application of global performance benchmarks to Australian subsidiaries 5. Australian policy environment becoming less attractive than that in competing countries

Chapter Six

Toyota Australia's Aspirations

Toyota Australia's aspiration is to establish a sustainable position as one of Toyota's global manufacturing, product development and export centres in Australia. Toyota Australia aims to be number one in everything it does.

Toyota Australia believes that the improvements in performance achieved in recent years, coupled with the increasingly globally integrated nature of the automotive industry present the company with a window of opportunity to achieve significant growth. Within the next five years the company aims to:

- increase vehicle production volume by over 50%;
- expand domestic sales of locally made vehicles to over 75,000;
- export 75,000 vehicles per annum;
- expand production of certain key vehicle components;
- develop strong product design/engineering capabilities and attract to Australia the Toyota Technical Centre for the Asia Pacific region;
- become a role model for other Toyota subsidiaries in the region; and
- greater strategic responsibilities in Toyota's global operations.

To reach this position within the global Toyota network, it is important that Toyota Australia offers sound prospects for profitable future growth both in domestic and export markets. Such growth will underpin investment to build the greater production capacity required to service market growth. Toyota Australia is also looking to take on new functions within the global Toyota network.

Toyota Australia must also now be pro-active in approaching Toyota head office with new ideas for the roles that the company can take on. This is particularly true now that Toyota globally has grown to the point where it is too big to centrally micro manage its overseas subsidiaries. This opens up new opportunities for Toyota Australia to play a more active and strategic role within the Toyota network.

It should be noted, however, that while membership of a leading global company brings with it significant opportunities, it also constrains some activities. For instance, Toyota Australia is not free to pursue export opportunities anywhere that it chooses. It must compete for export market mandates with other subsidiaries, such as the USA and Taiwan, that produce the Camry.

In order to achieve the ambitious targets outlined in Table 6.1 it will be necessary for Toyota Australia to convince its parent that considerable new investment in the Australian operations is warranted. To do so, it is important that not only does Toyota Australia meet, or exceed, Toyota global quality and efficiency standards, but also that the policy environment in place in Australia is competitive with that in other competing production centres.

Table 6.1

TOYOTA AUSTRALIA PRODUCTION AND SALES ASPIRATIONS

	2003	*2005 - 2007*	*2010*
Domestic Production Capacity	115,000	*150,000*	*200,000+*
Export Sales	70,000	*75,000*	*100,000*
Domestic Sales	45,000	*75,000*	*100,000*

Source: Toyota Motor Corporation Australia

Toyota Australia recognises that achieving these aspirations requires it to increase sales by developing more attractive vehicles, and being internationally competitive in producing these vehicles.

6.1 Vehicle sales growth

To justify new investment in its Australian production facility, it is imperative that Toyota Australia expand both its domestic and export sales.

Toyota's strategy to improve domestic market sales includes a product plan to bring to the market more appealing vehicles, especially in terms of improved fuel efficiency, safety and environmental performance. This includes the introduction of the new Camry in late 2002 with its locally made new high technology four cylinder alloy engine which delivers both improved fuel efficiency and environmental performance as well as increased power. The engine uses Toyota's latest Variable Valve Timing Intelligent (VVTi) technology and is capable of meeting stringent European vehicle emission standards (Euro 2 & Euro 3). To further build domestic sales, Toyota Australia is exploring options for an additional domestic model to expand its locally produced product range.

Further increasing exports will require Toyota Australia to expand its existing markets in the Middle East, continue its export push into South Africa, and access new markets such as China.

Toyota Australia has already put in place plans to increase capacity at its Altona plant to 115,000 units by 2003. However, to achieve further production volume increases, domestic sales must be increased and new export markets must be secured.

In order to position Toyota Australia to capture new export markets, the company needs to shorten lead times for the introduction of new models. The new Camry going into production later this year will be launched approximately 12 months after its release in Japan and the United States. This is a major barrier to capturing new export contracts. Therefore, Toyota Australia is fully committed to making the investment necessary to have the next Camry model ready in time as part of a simultaneous global model launch.

By 2007, Toyota Australia aspires to have expanded domestic sales of locally made vehicles to 75,000 units per annum and also be exporting in excess of 75,000 units per annum.

6.2 Vehicle production growth

Toyota Australia aims to increase domestic production to 150,000 vehicles by 2007. This is seen as a stepping stone to achieve the end of decade aspiration of domestic production of some 200,000 vehicles per annum.

In addition to the new investment being made to increase plant capacity to 115,000 units by 2003[35] (from 100,000 units), major new investment will be needed within the next three to four years to reach these ambitious production targets. These will be a threshold investment decision that will determine whether Toyota Australia can grow to meet its ambitious targets.

Major investment in design and components and tooling development will also be needed to enable Toyota Australia to bring forward the introduction of the next Camry model (to become synchronised with global model launch dates) and to add an additional model to its production range in Australia.

To secure these major new investments Toyota Australia needs to continue its strong recent record of improving quality, reducing costs and making sure the right products are in the right place at the right time. However, unless Toyota can reverse the recent decline in the Australian domestic sales base, it is unlikely that such significant new investment will occur. Export sales add vital additional sales volumes. However, export markets also involve greater risk and it is hard to mount an investment case that substantially relies on export focused production. A strong domestic sales base provides the demand stability required to support forward investment decisions. Greater volumes also provide a stronger case for investment in component supply.

6.3 Increase local production of strategically important vehicle components

Increased localisation of vehicle and engine components is a high priority for Toyota to enhance the capacity and technology of local automotive supply companies to meet the global requirements of local vehicle manufacturers. It also helps reduce volatility in costs due to exchange rate fluctuations.

Toyota Australia is particularly focusing on localising the production of a new V6 engine due to its significant cost and the consequent exposure to exchange rate risk in sourcing from the US.

Toyota is also examining the possible localisation of trans-axle production capabilities in Australia. Even if FWD trans-axle manufacture were not viable in Australia given domestic volumes, it may be possible to build components here.

6.4 Taking on new functions within the Toyota global network

As well as seeking to increase significantly its vehicle production and sales volumes and production of strategically important components, Toyota Australia is pursuing opportunities to take on new roles within the Toyota global network based on building up a technical centre for design and engineering in Australia.

The opportunity to do this arises partly from the evolution of thinking in Toyota away from central control over Toyota products and engineering towards giving greater strategic responsibility and operational autonomy to leading affiliates throughout the global network. In its “2010 Global Vision” statement, Toyota Motor corporation has committed to “clarify responsibilities and authority to create optimal and independent local entities in each region”[36]. This includes increased capacity and capability to conduct design and engineering and to more effectively tailor products to local market demands and the capabilities of local suppliers.

Although Toyota Australia already possesses significant in house engineering capabilities, these are primarily concentrated on supporting local component procurement. In order to meet growth aspirations Toyota Australia needs to substantially expand the company’s engineering/design capabilities. This will enable Toyota Australia to:

[35] Toyota Australia Media Release 13 December 2001

[36] Toyota Motor corporation press release, “2010 Global Vision”, April 2002

- design and engineer vehicle variants based on global platforms primarily for the Australian market.
- better match the capabilities of the local supplier base to their requirements for producing the Camry world car to world standards.
- take on design and engineering responsibilities for Toyota operations elsewhere in Asia Pacific.

At the present time Toyota has a significant Technical Centre in the US and is developing one in Western Europe. Toyota is considering locations for a Toyota Technical Centre – Asia Pacific. A decision has note yet been made but Australia is one of the countries being considered. Securing this Technical Centre would allow Toyota Australia to quadruple its design and engineering capabilities.

Toyota Australia currently employs 85 technical and engineering staff.

Securing this new capability will open up new product development opportunities and support the achievement of the company's sales and production targets.

The development of new design and engineering capabilities is a real opportunity for Toyota Australia to assume a more strategically significant role within the Toyota global network.

6.5 Conclusion

The major investment in the Altona plant in 1995, and subsequent investments to prepare for the production of the Avalon in 2000 and the launch of the new model Camry in the third quarter of 2002, demonstrates Toyota's long term commitment to car manufacturing in Australia.

Toyota Australia is now positioned to make a considerable ongoing contribution to Toyota's global production and export activities.

To fulfil its aspiration to establish a sustainable position as one of Toyota's global manufacturing, product development and export centres, Toyota Australia has ambitious production and sales goals for the remainder of this decade.

If Toyota Australia is able to achieve its aspirations this will have very considerable benefits for the Australian economy in terms of investment, exports, employment, workforce capability development, and development and expansion of the Toyota Australia supplier base.

To achieve these goals it will be necessary for Toyota Australia to demonstrate to its parent that considerable new investment in the Australian operations is warranted. Toyota Australia needs to meet, or exceed, Toyota global quality and efficiency standards, and the Australian policy environment must be competitive with that in competing production locations.

Chapter Seven

Recommended Post 2005 Policy Environment

The Australian automotive industry has demonstrated over the last decade the capacity to meet the challenges coming from both global and domestic sources. The industry has successfully restructured its activities to cope with increasing global integration of the automotive industry and the changing policy environment in Australia. Production has grown since the 1997 review driven primarily by the strong export growth achieved by both the car manufacturers and component suppliers. Exports were close to $5 billion in 2001.

At the same time, in the face of declining tariffs, the market share of imports has risen and the growth possibilities for the automotive industry in the Australian market are constrained. Although Toyota and other companies in the industry have high growth aspirations, achieving them will depend not just on the companies' own efforts but also the attractiveness of the Australian policy environment for the automotive industry compared to that in competing investment locations overseas.

Due to the significant and widespread benefits that the automotive industry is brings to the economies in which it is located, the industry receives special policy attention in many countries from both national and sub-national governments (eg. states in the USA). Governments have sought in a range of ways to provide policy environments for the automotive industry which attract and retain automotive investment in their jurisdictions.

The competition among nations, and regions within them, to attract and retain automotive industry investment is intense. Toyota considers the Australian policy settings for the automotive industry need to be internationally competitive for Australia to attract and retain automotive investment.

If internationally competitive policy setting are in place, Toyota Australia believes that it has real prospects for sustainable growth and the ability to assume an expanded role within the Toyota global production and sales network along the lines envisaged by the company's aspirations outlined in Chapter Six. Achieving this would bring substantial benefits to the Australian economy in terms of investment, production, employment, exports, and spillovers from the growth and development of Australia's knowledge based manufacturing base.

7.1 Specific policy areas

The Minister for Industry, Tourism and Resources, The Hon. Ian Macfarlane, in the joint media release with the Treasurer announcing the automotive industry review stated the Government's commitment to developing an internationally competitive automotive sector in Australia[37]. The Productivity Commission inquiry has been asked to examine post 2005 assistance measures for the automotive industry and to set out options for the consideration of the Government.

Toyota Australia considers the development of an internationally competitive automotive sector in Australia requires internationally competitive industry policy settings which reflect the Australian and international operating environment faced by the automotive industry.

Toyota Australia focuses its recommendations on Government policy on the following:

- tariffs post 2005;
- the need for a successor program to ACIS;

[37] Costello, P and Macfarlane, I (2001), The Government Announces Auto Industry Review, Joint Media Release 21st December 2001.

- improving international market access, particularly with regards to ASEAN countries;
- industrial relations;
- the ability of manufacturers to build their domestic market share; and
- the need for policy settings to be adopted for a longer time frame than five years, preferably 10 years. Significant investments require at least two model cycles, or 10-12 years, to recoup the investment.

as being crucial to the achievement of a vibrant growing automotive industry in Australia beyond 2005.

In addition to these key policy areas, Toyota Australia believes that environmental and safety issues relating to the age of the Australian vehicle fleet should also be considered by the Government as part of a comprehensive review of the policy environment impacting upon the Australian automotive industry.

7.1.1 Tariffs

Toyota Australia accepts that tariffs on passenger vehicles and components are scheduled to fall to 10% in 2005, while tariffs on commercial vehicles will remain at 5%.

Toyota notes that this drop represents a significant drop in tariff protection and a fall in the value to the industry of ACIS benefits.

Toyota Australia believes that tariffs should be held at these scheduled rates beyond 2005. Tariffs at this level would be the same as the EU's common external vehicle tariff of 10%. The policy stance would be similar to that of the US in providing a high tariff for a significant segment of the market. The US tariff is 2.5% on passenger vehicles and 25% on light trucks and commercial vehicles which account for over 60% of total production and half of all vehicle sales. Once the new Australian tariff rates come into effect in 2005, the only developed country with significantly lower average tariffs on vehicles will be Japan. For non-tariff related policy reasons, imports only hold 6.3% of the Japanese market.

Australian automotive tariffs are already significantly lower than those in place in key South East Asian automotive producing countries that are competitors with Toyota Australia for new automotive investment. Australian tariffs will remain much lower even if tariff changes envisaged in some of these countries over the next few years are implemented as scheduled (see Table 7.1).

Table 7.1

TARIFF RATES IN SELECTED KEY SOUTH EAST ASIAN MARKETS

Indonesia	Currently 125% with a 75% surcharge on CBU vehicles. Scheduled to fall to 40% with 50% surcharge in 2003.
Malaysia	140 – 300% on passenger cars dependent on engine size and 60 – 200% on 4WD and commercial vehicles.
Thailand	60 – 80% on vehicles dependent on engine size. 10 – 46% on components.
China	Currently vehicle tariffs are 50 - 60%. This rate is to fall to 25% by 2006.

Source: APEC tariff database, www.apecsec.org.sg, Sites accessed as at 1st April 2002

The actual degree of import penetration of a country's domestic automotive market is a useful indicator of the degree of market openness. Table 7.2 below sets out import penetration rates for Australia and a selection of developed economy automotive producing countries. In the case of Germany, Sweden and the US that are members of larger trade blocs, the import share is shown both for imports from within the trade blocs and from outside the trade bloc. Australia and Sweden have the highest import penetration of their markets and Japan has the lowest.

Table 7.2

IMPORT PENETRATION IN AUSTRALIAN AND SELECTED DEVELOPED ECONOMY MARKETS

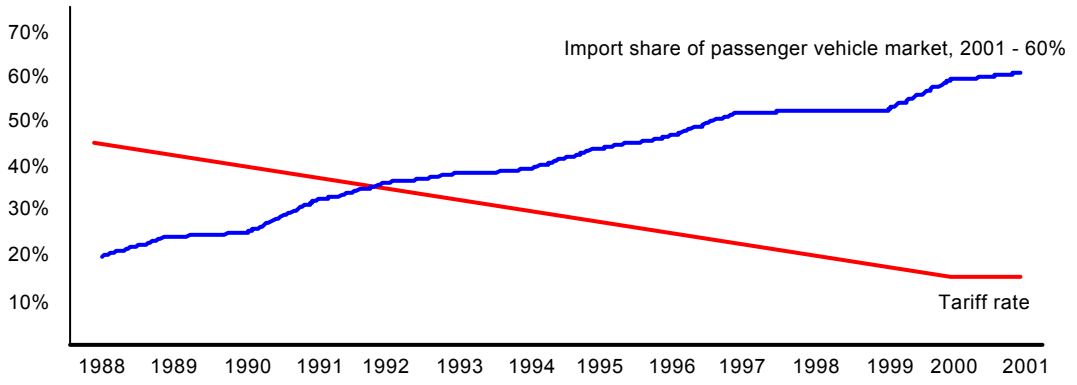
	Domestic Passenger Car Market (2000)	Import market share	Import (from within trade bloc) market share	Import (from outside trade bloc) market share
Australia	**554,000**	**58.9%**	**NA**	**58.9%**
Germany	3,380,000	47%	30%	17%
Japan	4,225,000	6.3%	NA	6.3%
Sweden	291,000	71.8%	46.2%	25.6%
United States	17,300,000	34%	17.5%	16.5%

Sources: Department of Industry Tourism and Resources (2001), Key Automotive Statistics 2001; Just-auto.com (2000), Global Car Forecasts to 2005; German Association of the Automotive Industry, Annual Figures (www.vda.de); www.ita.doc.gov/td/auto/qfact.html; The Swedish Institute (2001), The Motor Vehicle Industry in Sweden 2001, (www.si.se). Sites accessed as at 1st April 2002

Table 7.2 demonstrates the relatively high degree of openness of the Australian marketplace to imported passenger vehicles, as well as highlighting that the majority of imports into trade bloc member countries such as the USA, Germany and Sweden come from fellow members of their respective trade blocs, NAFTA and the EU. Figure 7.1 shows the trend in import market share of the Australian passenger vehicle market since 1988.

Figure 7.1

IMPORTED VEHICLES' SHARE OF THE AUSTRALIAN PASSENGER VEHICLE MARKET 1988-2001



Source: VFACTS

A further indication of a country's automotive market is provided by measures of car affordability. Table 7.3 sets out the relative affordability of comparable Toyota vehicles in a range of developed country markets. This indicates that vehicle affordability in Australia is already at world standards, with a 15% tariff of passenger vehicles in place. At the coming 10% tariff level, vehicle affordability will be close to world leading status for developed economy nations.

Table 7.3

VEHICLE AFFORDABILITY IN AUSTRALIA AND SELECTED DEVELOPED COUNTRIES

	Cost of base model automatic 4 cylinder Camry variant in $A.	Cost of base model automatic 4 cylinder Camry variant in local currency	Average full time weekly earnings	Vehicle cost: average weekly earnings
United Kingdom	$A35,080	Stg12,980	Stg 444	1:29.2
United States	A$37,560	US$20,285	US$ 640	1:31.7
Australia	**A$27,900**	**A$27,900**	**A$ 859**	**1:32.4**
Germany	A$32,360	Euro19,803	Euro 600	1:33.0
Canada	A$30,120	C$25,600	C$ 773	1:33.1
Sweden	A$45,090	SEK 248,000	SEK 4,650	1:53.3

Sources: Industry price data from Toyota Australia; Earnings data from ABS, 6302.0; www.statcan.ca; www.destatis.de; www.statistics.gov.uk; www.bls.gov; www.si.se; exchange rates at mid April 2002

In view of the already high degree of openness of the Australian automotive market to imports and the affordability of cars in Australia it is likely that unilaterally lowering tariffs to below 10% would provide little benefit to consumers, but could place the viability of local vehicle production in jeopardy.

Further unilateral tariff reductions would also send a message to investors that Australia was not committed to maintaining an environment supportive of further investment in automotive production.

With the industry globally going through a period of restructuring, the outcomes of which are still unclear, it would carry considerable risk for Australia to act unilaterally in a way that suggests that it is unlikely to provide as supportive an environment for automotive investment as that in many other competing investment locations.

Already Australia's highly open domestic market and lack of access to many highly protected regional markets leaves Toyota Australia at a disadvantage in the competition for new investment with Toyota subsidiaries in Thailand and now Taiwan.

Toyota Australia considers the gains for Australia would be minimal compared to the potential losses if tariffs on passenger vehicles are lowered below the scheduled 10% rate that will come into effect in 2005.

Toyota Australia recommends that pending significant reductions internationally in tariffs on automotive products, Australia should maintain the tariff regime due to come into effect in 2005, namely:

- **Tariffs on passenger vehicles and components – 10%**
- **Tariffs on 4WD and commercial vehicles – 5%**
- **Continuation of pre-emptive $12,000 tariff on full volume used cars.**

7.1.2 ACIS replacement

The EFS and its successor ACIS have played an essential role in establishing a competitive policy environment for the Australian automotive industry and creates conditions in which the parent companies of the car manufacturers and component supplier are prepared to continue investing in their Australian operations. ACIS is partly an offset for the non-application of the Tariff Concession Scheme to the automotive industry, and tariffs on components, but it also provide incentives for production, investment and R&D both for the car manufacturers and component suppliers.

Such incentives are necessary if the Australian automotive industry is to continue to grow through global integration and investment by parent companies.

The growing export success of the industry, led by Toyota Australia in particular, has shown that it can compete globally if competitive policy settings are in place in Australia. The industry is not seeking assistance that is out of step with that available in other automotive producing countries. Given that the Australian domestic market is highly open to imports by international standards, it is important that the industry be able to compete in global markets if it is to maintain a viable scale of operations. ACIS gives Toyota Australia a competitive environment that allows it to compete with other Toyota subsidiaries for new investment. Without such a scheme in place it is very unlikely that Toyota Australia would be able to secure either new investment in production capacity or gain access to new export contracts.

The industry is generating returns to the Australian economy from ACIS. The introduction of ACIS has had a range of positive impacts upon the automotive industry as a whole. These include:

- underpinning volumes (and hence jobs, and exports) in the industry pending greater overseas market access being achieved. This is particularly important for companies such as Toyota Australia that make truly global products and requires volume to justify investment in technology and capabilities to compete in an increasingly open market;
- 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.

Given the significant economic benefits the industry generates for Australia as a leading edge, globally networked advanced manufacturing sector, it is appropriate that government develop a broadly comparable successor scheme to ACIS.

A successor program to ACIS would support further industry growth to the level needed to be internationally competitive. In particular, it would assist in further developing the Australian supplier base to become globally competitive to meet the needs of the local manufacturers. A successor program would place Australia on a competitive footing with other countries to secure the necessary additional investment.

A successor program would also address the disadvantages the industry faces from the lack of market access to key potential markets that could provide the additional volumes required to justify new investment in capacity and capabilities.

Some shortcoming of ACIS should also be addressed in the design of a successor program. In particular, the uncertainty created by the modulation process and the short program time horizon could be addressed in any successor program.

It is essential that the design of a successor program occurs in a timely manner so that the industry has the policy environment continuity needed for investment planning.

Although the details of any successor will need to be determined once the effects of the current scheme have been further analysed, Toyota Australia believes that the Government should commit to develop a broadly comparable successor scheme to commence on the expiry of ACIS.

7.1.3 Market access

Access to international markets is crucial if Toyota Australia is to growth to become a major export centre within the Toyota global production network. While Toyota Australia has been able to win and service the Middle Eastern market, allowing production to reach close to the current Altona plant's capacity of 100,000 units per annum, if Toyota Australia is to increase its scale considerably it will need to win major new export mandates.

The North American Camry market is currently serviced by US and Japanese based production, suggesting that the Asian market may be the most immediately prospective sizeable market for Australian produced 4 cylinder Camrys. Unless Australia gains much better access to the markets in the region, however, Australia will not develop as an export base into the region and will not attract the considerable investment that would occur if Toyota Australia was able to significantly increase exports.

Unless market access improves, particularly in relation to the rapidly growing Chinese market and the ASEAN markets of Thailand, Malaysia and Indonesia, Toyota will locate new investment in production capacity in either Taiwan or Thailand, countries that do have better (and improving) access to crucial markets in the region.

Australia is currently in an isolated position in terms of access to major markets. We are not part of the EU or NAFTA, and are currently frozen out of the ASEAN trade block AFTA. APEC has not achieved the market access results that were hoped for, and appears to have been superseded by AFTA as the major trade negotiation forum in the South East Asian region.

Toyota Australia recommends that the Australian Government make all efforts possible to improve access to regional automotive markets. It should pursue any and all avenues available through the APEC, AFTA and WTO forums. Failing breakthroughs at the multilateral trade negotiation level, Australia should aggressively pursue bilateral trade negotiations with China, Thailand and other Asian countries.

7.1.4 Industrial relations

Toyota Australia's has been introducing a cooperative employee relations model to replace the traditional industrial relations paradigm in the workplace.

Unlike at the Toyota production sites in the UK and USA, which were established as "greenfield" sites, Toyota Australia has had to manage workplace change within the constraints of a "brownfield" site that brought together several legacy workplace cultures from former Dandenong and Port Melbourne sites. In recent years the process of workplace culture change have brought significant improvements.

The most recent enterprise bargaining round has recently been completed with no days lost to work stoppages, compared to 10 days in 1996 and 5 days in 1999. The new agreement will provide greater flexibility in workplace practices, something that is essential as Toyota Australia seeks to leverage its skills in lean flexible manufacturing to compete against higher scale producers. With labour costs now comprising less than 15% of the cost of the vehicle, the emphasis on labour flexibility and productivity rather than pure cost is becoming the most crucial issue. In the most recently established workplace agreement, Toyota Australia has secured commitments for significant improvements in these areas.

However, 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 and the number of operating days is still 10% below Japan and USA.

Toyota Australia will be continuing to pursue improvements in these areas within the constraints imposed by the award system.

Toyota Australia believes that the process of workplace practices change coupled with Business Structure Change must and will continue. The process will be ongoing rather than something that can occur overnight. Smooth management of this process is essential if Toyota Australia is to gain 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 and domestic sales.

Toyota Australia considers the current Industrial Relations structures and rules have served our community and industry well for the past century. However underpinning elements of the system reflect yesterdays solutions to inner 19th century workplaces that are possibly no longer relevant for the 21st century needs of industry, employees, unions and the community at large. It is essential that issues of recognition, rights, responsibilities and accountability be reviewed to position our industrial relations system to serve our needs in the 21st century.

Toyota Australia would welcome the level of reform that would enhance their competitiveness not only domestically but also through their globalisation program and would actively support this through participation in such a review.

Toyota Australia recommends government and industry work collaboratively to resolve industrial relations issues and move Australia's workplace capabilities and practices to a world competitive basis.

7.1.5 Environmental policy

As was highlighted in 3.2.10, Toyota Australia is committed to improving its environmental performance. However, Toyota Australia is not able to address a key area of environmental concern associated with the use of automobiles, namely the environmental impacts associated with the use of older vehicles which do not comply with current vehicle emission standards.

Compared to most OECD countries, Australia has a regulatory system which does not adequately limit the usage of older vehicles which do not comply with current or even former environmental (or safety) standards. Compliance with Australian Design Rules is enforced only on new motor vehicles and there is no mechanism in place to ensure ongoing compliance to the rules past the point of first registration. While the matter of ongoing compliance with environmental standards is the responsibility of State Government, given their national significance Toyota Australia believes it would be appropriate for the Commonwealth Government to take the initiative to have the issue addressed by Commonwealth and State Transport Ministers. Accelerating and elevating the vehicle scrappage rate would significantly reduce the environmental impact of the Australian vehicle stock and would increase demand for new vehicles.

7.2 Recommendations

Toyota Australia has seven key recommendations regarding the establishment of a post 2005 policy environment that is supportive of the development of a globally oriented, growing and highly competitive Australian automotive industry. These recommendation are:

R1 ***Pending significant reductions in international tariffs on automotive products, Australia maintain the tariff regime due to come into effect in 2005.***

R2 ***The Government commit to introduce an equivalent program to ACIS after ACIS expires.***

R3 ***The Australian Government make all efforts possible to improve market access to regional automotive markets. Failing breakthroughs at the multilateral trade negotiation level, Australia aggressively pursue bilateral trade negotiations with China, Thailand and other Asian countries.***

R4 **Government and industry work collaboratively to resolve industrial relations issues and move Australia's workplace capabilities and practices to a world competitive basis.**

R5 ***Policy be developed with a 10 year time horizon.***

R6 ***The government consider what other actions it is able to take to address the continuing decline in market share by locally produced passenger vehicles which will accelerate as the tariff falls to 10%.***

R7 ***The government maintain present policy settings in relevant areas including government purchasing, import of used vehicles, and the tax treatment of fleet vehicles, and continue international harmonisation of Australian Design Rules.***